

**“ATTRITION – A COMPARATIVE EMPIRICAL STUDY OF ITS
INTENSITY, CAUSATIVE FACTORS AND REMEDIAL
MEASURES IN THE MANUFACTURING SECTOR AND SERVICES
SECTOR ENTERPRISE IN PUNE (INDIA)”**

(For the period 2004-05 to 2009-10)

A thesis submitted to

TILAK MAHARASHTRA VIDYAPEETH

(DEEMED UNIVERSITY), PUNE

For the degree of

VIDYAVACHASPATI (Ph.D.)

In the Subject

MANAGEMENT

Under the faculty of

DEPARTMENT OF MANAGEMENT, TMU, GULTEKADI,

PUNE-411 037

By

DHANANJAY GAJANAN PINGALE

Under the guidance of

Dr. DONGARE MUKUND N.

OCTOBER 2015

FORM 'C'

CERTIFICATE

This is to certify that the thesis entitled

“ATTRITION – A COMPARATIVE EMPIRICAL STUDY OF
ITS INTENSITY, CAUSATIVE FACTORS AND REMEDIAL
MEASURES IN THE MANUFACTURING SECTOR AND
SERVICES SECTOR ENTERPRISES IN PUNE (INDIA)”

(For the period 2004-05 to 2009-10)

which is being submitted herewith for the award of Degree of Vidyavachaspati (Ph.D.) in Management of Tilak Maharashtra University, Pune is the result of original research work completed by Shri: Dhananjay Gajanan Pingale under my supervision and guidance. To the best of my knowledge and belief the work incorporated in this thesis has not formed the basis of the award of any Degree or similar title of this or any other University and examining body upon him.

Place: Pune

(Dr. Dongare M. N.)

Date: / /2015

Research Guide

FORM 'B'

I hereby declare that the thesis entitled

**“ATTRITION – A COMPARATIVE EMPIRICAL STUDY OF
ITS INTENSITY, CAUSATIVE FACTORS AND REMEDIAL
MEASURES IN THE MANUFACTURING SECTOR AND
SERVICES SECTOR ENTERPRISES IN PUNE (INDIA)”**

(For the period 2004-05 to 2009-10)

completed and written by me has not previously formed the basis for the award of any Degree or the similar title upon me of this or any other university or examining body.

Place: Pune

(Research Student)

Date: / /2015

Dhananjay Gajanan Pingale

Acknowledgment

At the beginning, I humbly would like to thank all my teachers who have inspired me to learn and provided with the support to nourish learning abilities in me.

I convey my sincere thanks and gratitude to my honorable guide, Dr. Mukund Dongare, Reader and HOD- Commerce Department, Prof. Ramkrishna More College, Aakurdi, for his guidance and encouragement throughout the course of my research. He has spend lots of his valuable time and energy in guiding at various stages, advising me and showed me the correct ways proceeding with my research. For this act of his kindness, I shall always remain grateful to him.

Also, I would like to thank Dr. Rajeshwar Hendre, for his suggestions and help.

I would like to extend my thanks to Mr. Kulkarni, HR Manager, TATA Motors Ltd.; Mr. Landage, Union Leader of the TATA Motors Ltd.; Mr. Ajay Botkar; Mr. Ijjaj Tamboli for their support and help to get the permeations for the data collection required for the present study. I also would like acknowledge the assistance extended by Ms. Jyoti Chaudhari while formatting and lay out of the research report.

And most importantly, thanks should also be due to all the employees from manufacturing sector and service sector who have extended their participation and cooperation during the period of primary data collection.

Dhananjay Gajanan Pingale

TABLE OF CONTENT

	TITLE	Page No.
	Completion Certificate (Form 'C')	i
	Declaration by Student (Form ('B'))	ii
	Acknowledgement	iii
	List of Table, Figures, Graphs and Charts	vii
	Abstract	xxvii- xxxiii
	Chapter-1:	
	Introduction	1-15
Part-I	Attrition Rates Across Industrial Sectors	2
Part-II	Profile of Pune Region / Pune District / Pune City	5
Part-III	Background information of Tata Motors (section-a) and I.T. Sector of Pune (section-b)	10
Part-IV	Chapter wise Scheme	14
	Chapter-2:	
	Review of Literature	16-54
Part-I	Evolution And Development of Attrition Phenomena	18
Part-II	Types, Impact and Cost of Attrition	21
Part-III	Quantification aspect of Attrition Phenomenon	28
Part-IV	Driving factors and causative forces for the attrition phenomenon	33
Part-V	Diagnosing attrition phenomenon	36
Part-VI	Approaches for managing attrition phenomenon	38
Part-VII	Solutions to mitigate the damage caused by attrition phenomenon	40

	TITLE	Page No.
	Chapter-3:	
	Research Methodology	55-70
Section-I	Introductory observations	55
Section-II	Statement of the research problem	58
Section –III	Aims and objectives	58
Section –IV	Hypotheses	59
Section –V	Databases of the study	59
Section –VI	Significance of the study	66
Section -VII	Time span, scope and limitations of the study	67
	Chapter-4:	
	Processing, Tabulation and Analysis of the data – Manufacturing Sector (Represented by TATA Motors Ltd.)	71-164
Part-I	Analysis of Demographic / General Information	72
Part-II	Analysis of Role of workers and Skills posses	84
Part-III	Analysis of Perceptions, Expectations and Satisfaction	128
Part-IV	Testing of Hypothesis H1 and H2	157
	Chapter-5:	
	Processing, Tabulation and Analysis of the data – Services Sector (Represented by the Information Technology Company)	165-262
Part-I	Analysis of Demographic / General Information	167
Part-II	Analysis of Role of workers and Skills posses	178
Part-III	Analysis of Perceptions, Expectations and Satisfaction	223

	TITLE	Page No.
Part-IV	Testing of Hypothesis H3 and H4	254
	Chapter-6:	
	Processing, Tabulation and Analysis of the data – Comparative Analysis of manufacturing Sector (TATA Motors Ltd.) and Services Sector (Represented by the Information Technology Company)	263-331
Part-I	Analysis of Demographic / General Information	265
Part-II	Analysis of Role of workers and Skills posses	273
Part-III	Analysis of Perceptions, Expectations and Satisfaction	298
Part-IV	Testing of Hypothesis H5	329
	Chapter-7:	
	Summary, Concluding Observations and Suggestions	332-338
Section-I	Summary	332
Section-II	Concluding Observations	333
Section-III	Suggestions	339
	Bibliography	341-346
	Annexure	347-357
Annexure- 1	Research Questionnaire	347

LIST OF TABLES, FIGURES, GRAPHS AND CHARTS

Table / Chart No.	Title's Name	Page No.
Chapter No. 1: Introduction		
Chart No. 1.1	Comparison of Attrition Rates	3
Table No. 1.1	Attrition Rate Across Industries (in Percentages)	3
Table No. 1.2	Showing area of the Pune District (in Square k.m.)	6
Table No. 1.3	Showing population details of Pune District	7
Table No. 1.4	Sector wise income (at Current Price) of Pune District	8
Table No. 1.5	Per capita income of Pune District (at Current Prices)	8
Table No. 1.6	Growth of the outsourcing Industry in India	12
Chapter No. 2: Review of Literature		
Figure No. 2.1	Types of Attrition	21
Figure No. 2.2	Strategic Accountability Approach	39
Chapter No. 3: Research Methodology		
Table No. 3.1	Details about the canvassed questionnaires accepted / rejected (Absolute numbers and per cent ages in brackets)	61
Table No. 3.2	Details about the reasons for rejection of the questionnaires (Absolute numbers and percentages in brackets)	61
Table No. 3.3	Distribution of workforce into various categories (in numbers and per cent ages) and in the sample (in numbers and per cent ages)	63
Chart No. 3.1	Comparison Between the Universe and the Sample indicating the closeness of the sample to the universe	63
Table No. 3.4	Details about the reasons for rejection of the questionnaires (Absolute numbers and percentages in brackets)	64

**Chapter No. 4: Processing, Tabulation and Analysis
of the data – Manufacturing Sector (Represented by
TATA Motors Ltd.)**

Table No. 4.1	List of companies (From where employees joined present company -TATA Motors Ltd)	72
Table No. 4.2	AGE and GENDER wise distribution of the respondents	74
Chart 4.2	Age wise distribution of respondents in Percentages	74
Table No. 4.3	Distribution of respondents according to the QUALIFICATION	75
Table No. 4.4	Distribution of respondents according to the SPECIALIZATION	76
Table No. 4.5	Professional experience of the respondents	77
Table No. 4.6	Organizations joined during career span	78
Chart No. 4.6	Organizations joined during career span	78
Table No. 4.7	Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED	79
Chart No. 4.7	Distribution of employees according to the number promotions received	80
Table No. 4.8	Showing expectation of percent increment in remuneration against satisfaction about the remuneration.	81
Chart No. 4.8	Showing Expectation of Per cent increment in remuneration against Satisfaction about the remuneration	82
Tabel No. 4.9	Showing the changes to get new job as per expected remuneration	82
Chart No. 4.9	Showing the chances to get new job as per expected remuneration (Number of employees-in Per cent)	83
Table No. 4.10	Distribution of employees according to the Designations	85
Chart No. 4.10	Distribution of employees according to the Designations	85
Table No. 4.11	Comparison for job description related to Present Job	86

	and Previous Job	
Table No. 4.12	Showing index comparison of average satisfaction level of respondents for present job and previous job	90
Chart No. 4.12	Showing index comparison of average satisfaction level of respondents for present job and previous job	91
Table No. 4.13	Showing physical difficulties observed at work place and its effect on efficiency	92
Table No. 4.14	Showing sense of belonging of respondents to formal and informal group at workplace (In Percentages)	93
Table No. 4.15	Showing <u>EFFECTIVENESS</u> of sense of belonging of respondents to <u>FORMAL group</u> at workplace on the efficiency of respondents	95
Table No. 4.15 (A)	Showing sense of belonging of respondents to Employees Union at workplace	96
Table No. 4.16	Showing great influence of employees union in management decision making	97
Table No. 4.17	Showing the reasons for joining the present company (Arranged by higher priority)	98
Chart No. 4.17	Reason for joining the present company	99
Table No. 4.18	Showing the reasons for leaving the previous company (Arranged by higher priority)	100
Chart No. 4.18	Reason for leaving the previous company	101
Table No. 4.19	Designation wise distribution of opinions regarding 'proper management with appropriate policy mix will avoid unusual leaving of highly performing employees'	102
Chart No. 4.19	showing opinions proper management with appropriate policy mix will avoid unusual leaving of highly performance employees	102
Table No. 4.19(a)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Machine Operation (Production)	104
Chart No. 4.19 (a)	Skills available with the respondents and utilization Machine Operation (Production)	105
Table No. 4.19(b)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	105

	Machine Operation (office)	
Chart No. 4.19 (b)	Skills available with the respondents and utilization Machine Operation (Office)	106
Table No. 4.19(c)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Clerical	107
Chart No. 4.19 (c)	Skills available with the respondents and utilization Clerical	107
Table No. 4.19(d)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Managerial	108
Chart No. 4.19 (d)	Skills available with the respondents and utilization Managerial	108
Table No. 4.19(e)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Leadership	109
Chart No. 4.19 (e)	Skills available with the respondents and utilization Leadership	109
Table No. 4.19(f)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Functional	110
Chart No. 4.19 (f)	Skills available with the respondents and utilization Functional	111
Table No. 4.19(g)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Motivating other employees	111
Chart No. 4.19 (g)	Skills available with the respondents and utilization Motivating other employees	112
Table No. 4.19(h)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Presentation skill	112
Chart No. 4.19 (h)	Skills available with the respondents and utilization Presentation Skills	113
Table No. 4.19(i)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Problem Solving ability	114

Chart No. 4.19 (i)	Skills available with the respondents and utilization Problem Solving ability	114
Table No. 4.19(j)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Error handling capacity	115
Chart No. 4.19 (j)	Skills available with the respondents and utilization Error handling capacity	115
Table No. 4.19(k)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Soft Skills	116
Chart No. 4.19 (k)	Skills available with the respondents and utilization Soft Skill	116
Table No. 4.19(l)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Programming knowledge	117
Chart No. 4.19 (l)	Skills available with the respondents and utilization Programming Knowledge	118
Table No. 4.19(m)	Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Software knowledge	118
Chart No. 4.19 (m)	Skills available with the respondents and utilization Software Knowledge	119
Table No. 4.20	Designation wise distribution of skills available with the respondents and utilization (Previous Work Place)	120
Table No. 4.21	Distribution of Tata Motor's respondents according to the Demand of skill and attempt to grab this demand by the respondents	125
Chart No. 4.21	Demand of skill and attempt to procure this demand by the respondents	126
Table No. 4.22	Commitment of the Tata Motor's employees for the present company and the reasons for this commitment	126
Chart No. 4.22	Reasons for staying with present job	127
Table No. 4.23	The level of expectations of the respondents	129
Chart No. 4.23	Level of expectations of the respondents	130
Table No. 4.24	Showing comparative analysis of the satisfaction level	131

	of respondents regarding present and previous Job	
Table No. 4.25	Distribution of respondents according to the status of having team members at work place	133
Table No. 4.26	Opinion about feeling helpless when team member leave the job	133
Table No. 4.27	Showing extent of adverse effect on teamwork when team member leave the job	134
Chart No. 4.27 (a)	Effect on teamwork when team member leave the job	135
Chart No. 4.27(b)	Effect on teamwork when team member leave the job	135
Table No. 4.28	Showing time required for tuning with new team members	136
Chart No. 4.28	Time required for tuning with new team members	137
Table No. 4.29	Distribution of respondents according to the per cent productivity loss due to leaving of team member (Attrition)	137
Chart No. 4.29	respondents according to the per cent productivity loss due to leaving of team member (Attrition)	138
Table No. 4.30	Psychological impact of attrition on team members	139
Chart No. 4.30 (a)	Psychological impact of attrition on team members (Feelings of Nervousness and Sadness)	140
Chart No. 4.30 (b)	Psychological impact of attrition on team members (Feelings of Loneliness)	140
Chart No. 4.30 (c)	Psychological impact of attrition on team members (Feelings of Helplessness)	141
Chart No. 4.30 (d)	Psychological impact of attrition on team members (Feelings of insecure)	141
Chart No. 4.30 (e)	Psychological impact of attrition on team members (Feelings of lack of motivation)	141
Chart No. 4.30 (f)	Psychological impact of attrition on team members (Feelings of lack of guidance)	142
Chart No. 4.30 (g)	Psychological impact of attrition on team members (Feeling stressfulness)	142
Chart No. 4.30	Psychological impact of attrition on team members	142

(h)	(Feelings of lack of confidence)	
Chart No. 4.30 (i)	Psychological impact of attrition on team members (Feeling of happiness)	143
Chart No. 4.30(j)	Psychological impact of attrition on team members (Opportunity to rise in cadre)	143
Chart No. 4.30 (k)	Psychological impact of attrition on team members (Cumulative effect on performance levels)	143
Table No. 4.31	Comparative analysis of supervisory relationship between both the workplaces (Present and Previous)	144
Table No. 4.32	Comparative analysis of attitude of respondents between both the workplaces (Present and Previous)	146
Chart No. 4.32 (a)	Present workplace Attitude of respondents (I am less productive than I used to be)	147
Chart No. 4.32 (a)	Previous workplace Attitude of respondents (I am Less productive than I used to be)	147
Chart No. 4.32 (b)	Present workplace Attitude of respondents (My work group is very productive)	148
Chart No. 4.32 (b)	Previous workplace Attitude of respondents (My work group is very productive)	148
Chart No. 4.32 (c)	Present workplace Attitude of respondents (My working group puts all of their efforts into their job)	149
Chart No. 4.32 (c)	Previous workplace Attitude of respondents (My working group puts all of their efforts into their job)	149
Chart No. 4.32 (d)	Present workplace Attitude of respondents (My pay depends mostly upon how well I do my job)	150
Chart No. 4.32 (d)	Previous workplace Attitude of respondents (My pay depends mostly upon how well I do my job)	150
Table No. 4.33	Factors needs to improve respondent's productivity	151
Table No. 4.34	Probable productivity increase if provided above factors as expected by the respondents (At present workplace)	152
Chart No. 4.34	Productivity increase if provided above factors as expected by the respondents (At present workplace)	153
Table No. 4.35	Probable productivity increase if provided above factors as expected by the respondents (At previous	153

	workplace)	
Chart No. 4.35	Productivity increase if provided above factors as expected by the respondents (At previous workplace)	154
Table No. 4.36	Defining Technical Hypothesis-H1	158
Table No. 4.37	Descriptive Statistics	160
Table No. 4.38	Chi-Square test Statistics	160
Table No. 4.39 (A)	Frequency of Parameter Stress (Present Workplace)	161
Table No. 4.39 (B)	Frequency of Parameter Stress (Previous Workplace)	161
Table No. 4.39 (C)	Frequency of Parameter Work Pressure and Lack of Relaxation (Present Workplace)	162
Table No. 4.39 (D)	Frequency of Parameter Work Pressure and Lack of Relaxation (Previous Workplace)	162
Table No. 4.40	Defining Technical Hypothesis-H2	163
Table No. 4.41	One Sample Statistics	164
Table No. 4.42	One Sample 't' Test for Hypothesis-H2	164

Chapter No. 5: Processing, Tabulation and Analysis of the data – Services Sector (Represented by the Information Technology Company)

Table No. 5.1	List of companies (From where employees joined present company -TATA Motors Ltd)	167
Table No. 5.2	AGE and GENDER wise distribution of the respondents	168
Chart 5.2	Age wise distribution of respondents in Percentages	168
Table No.5.3	Distribution of respondents according to the QUALIFICATION	169
Table No. 5.4	Distribution of respondents according to the SPECIALIZATION	170
Table No 5.5	Professional experience of the respondents	171
Chart No. 5.5	Professional Experience of the respondents	171
Table No. 5.6	Organizations Joined and Worked Before Joining Present Company	172

Chart No. 5.6	Organizations Joined and Worked Before Joining Present Company	172
Table No. 5.7	Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED	173
Chart No. 5.7	Distribution of employees according to the number promotions received	174
Table No. 5.8	Showing expectation of percent increment in remuneration against satisfaction about the remuneration.	175
Chart No. 5.8	Showing Expectation of Per cent increment in remuneration against Satisfaction about the remuneration	176
Tabel No. 5.9	Distribution of respondents according to the Probability of Getting New Job as per Expected Remuneration	177
Chart No. 5.9	Showing the chances to get new job as per expected remuneration (Number of employees-in Per cent)	177
Table No 5.10	Distribution of employees according to the Designations	179
Chart No. 5.10	Distribution of employees according to the Designations	179
Table No. 5.11	Comparison for job description related to Present Job and Previous Job	180
Table No. 5.12	Showing index comparison of average satisfaction level of respondents for present job and previous job	184
Chart No. 5.12	Showing index comparison of average satisfaction level of respondents for present job and previous job	185
Table No. 5.13	Showing physical difficulties observed at work place and its effect on efficiency	187
Table No. 5.13 (A)	Showing sense of belonging of respondents to formal and informal group at workplace (In Percentages)	188
Table No. 5.14	Showing <u>EFFECTIVENESS</u> of sense of belonging of respondents to <u>FORMAL</u> group at workplace on the efficiency of respondents	189
Table No. 5.15	Showing sense of belonging of respondents to Employees Union at workplace	190

Table No. 5.15 (A)	Reasons for not belonging to union (Present Workplace)	190
Table No. 5.15 (B)	Reasons for not belonging to union (Previous Workplace)	191
Table No. 5.16	Showing the reasons for joining the present company (In order of preference)	193
Chart No. 5.16	Reason for joining the present company	194
Table No. 5.17	Showing the reasons for leaving the previous company (Arranged by higher priority)	195
Chart No. 5.17	Reason for leaving the previous company	196
Table No. 5.18	Designation wise distribution of opinions regarding 'proper management with appropriate policy mix will avoid unusual leaving of highly performing employees'	196
Table No. 5.19 (a)	Designation wise distribution of skills available with the respondents and utilization: Machine Operation in office (Present Work Place)	199
Chart No. 5.19 (a)	Designation wise distribution of skills available with the respondents and utilization: : Machine Operation in office (Present Work Place)	200
Table No. 5.19(b)	Clerical Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	200
Chart No. 5.19 (b)	Clerical Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	201
Table No. 5.19(c)	Managerial Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	201
Chart No. 5.19 (c)	Managerial Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	202
Table No. 5.19(d)	Leadership Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	203
Chart No. 5.19 (d)	Leadership Designation wise distribution of skills available with the respondents and utilization (Present	203

	Work Place)	
Table No. 5.19(e)	Functional Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	204
Chart No. 5.19 (e)	Functional Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	204
Table No. 5.19(f)	Motivating other employees Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	205
Chart No. 5.19 (f)	Motivating other employees Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	206
Table No. 5.19(g)	Presentation Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	206
Chart No. 5.19 (g)	Presentation Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	207
Table No. 5.19(h)	Problem Solving Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	207
Chart No. 5.19 (h)	Problem Solving Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	208
Table No. 5.19(i)	Error handling Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	208
Chart No. 5.19 (i)	Error handling Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	209
Table No. 5.19(j)	Soft Skills Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	210
Chart No. 5.19 (j)	Soft Skills Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	210

Table No. 5.19(k)	Programming knowledge Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	211
Chart No. 5.19 (k)	Programming knowledge Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	212
Table No. 5.19(l)	Software knowledge Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	212
Chart No. 5.19 (l)	Software knowledge Designation wise distribution of skills available with the respondents and utilization (Present Work Place)	213
Table No. 5.20	Designation wise distribution of skills available with the respondents and utilization (Previous Work Place)	215
Table No. 5.21	Distribution of Tata Motor's respondents according to the Demand of skill and attempt to grab this demand by the respondents	220
Chart No. 5.21	Demand of skill and attempt to procure this demand by the respondents	220
Table No. 5.22	Commitment of the employees for the present company and the reasons for this commitment	221
Chart No. 5.22	Reasons for staying with present job	221
Table No. 5.23	The level of expectations of the respondents	224
Chart No. 5.23	Level of expectations of the respondents	225
Table No. 5.24	Showing comparative analysis of the satisfaction level of respondents regarding present and previous Job	226
Table No. 5.25	Distribution of respondents according to the status of having team members at work place	228
Table No. 5.26	Opinion about feeling helpless when team member leave the job	228
Table No. 5.27	Showing extent of adverse effect on teamwork when team member leave the job	229
Chart No. 5.27 (a)	Effect on teamwork when team member leave the job	230
Chart No.	Effect on teamwork when team member leave the job	230

5.27(b)		
Table No. 5.28	Showing time required for tuning with new team members	231
Chart No. 5.28	Time required for tuning with new team members	232
Table No. 5.29	Distribution of respondents according to the per cent productivity loss due to leaving of team member (Attrition)	233
Chart No. 5.29	respondents according to the per cent productivity loss due to leaving of team member (Attrition)	233
Table No. 5.30	Psychological impact of attrition on team members	234
Chart No. 5.30 (a)	Psychological impact of attrition on team members (Feelings of Nervousness and Sadness)	235
Chart No. 5.30 (b)	Psychological impact of attrition on team members (Feelings of Loneliness)	236
Chart No. 5.30 (c)	Psychological impact of attrition on team members (Feelings of Helplessness)	236
Chart No. 5.30 (d)	Psychological impact of attrition on team members (Feelings of insecure)	237
Chart No. 5.30 (e)	Psychological impact of attrition on team members (Feelings of lack of motivation)	237
Chart No. 5.30 (f)	Psychological impact of attrition on team members (Feelings of lack of guidance)	238
Chart No. 5.30 (g)	Psychological impact of attrition on team members (Feeling stressfulness)	238
Chart No. 5.30 (h)	Psychological impact of attrition on team members (Feelings of lack of confidence)	239
Chart No. 5.30 (i)	Psychological impact of attrition on team members (Feeling of happiness)	239
Chart No. 5.30(j)	Psychological impact of attrition on team members (Opportunity to rise in cadre)	240
Chart No. 5.30 (k)	Psychological impact of attrition on team members (Cumulative effect on performance levels)	240
Table No. 5.31	Comparative analysis of supervisory relationship between both the workplaces (Present and Previous)	241
Table No. 5.32	Comparative analysis of attitude of respondents	243

	between both the workplaces (Present and Previous)	
Chart No. 5.32 (a)	Present workplace Attitude of respondents (I am less productive than I used to be)	243
Chart No. 5.32 (a)	Previous workplace Attitude of respondents (I am Less productive than I used to be)	244
Chart No. 5.32 (b)	Present workplace Attitude of respondents (My work group is very productive)	244
Chart No. 5.32 (b)	Previous workplace Attitude of respondents (My work group is very productive)	245
Chart No. 5.32 (c)	Present workplace Attitude of respondents (My working group puts all of their efforts into their job)	245
Chart No. 5.32 (c)	Previous workplace Attitude of respondents (My working group puts all of their efforts into their job)	246
Chart No. 5.32 (d)	Present workplace Attitude of respondents (My pay depends mostly upon how well I do my job)	246
Chart No. 5.32 (d)	Previous workplace Attitude of respondents (My pay depends mostly upon how well I do my job)	247
Table No. 5.33	Factors needs to improve respondent's productivity	248
Table No. 5.34	Probable productivity increase if provided above factors as expected by the respondents (At present workplace)	249
Chart No. 5.34	Productivity increase if provided above factors as expected by the respondents (At present workplace)	250
Table No. 5.35	Probable productivity increase if provided above factors as expected by the respondents (At previous workplace)	250
Chart No. 5.35	Productivity increase if provided above factors as expected by the respondents (At previous workplace)	251
Table No. 5.36	Descriptive Statistics	252
Table No. 5.37	Defining Technical Hypothesis-H3	255
Table No. 5.38	Descriptive Statistics	257
Table No. 5.39	Chi-Square test Statistics	257
Table No. 5.40 (A)	Frequency of Parameter Stress (Present Workplace)	258

Table No. 5.40 (B)	Frequency of Parameter Stress (Previous Workplace)	258
Table No. 5.40 (C)	Frequency of Parameter Work Pressure and Lack of Relaxation (Present Workplace)	259
Table No. 5.40 (D)	Frequency of Parameter Work Pressure and Lack of Relaxation (Previous Workplace)	259
Table No. 5.41	Defining Technical Hypothesis-H4	260
Table No. 5.42	One Sample Statistics	261
Table No. 5.43	One Sample 't' Test for Hypothesis-H4	261

**Chapter No. 6: Processing, Tabulation and Analysis
of the data – Comparative Analysis of
manufacturing Sector (TATA Motors Ltd.) and
Services Sector (Represented by the Information
Technology Company)**

Table No. 6.1	AGE and GENDER wise distribution of the respondents (No. of employees)	265
Chart No. 6.1 (a)	AGE and GENDER wise distribution of the respondents in Manufacturing Sector	266
Chart No. 6.1 (b)	AGE and GENDER wise distribution of the respondents in Services Sector	266
Table No. 6.2	Distribution of respondents according to the QUALIFICATION	267
Chart No. 6.2 (a)	Distribution of respondents according to the QUALIFICATION in Manufacturing Sector	267
Chart No. 6.2 (b)	Distribution of respondents according to the QUALIFICATION in Services Sector	268
Table No. 6.3	Organizations joined during career span	268
Chart No. 6.3 (a)	Organizations joined during career span in Manufacturing Sector	269
Chart No. 6.3 (b)	Organizations joined during career span in Services Sector	269
Table No. 6.4	Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED	270

Chart No. 6.4 (a)	Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED in Manufacturing Sector	271
Chart No. 6.4 (b)	Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED in Services Sector	272
Chart 6.4	Distribution of employees according to the number of promotions received (in Per cent)	272
Table No. 6.5	Comparative presentation for both sectors regarding Satisfaction of employees related to Remuneration, average overall satisfaction against organizational commitment	273
Table No. 6.6	Comparative presentation for both sectors regarding chances to get new job of expected remuneration	275
Chart No. 6.6 (a)	Comparative presentation for both sectors regarding chances to get new job of expected remuneration in Services (IT)	275
Chart No. 6.6 (b)	Comparative presentation for both sectors regarding chances to get new job of expected remuneration in Manufacturing (Automobile)	275
Table No. 6.7	Comparison for job description related to Present Job and Previous Job	276
Table No. 6.8	Showing deviated index comparison of average satisfaction level of respondents for present job and previous job	278
Chart No. 6.8	Showing deviated index comparison of average satisfaction level of respondents for present job and previous job	279
Table No. 6.9	Showing physical difficulties observed at work place and its effect on efficiency	280
Table No. 6.10	Showing belongingness of respondents to formal and informal group at workplace	282
Table No. 6.10 (A)	Showing <u>EFFECTIVENESS</u> of belongingness of respondents to <u>FORMAL</u> group at workplace on the efficiency of respondents	283
Table No. 6.10 (B)	Showing <u>EFFECTIVENESS</u> of belongingness of respondents to <u>INFORMAL</u> group at workplace on the	283

	efficiency of respondents	
Table No. 6.11	Showing the reasons for joining the present company (Arranged by higher priority)	284
Table No. 6.12	Showing the reasons for leaving the previous company (Arranged by higher priority)	285
Table No. 6.13	Distribution of opinions regarding 'proper management with appropriate policy mix will avoid unusual leaving of highly performing employees'	288
Chart No. 6.13 (a)	Distribution of opinions regarding 'proper management with appropriate policy mix will avoid unusual leaving of highly performing employees' in Manufacturing Sector	288
Chart No. 6.13 (b)	Distribution of opinions regarding 'proper management with appropriate policy mix will avoid unusual leaving of highly performing employees' in Services Sector	289
Table No. 6.14	Distribution of skills available with the respondents and utilization (Present Work Place)	291
Table No. 6.15	Distribution of respondents according to the Demand for skills and attempt to grab demand	295
Chart No. 6.15 (a)	Distribution of respondents according to the Demand for skills and attempt to grab demand in Manufacturing Sector	295
Chart No. 6.15 (b)	Distribution of respondents according to the Demand for skills and attempt to grab demand in Services Sector	296
Table No. 6.16	Commitment of the employees for the present company and the reasons for this commitment (Per cent of respondents)	297
Table No. 6.17	The level of expectations of the respondents	298
Table No. 6.18	comparative analysis of the satisfaction level of respondents regarding present and previous Job	300
Chart No. 6.18	comparative analysis of the satisfaction level of respondents regarding present and previous Job	300
Table No. 6.19	Analysis of Satisfaction levels and Organizational Commitment for Both Sectors and both workplaces	302
Chart No. 6.19	Graphical presentation of Job Satisfaction and	303

	Organizational commitment for Both Sectors	
Table No. 6.20 (A)	Descriptive Statistics	303
Table No. 6.20 (B)	Correlations	304
Table No. 6.21	Distribution of respondents according to the status of having team members at work place	305
Chart No. 6.21 (a)	Distribution of respondents according to the status of having team members at work place in Manufacturing Sector	306
Chart No. 6.21 (b)	Distribution of respondents according to the status of having team members at work place in Service Sector	306
Table No. 6.22	Opinion about feeling helpless when team member leave the job	307
Chart No. 6.22	Opinion about feeling helpless when team member leave the job	307
Table No. 6.23	Showing extent of adverse effect on teamwork when team member leave the job	308
Chart No. 6.23 (a)	Showing extent of adverse effect on teamwork when team member leave the job in Manufacturing Sector	309
Chart No. 6.23 (b)	Showing extent of adverse effect on teamwork when team member leave the job in Services Sector	309
Table No. 6.24	Showing time required for tuning with new team members	310
Chart No. 6.24 (a)	Showing time required for tuning with new team members in Manufacturing Sector	311
Chart No. 6.24 (b)	Showing time required for tuning with new team members in Services Sector	311
Table No. 6.25	Psychological impact of attrition on team members	312
Table No. 6.26	Per cent productivity loss due to leaving of team member (Attrition)	314
Chart No. 6.26	Per cent productivity loss due to leaving of team member (Attrition)	315
Table No. 6.27	Comparative analysis of supervisory relationship between both the workplaces (Present and Previous)	316

Table No. 6.27 (A)	Factors needs to improve respondent’s productivity for both Sectors in present workplace (Indexed According to the importance)	318
Table No. 6.27 (B)	Probable productivity increase if provided above factors as expected by the respondents (At present workplace)	319
Chart No. 6.27 B (a)	Probable productivity increase if provided above factors as expected by the respondents (At present workplace) in Manufacturing Sector	320
Chart No. 6.27 B (b)	Probable productivity increase if provided above factors as expected by the respondents (At present workplace) in Services Sector	320
Table No. 6.28	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace	322
Chart No. 6.28 (a)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I am Less productive than I used to be) Manufacturing Sector	322
Chart No. 6.28 (a)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I am Less productive than I used to be) Services Sector	323
Chart No. 6.28 (b)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I My work group is very productive) Manufacturing Sector	323
Chart No. 6.28 (b)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I My work group is very productive) Services Sector	324
Chart No. 6.28 (c)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My working group puts all of their efforts into their job) Manufacturing Sector	324
Chart No. 6.28 (c)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My working group puts all of their efforts	325

	into their job) Services Sector	
Chart No. 6.28 (d)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My pay depends mostly upon how well I do my job) Manufacturing Sector	325
Chart No. 6.28 (d)	Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My pay depends mostly upon how well I do my job) Services Sector	326
Table No. 6.29	Opinions and factors considered by respondents regarding their concept of dream job	327
Chart No. 6.29 (a)	Opinions and factors considered by respondents regarding their concept of dream job in Manufacturing Sector	327
Chart No. 6.29 (b)	Opinions and factors considered by respondents regarding their concept of dream job in Services Sector	328
Table No. 6.30	Descriptive Statistics- H5	330
Table No. 6.31	Independent Sample ‘t’ Test	331
Chapter No. 7: Summary, Concluding Observations and Suggestions		
Table No. 7.1	Comparative analysis of level of embeddedness in the Manufacturing Sector and Service Sector	335
Chart No.1.1	Reproduced: Comparison of Attrition Rates	

Abstract

Introduction

The 'attrition phenomenon', whichever way one chooses to comprehend, involves reduction in the strength of employees engaged in the corporate establishments engaged either in the production of the manufacturing goods (secondary sector activities) or supply of services (tertiary sector activities). Such a labour turnover resulted in the disturbance of the smooth functioning of the corporate houses as the replacements of the employees were not always available; and whenever available, necessitated huge costsⁱ. This resulted in the reduction of competitive edge of the establishment, making it a high cost producer, and naturally, lowered its profitabilityⁱⁱ.

The significant part of the attrition phenomena has been involved in its limitation, which may be highlighted as the pitfalls in finely defining the term. At the very outset attrition may be defined as 'reduction in employee strength either by resignation, retirement and or death.' This definition has not been that much of inclusive, and unfortunately, it is unable to cover the intensity of the attrition phenomena. Thus, in the present research an effort has been made to define the attrition phenomena by considering its dimension of intensity. The definition of the attrition phenomena, in this context, may be offered as mentioned below-

'Attrition may be defined as the process of continuous reduction in the strength of human resources through the passive causes and friction within the particular organization which, for whatever reasons could not be completely replaced'

In the definition above, an intensity of the attrition phenomena has been highlighted with the help of inability to completely replace the human capital left out with the event of attrition. Detailed discussion on this aspect has been offered in the chapter-2 on literature review. In Chapter-1-introduction, working concept on attrition phenomena has been offered while brief profile of the Pune Region / Pune District / Pune city has also been discussed.

Significance of the study

It is abundantly clear that the attrition phenomenon, over years and even over generations, has resulted in a substantial loss of work force and its labour hours. It hardly needs to be emphasized that this loss is irreparable and cannot be retrieved. In this view of the matter, the present study is eminently significant to the decision makers in the industry and the policy formulators in the Government. In addition, mitigation of attrition would enhance the levels of production and productivity and on an overall basis, promote socio economic welfareⁱⁱⁱ.

It may be pointed out also that the attrition phenomenon has been occurring in the context of every type of economy in the world whether developed, developing or under developed. And hence its significance hardly needs any emphasis.

Aims and Objectives of the study

The aims and objectives of the study can be summarized as below-

1. To assess and quantify the present status of the attrition phenomena in the manufacturing sector (represented by the automobile industry) and services sector (represented by I.T. sector)
2. To analyze the causes of attrition and present a comparative analysis of the causative factors in manufacturing sector (represented by the automobile industry with 32 companies) and services sector (represented by I.T. sector with 27 companies)
3. To observe remedial measures adopted in the context of two sectors mentioned above to minimize the impact of attrition and to make a comparison of the remedial measures (in the light of job embeddedness) adopted in the two sectors mentioned above

Hypothesis of the study

Keeping in mind the title of the present study and the key words appeared in it; below mentioned hypotheses have been designed, tested and interpreted in the context of aims and objectives mentioned above.

H1- Excessive workload and heavy stress coupled with lack of relaxation would lead to a higher level of attrition in the manufacturing sector (highlighting causes of the attrition phenomenon)

H2- The management with appropriate policy mix can go a long way in reducing the level of attrition in the manufacturing sector (highlighting remedial measures of the attrition phenomenon)

H3- Excessive workload and heavy stress coupled with lack of relaxation would lead to a higher level of attrition in the services sector

H4- The management with appropriate policy mix can go a long way in reducing the level of attrition in the services sector

H5- The employees in the manufacturing sector are more embedded than those in the services sector resulting in lower level of attrition (comparative aspect of causes and remedial measures)

Hypothesis, H1 and H2 are specifically related to the manufacturing sector and thus, both have been analyzed, tested, interpreted and presented in Chapter-4 on Data Analysis of the manufacturing sector. Subsequently, hypothesis H3 and H4 are in the context of service sector and has been presented in Chapter-5 on Data Analysis of the Service Sector. The comparative assessment of the level of job embeddedness (H5) has been presented in Chapter-6 on Comparative Analysis of the data in the context of Manufacturing Sector and Service Sector enterprises.

Time span, scope and limitations of the study

The time span prescribed for the present study commences from 2004-05 and extends over to 2009-10. In spite of this, considering the extensive nature of the problem, it appears difficult to confine one-self only to this time period as some of the issues of literature review could well get beyond this time period and may also have relevance to the earlier time period by way of the legacy of the past. Moreover, it needs to be pointed out that, the time period mentioned has relevance to the literature review and not considered for collection of the primary data.

As has been mentioned earlier, the study has relevance to the time period as also to the geographical region in which it gets conducted. Apart from this, the activities in respect of which the study is conducted would also have significance. In the present case, the study is conducted in the Pune Metropolitan region for activities - manufacturing and services sector. The inferences and conclusions of this study may be made with appropriate modifications keeping in mind the exigencies of the other situations. This must be underlined as the limitations of the study.

The object and scope of the problem are confined to the geographical context of very significant region in INDIA, namely the PUNE city which is recognized as Information Technology and Automobile Industry hub of India. The inferences and conclusion derived from this study may be useful in the context of other industrial activity and other regions only by making appropriate modifications.

Research methodology

The title of the present study is quite self explanatory to highlight the methodology adopted for deriving at the concluding stage. More specifically, it appears to call upon that, an *empirical* fact finding *research method* has been applied to conclude the *comparative aspect* of the attrition phenomena in the context of highlighting *intensity, causative factors and remedial measures* as witnessed in the manufacturing sector and the service sector enterprises of the Pune City.

An attrition phenomenon is the process of leaving employees and can be treated as an incidental to the decision made by employees to quit the present work place. While investigating the causative factors of the attrition phenomena, it was observed challenging to reach out the employees left from the work place. This limitation has been overcome by assessing the various parameters in a comparative fashion for the present workplace and previous workplace in both of the activities, namely, manufacturing and service to assess the relationship between causes of joining and causes of leaving an assignment.

Considering the respondents from the manufacturing sector, this activity has been represented by the TATA Motors Ltd, Car Plant at Pimpri, Pune for present workplace along with other 31 companies as previous workplace. It needs to be

mentioned that, total 650 questionnaires were canvassed in the TATA Motors and then 349 were considered worthwhile in further tabulation and analysis. The selection of these 349 respondents was based on the telephonic and face-to-face interviews to minimize the illogical and biased responses. In the context of these 349 respondents, it has to be highlighted that, while comparing to the previous workplace parameters, around 31 companies have been considered. In a more specific way, in relation to the manufacturing activity comparison has been made between TATA Motors Ltd. (for present workplace) and the 31 companies (for previous workplace) from where these 349 respondents were came to serve the TATA Motors Ltd. Chapter-4 fairly presents the analysis on the manufacturing sector.

The methodology adopted to quantify the parameters considered for the analysis in services sector is the exact replica of the methodology applied in manufacturing sector, although, out of 650 questionnaires canvassed for IT sector, then 275 responses have been considered worthwhile for further tabulation and analysis of the parameters under consideration. In the context of comparing previous workplace to present workplace, it has to be mentioned that, around 26 IT sector companies were representing the previous workplace. This aspect of analysis and presentation has been considered in the Chapter-5 of the data analysis.

Further in Chapter-6, comparative aspects of manufacturing sector and service sector have been presented to highlight the extent and interpretation of the select parameters.

Data Analysis and Hypothesis Testing

The entire part of the research analysis has been divided and presented in chapter-4, 5 and 6. In the Chapter-4, data analysis and hypothesis testing has been presented in the context of manufacturing sector while in Chapter-5 analysis of the parameters corresponding with services sector and relevant hypotheses have been discussed and presented. A comparative picture of the suitable parameters has been presented with the help of Chapter-6 along with the hypothesis H₆ on job embeddedness.

Aligned to the sequence of questionnaire tool, the chapters on data analysis have been elaborated. In the ultimate analysis, 9 parameters have been considered, quantified, tabulated and interpreted as, namely; (i) demographic information; (ii) professional information; (iii) role of employees; (iv) skills and competence of the employees; (v) expectation of the workers; (vi) job satisfaction and level of organizational commitment; (vii) Job embeddedness; (viii) status of supervisory relationship; and (ix) work culture and attitude related parameters.

The analysis of the data has been made by using M/S Excel software package basically for the tabulation, exploration and for preparing charts. The part of hypothesis testing has been carried out by using SPSS. The quantified aspect of the all parameters have been properly illustrated with the help of suitable charts and appropriate bar-diagrams, wherever needs necessary. The “one sample ‘t’ test” and chi-square test has been applied for the purpose of testing the hypothesis, taking into considerations the scale of quantified details.

Suggestions and Implications for future research

The studies of the present type are time specific, space specific and activity specific. This would mean that researches in the context of attrition phenomena can never be a one-time proposition but will have to be carried on continuous basis if the output of such researches have to constitute meaningful inputs into the decision making process of the corporate houses. In the same way the space specificity of the study would mean that the inferences drawn on the basis of the study in one area cannot be utilized for policy making process without appropriate modifications for another area. Exactly in the same way it has to be appreciated that, the attrition phenomena is also activity specific. It means that, the attrition phenomena pertaining to manufacturing sector activity would be quite different from such a phenomena pertaining to another type of activity, may be services sector activity.

These limitations arising out of the time specificity, space specificity and the activity specificity of the attrition phenomena will have to be borne in mind by the decision makers in the corporate houses, while, formulating appropriate policies and chalking out suitable measures to mitigate the impact of the attrition phenomena.

Finally, it needs to be mentioned specifically that, this research was undertaken with the intension of contributing to the understanding of the intensity, causative factors and probable solutions in the light of findings. This study has added to the current body of knowledge relating to the comparative aspect of the attrition phenomena and has provided insight into areas that warrant further exploration.

References

ⁱ Dell, D., and Hicky, J. *Attracting and Keeping Top Employees*. New York: The Conference Board, 2002.

ⁱⁱ Bowen, D.E., & Schneider, b. (1988), Services marketing and management: Implications for organizational behavior. In B. Stew & L. Cummings 9Eds.0, research in organizational behavior (vol.10,pp.43-80) Greenwich, CT : JAI

ⁱⁱⁱ Marie Jahoda, Morton Deutsch and Stuart W. Cook, *Research Methods in Social Relations*, p-4

CHAPTER-1

INTRODUCTION

This introductory chapter has been structured keeping in mind the title of the present work, namely, “Attrition - a comparative empirical study of its intensity, causative factors and remedial measures in the manufacturing sector and services sector enterprises in Pune (INDIA- 2004-05 to 2009-10)”.

Accordingly, the present introductory chapter has been divided into four Parts.

In **Part I**, starting with a simple working concept of “Attrition”, comparative dimensions of the phenomenon witnessed in the context of various sectors of the economy have been highlighted.

In **Part-II**, attention has been focused on Pune Region / Pune District / Pune City with a view to highlighting the regional dimensions of the Attrition concept handled in the course of the present study.

In **Part-III**, since the topic is about a comparative assessment of the attrition phenomena relating to the Manufacturing Sector and the services sector, representative units of these two activities have been identified : (a) TATA Motors Ltd. and other 31 companies (manufacturing activity or the secondary sector); and (b) IT Sector, services or the tertiary sector represented by 27 I.T. companies. Basic details of these activities have been presented in Part-III. Section - A of Part III, highlights relevant details about the manufacturing sector representing automobile industry, while, Section - B brings out details regarding IT sector.

In **Part-IV**, chapter- wise scheme of this study has been presented.

Part I

Attrition Rates across Business Enterprises

The 'attrition phenomenon', whichever way one chooses to comprehend, involves reduction in the strength of employees engaged in the corporate establishments engaged either in the production of the manufacturing goods (secondary sector activities) or supply of services (tertiary sector activities). Such a labour turnover resulted in the disturbance of the smooth functioning of the corporate houses as the replacements of the employees were not always available; and whenever available, necessitated huge costs¹. This resulted in the reduction of competitive edge of the establishment, making it a high cost producer, and naturally, lowered its profitability². However, such a damage caused by the turnover of the employees was never adequately appreciated and continued to be one of the most undervalued issues confronting the business corporate houses³. The stake holders associated in the attrition phenomenon need to be appreciated from a much wider angle and should incorporate not only the workers and the management directly linked with the corporate houses but should be including the trade unions, management associations, the governmental and semi-governmental agencies and of course, the entire society at large. The structures of various economies in which the labour turnover occurs and within an economy where this occurs in different sectors of the same economy; also required a special attention. It has been observed that the attrition phenomenon / employee turnover has been quantitatively as also, qualitatively, different as between the primary, secondary and tertiary sectors of the economy. The causative factors and the remedial measures chalked out to combat this evil, quite naturally, would have to be different.

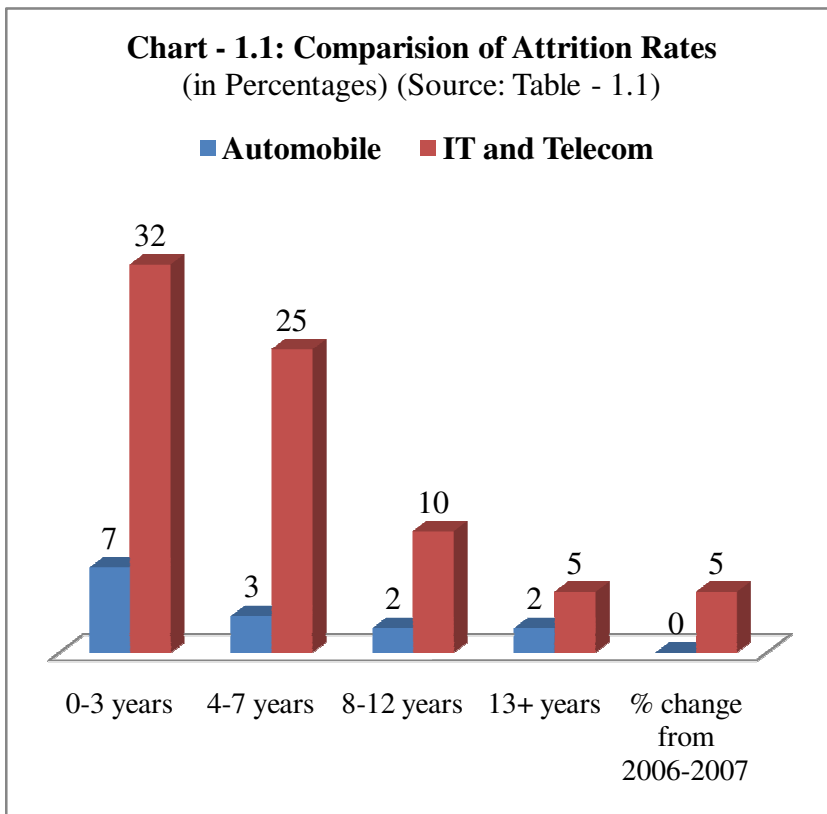
In this context, according to the one of the objectives of this present study, it may be useful to bring out the rates of attrition prevalent in several industrial establishments in India. (*Source: Table - 1.1*) As will be seen from the self explanatory table indicating the attrition rates across industries in India, ten industrial activities have been represented namely, (i) Pharma and chemicals; (ii) Manufacturing; (iii) Financial Services; (iv) Hospitality; (v) Advertisement and Media; (vi) Automobile; (vii) Auto components; (viii)

Banking; (ix) Infrastructure; and (x) IT and Telecom out of which present study is about Automobile and IT industries.

Table No. 1.1
Attrition Rate Across Industries (in Percentages)

Sr. No.	Sector	0-3 years	4-7 years	8-12 years	13+ years	% change from 2006-2007
I	II	III	IV	V	VI	VII
i	Pharma and chemicals	25.00	10.00	5.00	2.00	-5.00
2	Manufacturing	8.58	2.46	2.46	3.00	5.00
3	Financial Services	20.00	20.00	20.00	20.00	----
4	Hospitality	35.00	25.00	20.00	7.50	13.00
5	Ad and media	40.00	35.00	20.00	15.00	17.00
6	Automobile	7.00	3.00	2.00	2.00	No Visible
7	Auto components	12.00	15.00	20.00	12.00	5.00
8	Banking	10.00	5.00	2.50	2.50	2.00
9	Infrastructure	16.00	11.00	7.00	11.00	9.00
10	IT and Telecom	32.00	25.00	10.00	5.00	5.00

(Source: www.nascom.org)



The information provided in the tabular form, relates to the attrition rate during zero to three years of service; four to seven years of service; eight to twelve years of service and thirteen plus years of service. The information regarding the

percentage change, from 2006 to 2007 has also been presented and the expected increase in 2008 has been indicated and illustrated in *Bar Chart No. 1.1*.

It is quite obvious that the attrition rates would be higher in the initial years of service and would have a tendency to taper down with increases in the years of service. In some of the establishments where training does not constitute a very significant aspect for the continuation of the employees the attrition rates could be of a lower order but in a establishments where training constitutes and comprises a significant aspect of the work pattern the attrition rate could be seen to be of a higher order. It is possible that once having got the training from an establishment 'A', the employee could move on to the establishment of 'B', 'C', 'D' and so on for whatever reasons. To be specific, in the context of the present study in the IT and telecom sector the movement of the workforce (attrition rate) has been of the order of 32 per cent in the first three years of the association of the employees meet a certain establishment while it drops to 25 per cent during the association ranging between 4 and 7 years and to 10 per cent for the association ranging between 8 and 12 years and further to 5 per cent during the association ranging beyond 13 years.

In comparison, the automobile establishments have an attrition rate which is very much lower than what has been indicated for the IT and telecom sector and even the percentage change in the attrition rate from 2006 to 2007 was reported to be not visible while it stood at 5 percent for IT and telecom sector. The data furnished by NASSCOM, thus, clearly indicate the glaring differences in the attrition rate in IT and telecom sector (services industry) and automobile industry (the manufacturing sector). The present study seeks to highlight this comparative scenario witnessed in the context of these two sectors belonging to the Pune region / Pune District / Pune City of the state of Maharashtra.

Part-II

Pune Region / Pune District / Pune City

In this part, an attempt has been made to present the economic dimensions of the Pune district and / or Pune region with a view to developing familiarity with the region in the context of which this study is being conducted. No elaborate statistical substantiation appears to be called for, to make a statement to the effect that, the state of Maharashtra is easily amongst the most progressive, industrialized and advanced states in India. It is a different matter that the state of Maharashtra has been experiencing regional imbalances and has developed regions in the western Maharashtra while, the Vidarbha and Marathwada regions have been backward and continue to be so because of the developmental backlogs registered in the context of these regions⁴. However, it is not proposed to go into issues regarding regional imbalances in the state of Maharashtra, but to focus attention only on the Pune District and Pune region (comprising the districts of Kolhapur, Sangali, Satara and Solapur along with Pune District). It may be pointed out that, the Pune region forming a very significant portion of the western Maharashtra is amongst the most prosperous and industrially developed regions within the state of Maharashtra⁵. It may also be mentioned that, Pune, Nashik and Mumbai constitute a **Golden Triangle** in the state of Maharashtra which accounts for around 90 per cent of the total industrial activity in the state. To be more specific, this **Golden Triangle** accounts for around 90 per cent of Industrial investment, and about the same per cent of the value addition in industry and has also about the same per cent of industrial employment within the state of Maharashtra⁶.

In **Table No. 1.2**, the area in square kilometers of the Pune District has been indicated from 1961 to 2009-10. Except for a change in the area measured in square kilometers from 1960-61 to 1970-71 (indicating a decline of 360 square kilometers), for the rest of the years there has been no change in this parameter. And it appears that, even this change must have been because of administrative reasons which need not be attended to in the context of present study.

Table No. 1.2

Showing area of the Pune District (in Square K.M.)

S.N.	Area	1960-1961	1970-1971	1980-1981	1990-1991	2000-2001	2008-2009	2009-2010
I	II	III	IV	V	VI	VII	VIII	IX
1	Pune District	16000	15640	15642	15642	15642	15642	15642
2	Variance	Base Year	-360	2	0	0	0	0

Source: “District Social and Economical Report, Pune District-2010”, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai

In *Table No. 1.3*, population details of the Pune district have been indicated for a period commencing from 1960-61 to 2009-10. All the demographic details have not been presented but a mere increase in population in the urban areas of Pune district, which appears to be quite relevant for the present study, has been brought out. These details have been indicated in the various census records spanning over the period under consideration. It may be pointed out that the rate of growth of the urban population in Pune district during 1970-71 worked out to 42 percent indicating an annual average rate of growth of urban population of the order of 4.2 per cent. It is not conceivable that the urban Pune district population would expand at the rate of 4.2 per cent annually because of only the natural growth rate of population. It appears reasonable to suggest that such a substantial increase in urban population could be because of migratory character of urban population. In subsequent decades also the urban population in Pune district has been growing at 4.7 per cent, 4.0 per cent and 5.3 per cent according to the census of 1981, 1991 and 2001, respectively. As mentioned earlier, the contribution of migratory urban population must have contributed to the growth of urban population of Pune district. This feature holds good right from 1960-61 to even the present day and has been reflected in population census.

Table No. 1.3**Showing population details of Pune District**

S.N.	Population	Unit	1960-1961	1970-1971	1980-1981	1990-1991	2000-2001	2008-2009	2009-2010
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Total	Numbers in thousands	2467	3178	4164	5359	7233	7233	7233
2	Increase/Decrease	Percentages	38.00	28.82	31.03	28.70	34.97	0.00	0.00
3	Urban	Calculated	937	1335	1957	2733	4195	4195	4195
4	Percent Increase in Urban Population		Base	0.42	0.47	0.40	0.53	*N/A	*N/A

Source: “District Social and Economical Report, Pune District-2010”, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai. * Not available

The incomes in the Pune district (*Table No. 1.4*) have been obtained obviously from three sectors, namely, primary sector, secondary sector and tertiary sector. The primary sector comprises of agriculture, forestry, fishery, and mining. The secondary sector data include registered- unregistered industrial establishments, construction, electricity, gas and water supply. The tertiary sector is made up of railways, transports, business and hotels, banks and services, general administration and other services. One may not go into the sub categories of the three basic sectors of the economy but it would be meaningful to concentrate only on the primary, secondary and tertiary sector and examine the details of the contribution made by each one of these sectors to the total income in the Pune district. It would appear from the data presented for the sectoral disaggregation of district income (gross domestic product), for the years from 2005-06 to 2008-09, that typical characteristic of prosperous region are witnessed in the context of Pune district. During all these years under consideration, the proportion of primary sector to the total income has been around 8 per cent and for 2008-09 it has dropped to 7.17 per cent. The proportionate contribution of the secondary sector has been around 38 per cent and has registered an increase to 40.01 per cent in 2008-2009. In case of the tertiary sector, the contribution to the total income of the Pune district has been little upwards of 50 per cent and has been standing at 52.82 per cent in the year 2008-2009. This would very clearly indicate that, on the basis of sectoral disaggregation of the district incomes of

Pune, Pune district can be considered as one of the industrially advanced and prosperous region where the primary sector plays least significant role in the matter of contribution to the total district income, while the secondary sector (manufacturing activity) contributes around 40 per cent and the balance of a little over 50 per cent is contributed by the services sector. This is in accordance with the confirmed belief that as the region advances economically, the proportional contribution made by the primary sector of that region goes on continuously decreasing, while the contributions of the secondary and tertiary sector are constantly on the increase. From the data presented so far, this aspect of the confirmed belief appears to hold good in the context of the Pune District.

Table No. 1.4
Sector wise income (at Current Price) of Pune District

S.N.	Sector	2005-06 GDI	2006-07 GDI	2007-08 GDI	2008-09 GDI
I	II	III	IV	V	VI
1	Primary Sector	9.00%	8.59%	8.97%	7.17%
2	Secondary Sector	39.30%	39.38%	38.11%	40.01%
3	Services Sector	51.70%	52.03%	52.92%	52.82%

Source: “District Social and Economical Report, Pune District-2010”, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai. GDI= Gross Domestic Income.

In the *Table No. 1.5*, details regarding district per capita income of Pune and in the state of Maharashtra have been presented. It would be clearly seen that during the period under consideration, the per capita income in Pune District far exceeded that in the state of Maharashtra. And as a matter of fact, Pune district per capita income is almost one and half times more than the average per capita income of the state of Maharashtra.

Table No. 1.5
Per capita income of Pune District (at Current Prices in INR)

S. N.	Income	Unit	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	District Per Capita Income	Rs.	38230	40414	44435	51451	62323	67694	78473	90840	107214
2	State Per Capita Income	Rs.	26041	28199	30913	35157	39874	45287	52523	61003	71507

Source: “District Social and Economical Report, Pune District-2010”, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai

As a result of higher level of income both in aggregate and per capita terms registered in Pune district in comparison to the state of Maharashtra, rank of the human development index of Pune district has been placed at 4⁷.

The economic dimensions presented so far relate to Pune region, Pune district and the Pune city. The data regarding these parameters relating to only Pune City are not readily available in a comparative form. Therefore, an inference is required to be drawn to the effect that the parameters of Pune city would be of a far higher order than those obtained in a cumulative form for the Pune District or the Pune region. This is because of the fact that Pune is urban, Metropolitan Township and is surrounded by rural areas where these parameters would be of much lower order and hence pull their value down either for Pune district or for Pune region.

The phenomenon of attrition rate which mainly concerns the secondary sector, that is, the manufacturing sector and the tertiary sector, that is the services sector, would be confined in the context of the Pune City. As the present study involves a comparison of attrition activity in the manufacturing sector and services sector, the relevance of the above statistical information about the Pune district / City would become obvious.

Part-III

Manufacturing Sector (Represented by Automobile Industry) (section-a) and

Service Sector (Represented by IT Activity) (section-b)

Section-(a)

Automobile Industry (Representing Manufacturing Sector).^{8,9}

Pune is amongst one of the most popularize destinations for the automobile value chain in India. It should be noted that, from last several years Pune has emerged as one of the major business centre in Maharashtra. Pune is a base for various large and small units that are operating in sectors such as auto components, engineering, IT/ITeS BPO, pharmaceuticals and food processing. Pune is amongst the largest automotive hubs in India, with over 4,000 manufacturing units only in the Pimpri-Chinchwad belt. Major companies from the automotive industry such as Bajaj Auto, Tata Motors and Force Motors are present in Pune. Additionally, various international players such as General Motors and Volkswagen are also present in Pune. As mentioned earlier, regarding the value chain of automotive activities Pune is the house for more than 12000 small and medium auto-ancillary unitsⁱ.

An establishment of TATA Motors in an around 1960-62, Pimpri Chinchwad area has been started as an industrial belt. By the time of manufacturing TATA's 100 per cent made in India Car (Indica), Pune has developed technologically sound and supporting supplier to manufacture an automobile vehicle. This has attracted major global players operative in automobile value chain, resulting in increased per capita income of the peoples and also played role of booster to the economy of Pune.

Thus, it will not involve any logical risk to point out here that, automobile industry has been the base for economic development of Pune and thus, has been considered as a representative industry for the manufacturing sector in Pune to the extent of present study.

ⁱ Source: Discussion with the Chairman, Pimpri-Chinchwad Small and Medium Industries, Chinchwad

Section-(b)

IT Sector

It is widely accepted that in the context of Indian economy the knowledge economy has spread and has been playing a very concrete and a substantive role in bringing about the advances in the right direction and at good speed. It may be pointed out that 'a knowledge economy is one that realize intensively on human skills and creativity, the utilization of human intellectual, capital supported by lifelong learning and adaptation, the creative exploitation of existing knowledge, and extensive creation of new knowledge through research and development.'¹⁰

In the context of Pune Region / Pune District / Pune City, in addition to the traditional manufacturing activity involving automobiles and automobile spares, the IT Sector has made very heavy enrolls. Pune of today is known not only for the automobile hub but also called preponderance of IT sector activities. The IT population and IT education and training have registered a very substantial increase in and around Pune at a remarkable speed. This has naturally led to the development of IT culture in this part of the country. The IT culture has crept into the corporate sector as well. As a matter of fact the phenomenal growth of the IT Sector in Pune Region has symbolized the potential of the IT Industry since; it has drawn into its hub resources- human, physical and monetary from the other parts of the India as also from the other countries in the world, more particularly the United States of the America.

For the growth of the IT Sector in the Pune region several factors have played a very significant role such as (a) growing and highly educated English speaking workforce with the required technical and soft skills; (b) high cost advantages because of nearness to Bombay city acclaimed to be the financial capital of India; (c) evolution of competent management systems regarding data security risks; (d) adoption, maintenance and perpetuation of international quality standards; (e) availability of world class telecom infrastructure and (f) governmental support.

At the national India level, the IT outsourcing industry has branched off into several economic spheres and has generated huge employment and revenues as will be seen from following *Table No. 1.6*.

Table No. 1.6
Growth of the Outsourcing Industry in India

Sr. No.	Service Area	Growth Trend in Outsourcing Industry			
		Employment		Revenue	
		2002-2003	Per cent	in \$m	Per cent
I	II	III	IV	V	VI
1	Customer Care	65,000	37.98	810	34.46
2	Finance	24,000	14.02	510	21.70
3	HR	2,100	1.22	45	1.91
4	Payment Service	11,000	6.42	210	8.93
5	Administration	25,000	14.61	310	13.91
6	Content Development	44,000	25.71	465	19.78
	TOTAL	1,71,100	100.00	2,350	100.00

Source: www.nasscom.com

Speaking specifically about the Pune IT industry, its strengths factors may be briefly indicated. The strength is derived from the sectors such as; CAD / CAM / CAE; process control and automation; design, development engineering and technical expertise; VLSI design; GIS, MIS net worth protocol; internet and internet applications; client server architecture; system programming; embedded systems; digital signal processing; multimedia; Web-Hosted tools; e-Education; ERP applications; tools and implementations; software testing; software products; BPO and KPO in a wide range. This list is certainly not exhaustive nor it is complete and with the passage of time it has been constantly changing with newer elements coming in and some of the older ones becoming redundant. As been experienced in the Pune Region as also elsewhere in the world, there appears to be an appropriate blend between the IT Sector activities and the other manufacturing and services activities of the region. Consequently, a large number of IT Sector companies have been mushrooming in Pune Region and Pune City.

Despite of all this positive points emphasizing the strength of the Pune IT Sector and making for its growth and development, there are some drawbacks also. These may

be briefly touched upon. The lack of training facilities and availability of only limited and lack luster training facilities, vagueness of vision and values associated with the IT Sector, lack of positive direction, inappropriateness of human resource policies in respect of hiring, inadequacy if supervisory staff, over work and burnout problems and the leakages in the employee database¹¹. All these factors will hamper the development of IT sector in the Pune region and would prevent this sector from reaching its growth potential.

The lack of positive and constructive approach to various human resource problems engaged in the IT Sector activities in the Pune region was prominently felt during the course of the present study. In spite of the best efforts, and in spite of the fact that, the attrition phenomena is predominantly felt in the Pune IT sector, no IT sector company agreed to part with information regarding the hiring of the human labour force engaged in its setup.¹² Officially, it was impossible to get the information on the attrition phenomena at the company level and since, no trade union activity is prevalent in this sector. It was not possible to obtain field investigation data through this source also. Nevertheless in an unofficial fashion and strict condition of anonymity the IT workers parted with the information on the basis of restructured questionnaire canvassed among them. The details of the number of questionnaires circulated have been furnished in the Chapter of research methodology.

Part-IV

Chapter wise Scheme

Chapter1: Introduction

Chapter 2: Review of Literature

Chapter 3: Methodology, database, time span, aims & objectives of the study

Chapter 4: Manufacturing Sector- Processing, Tabulation and Analysis of the data

Chapter 5: Services Sector- Processing, Tabulation and Analysis of the data

Chapter 6: Comparative study of Manufacturing Sector and Services Sector - Processing, Tabulation and Analysis of the data

Chapter 7: Summary, Concluding Observations and Suggestions

Relevant Bibliography,

Annexure,

List of tables, figures, graphs and charts

References

-
- ¹ Dell, D., and Hicky, J. *Attracting and Keeping Top Employees*. New York: The Conference Board, 2002.
- ² Bowen, D.E., & Schneider, b. (1988), Services marketing and management: Implications for organizational behavior. In B. Stew & L. Cummings 9Eds.0, research in organizational behavior (vol.10,pp.43-80) Greenwich, CT : JAI
- ³ Researcher's own experience based on observations made while field investigation.
- ⁴ Deshpande, S., A., Research Article Published in Daily- *Tarun Bharat*, Nagpur, Dated 6 July 1990.
- ⁵ The Report on District Social and Economic Indicators, by Directorate of Statistics and Economics, Govt. of Maharashtra, 2010, p-XII-2
- ⁶ Kurulkar, R., P. *The Problem of Regional Disparities in Maharashtra State and The Role of Regional Development Boards*, Journal of Indian School of Political Economy, Jan-Dec. 2009.
- ⁷ Directorate of economics and statistics, 2001, District Domestic Product of Maharashtra, 1993-94 to 1998-99, Government of Maharashtra, Mumbai
- ⁸ www.tatamotors.com
- ⁹ Annual report of the TATA Motors Ltd for the year 2010-11
- ¹⁰ Konana, Prabhudev, and Balasubramanian, Sridhar, '*India as a Knowledge Economy: Aspirations versus Reality*', McCombs School of Business, UT-Austin, p-1
- ¹¹ PhD Thesis of Dr. Mrs. Bharatikumar on Attrition: Study on Services Sector In Pune, submitted to University of Pune, pp-155-156
- ¹² Email correspondence with Mr. Aditya Hirlekar of SYNTEL Incl. and Mr. Rajesh Save, Global HR Head, SYNTEL Incl. between 30th Oct. 2013 to 1st Nov. 2013

CHAPTER-2

REVIEW OF LITERATURE

It has to be appreciated that basically attrition phenomena relate to diminution of labour force operating in an industrial establishment or service corporations. Various aspects of these phenomena have been perceived by a variety of researchers all over the globe and very abundant literature is available in this context illustrating various facets of the attrition phenomena. Naturally, therefore, the present topic of literature review has got to be divided into several parts and sections and subsections to present a systematic review of the literature. In the process of presenting the literature review, an attempt has also been made to streamline various facets of the attrition phenomenon / employee turnover concept.

In **Part-I**, efforts have been made to define the conception of attrition in a systematic fashion and the way this perception changed over a period of time has been indicated.

In **Part-II**, section-(a) brings out the various types of attrition as visualized in several studies, while in section-(b) the impact of attrition as perceived in the literature of the subject has been presented. In section-(c), views regarding then cost implication of the attrition phenomena have been brought out.

In **Part-III**, an attempt has been made to visualize the quantification studies of the attrition phenomena as presented in several research works.

In **Part-IV**, an attempt has been made to identify and appreciate the causative forces and the driving factors of the attrition phenomena.

In **Part V**, several issues regarding the diagnostic aspects and the literature associated with attrition phenomena have been brought out.

In **Part VI**, since the attrition phenomena is not considered desirable from the point of view of the smooth functioning of the industrial and business corporations,

several studies available indicating various approaches for purposes of managing the attrition phenomena and mitigating its impact, have been reviewed.

In **Part-VII**, several solutions which got evolved over a period of time to curb the impact of attrition phenomena has been indicated.

It is considered that such a review of literature, as disaggregated over several aspects relating to attrition phenomena, would considerably go a long way in appreciating the way these phenomena got evolved and studied over years and the present status it acquired. The literature review fanning over the ways in which attempts were made to mitigate its impact would also come in handy to appreciate it from a practical angle taking into account the mitigating efforts undertaken to minimize its impact on the concerned stakeholders.

Part-I.

Evolution And Development of Attrition Phenomena

To begin with, in this context it appears useful to offer working definition of attrition as,

*'Reduction in the total employee's strength of organization through retirement, resignation or death'*¹

This could be treated as a working definition of attrition which would have to be looked into by considering the meaning of attrition as offered in several academic studies. It would be very useful to start by mentioning the meaning of attrition as in the Oxford dictionary². According to the Oxford Dictionary version, the meaning of attrition relates to the process of reduction in the strength or effectiveness through sustained attack or pressure. Obviously, the process of attrition relates to the reduction in the strength of human factor of production (labour) in any industrial organization and the reason for such a reduction appears to be the sustained attack or pressure on human factor engaged in the organization. The Longman's dictionary³ has more or less similar style of comprehending the attrition concept. Although, it includes some additional factors also, this version conceives of attrition as happening when people will leave a company or organization or a course of study and the occurring gaps are not replaced. It is obvious that non replacement of the human factor which leaves the organization has been specifically emphasized. A more elaborated concept of attrition has been offered by Wiktionary⁴ which happens to be the dictionary of online encyclopedia i.e. Wikipedia.

According to the version offered by Wiktionary, attrition is conceived of as: (a) wearing or grinding down by a friction; (b) the gradual reduction in a tangible and intangible resource due to causes that are passive and do not involve the productive use of the resource; (c) a gradual, natural reduction in membership or personnel (relating to human resources) as through retirement, resignation or death; and (d) the loss of participants during an experiment. This version of attrition is indicative of the nature of phenomena. It also makes a systematic reference to its causes in a wider context. More specifically, it appears to be relevant in the context of human factor in production. In this

context the loss in participation could be as a result of friction within various stake holders (labour, management, trade unions and the concerned Governments) and would be leading to considerable damage.^{5,6}

Considering all these aspects the definition of attrition phenomena could be stated as follows:

‘Attrition may be defined as the process of continuous reduction in the strength of human resources through the passive causes and friction within the particular organization which, for whatever reasons could not be completely replaced’

This definition incorporates several words and expressions which specifically communicate ideas which may warrant some explanations as follows:

In the ***first place***, the expression ‘strength of human resources’ refers to a total number of employees functioning at various stages and with different levels of seniority. This workforce would include technically and technologically competent workers endowed with different level of skills and efficiency, workers and officers with managerial abilities and skills providing secretarial assistance to the functioning of the enterprise. It may be pointed out that the various components of the workforce would not have identical level of skill and efficiency nor would it be right to assume that each one of them has the same degree of the loyalty to the concerned or display the same degree of belonging. In this view of the matter, the different components of the human resources with any organization would naturally be expected to make different additions to the total production, or for that matter, to the identical levels of productivity.

In the ***second place***, the significant expression is ‘passive causes’. These relate to those factors or aspects which are not actively involved in the participation of the productive or the effective work of the organization. These also play a significant role in the matter of quantification of the attrition phenomena and on several occasions, assume a very significant proportion.

In the ***third place***, ‘friction’ could be considered as a very significant component of the attrition phenomena. It has to be appreciated that, when such a big chunk of

human resource drawn from a variety of sources domestic, regional, national or even international, works together to promote the vision and mission of the organization, some discord in their rank can always be expected. This discord may take the form of different types of squirrel, disagreement and conflicts. This may result in the exit of employees leading to enhancement of attrition rate.

In the *fourth place*, the attrition phenomena relates to a ‘specific or particular organization’. In the present day functioning of a industrial set up at the national, transcontinental and international levels the organizational pattern keeps changing at between time and the space. The activity modes of different organizations also are different depending up on the processes and products they handled and the styles of functioning they adopt. In such an environment the shift of workers from one set up to another, could always be expected. However, such a shift would inflict damages to the place from which the workers move, while it would confer benefits to the organizations where the workers shift. In the present day global set up, acquisitions and mergers of the industrial units functioning under the auspicious of multi-national corporations, such a phenomenon could be both advantageous and disadvantageous at the same time.

In the *fifth place*, ‘replacement’ aspect of the shifted workers gains prominence, in the attrition phenomenon, it become imperative for the industrial units from which the shifts occurs to ‘replace’ the shifted workers for the continuance of the smooth functioning of their activities. It has to be noted that in all the national groups of industries or / and in the multinational and transcontinental corporations the replacement aspect of the shifted workers gains considerable degree of importance. It is not always possible to replace the workers in the same degree of skill and efficiency. This hampers the production and productivity aspect leading to high cost production resulting in higher prices and reduction in the competitiveness of the product.

The definition of the attrition phenomenon mentioned above has been a starting point for a detailed discussion in respect of five key words appearing in the definitions which have been elaborated above.

Part-II,

Types, Impact and Cost of Attrition

In this section, attention has been focused on types of attrition (Subsection-A); impact of attrition (Subsection-B); and cost associated with attrition (Subsection-C).

Section-(a)

Types of Attrition

The attrition phenomenon can be viewed at from various angles and depending upon the perception, various types of attrition naturally emerge. It must be pointed out that the basis of attrition phenomenon is the fact that the workers quit the present assignment from the organization resulting in the attrition phenomena. Such a quit of the workers results in the turnover and such a quit and or a turnover could be of various types.

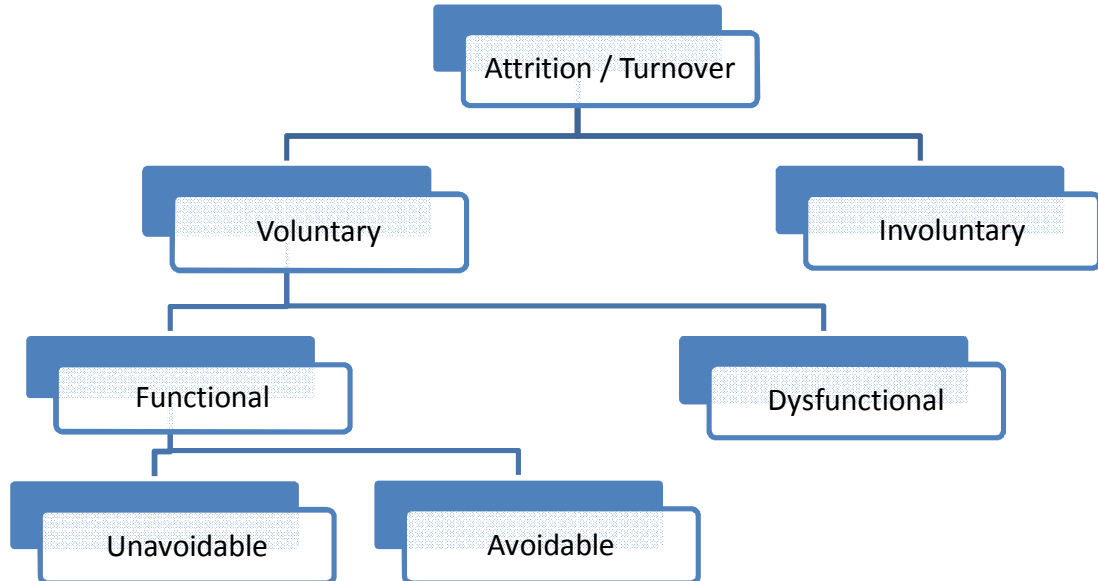


Figure 2.1: Types of Attrition / Turnover

As will be seen from the figure-1, the attrition phenomenon resulting from the quits of workers leading to turnover has been broadly divided into two types, **(i) voluntary; and (ii) involuntary**. In case of the **voluntary** movement of workers from one establishment to another, the movement occurs absolutely freely and the workers choose to move in accordance with their wishes, whims or free volition. Various reasons can be attributed to such a movement as will be brought out in subsequent discussions^{7,8}.

In regard to the **involuntary movements**⁹, workers have no choice in the matter and on most occasions such movements are driven by the management forces, such as, dismissals due to in-disciplinary behavior, or any other reasons; layoffs (when the management finds it difficult to cope up in the business environment); inefficiency of the worker and poor performance leading to undesirability for continuation. It may be noted that involuntary attrition could be entirely because of the reasons originating from the styles of functioning of the management and as pointed out the workers would have no choice in the matter. In addition it may be pointed out that involuntary shift of workers for whatever reasons would be possible only when the trade unions are weak and even otherwise may lead to a lot of litigation in a court of law against the management but that is a different issue. It may not be exactly very easy to ascertain whether the quit of the worker is voluntary or involuntary. It may be possible to ascertain with the help of exit interviews of the workers or interviews with immediate superior of the workers in the establishment. In such situations the shift of workers could be caused because of poor health or superannuation. In some other cases the involuntary movement of workers could also be because of permanent disability caused by professional hazards. Personal reasons could also be attributed to involuntary movement of workers.

In consideration of the voluntary movements of workers a further classification in two categories can be made namely, **(i) functional; and (ii) dysfunctional**. In case of functional turnover the exit of substandard performances takes place, while in case of dysfunctional turnover, the exit of effective performers endowed with high skills and superior training (difficult to be replaced) occurs. It may however be pointed out that the functional turnover involving the quitting of sub standard performers may be desirable

from the point of view of the organization in its functioning. And the dysfunctional quits / turnover involving the movement of skilled or efficient performer is most undesirable.¹⁰

It is desirable to distinguish further the dysfunctional quits /turnover into two categories such as **(i) avoidable; and (ii) unavoidable**¹¹. The unavoidable quit represents such cases of workers which employers cannot control and which are mostly due to personal or family considerations, acute medical disability and death. Although the contribution of the employers in such quite of a worker is minimal, efforts are being made at a global level to mitigate the impact of this type of turnover.

The avoidable category of functional turnover can be reduced to a considerable extent by adopting appropriate policies and setting up scheme and procedures for the purpose. Such efforts are put in place all over with a view to reducing if not completely eliminating such type of turnover occurs.

Section-(b)

Impact of attrition

The impact on the organization of attrition phenomenon can be looked into under the following heads-

(i) High financial cost

High financial cost results from the turnover both in the direct and indirect cost. The direct cost results from the loss of a recruited workers (cost of advertisement, scanning of responses, selection process, training program, in service job training- each one of these have huge cost component in monetary and real terms). The effect involved in the direct cost becomes a critical issue when the performance of the company are affected as a result of huge turnover leading to inefficiency, high cost, high process and loss of competitive edge in the market.^{12,13}

(ii) Survival

Survival of several companies becomes a very crucial issue in case of several companies where employees with critical skills exit and the replacement is very difficult¹⁴.

(iii) Exit Problems

Issues relating to these area problems in variably lead to increase litigation and several organizations are required to spent significant time and resources to handle these problems. Apart from this, the harmonious work culture gets disturbed which is not desirable from the point of view of smooth working of the organization¹⁵.

(iv) Productivity losses and work flow interruptions

As a result of quitting / turnover, when the worker does so abruptly a huge productivity gap emerges. This naturally results in a disruption in the systematic flow of the work position and causes interruptions in the entire system leading, of course, to inefficiency and higher costs.¹⁶

(v) Service quality

As has been observed on several occasions, the quality of service to the external and internal customers gets adversely affected as a result of high turnover and it entails a negative impact on the service ethics of the company and creates a damaging impression on customers and in the market^{17, 18}.

(vi) Loss of Business Opportunities

A huge labor turnover invariably would lead to a shortage of manpower and prevent the existing staff from operating efficiently and even make it impossible, for that, to take advantage of several business opportunities which would present themselves¹⁹.

(vi) Administrative Problems

Several issues relating to secretarial assistance or sharing the administrative responsibilities will crop up as a result of labour turnover and could cause diversion of

attention from productive activities. As a result, smooth functioning of the organizational set up could be disturbed.²⁰

(viii) Job Satisfaction of Retained Employees

Job Satisfaction of the employees continuing in the organization could also be affected when the workers are called up on to share additional burden of the work of the employees who have left the work.

In the ultimate analysis, what is most hurting to the organization is the loss of image in the business set up which would take quite some time to recoup. All these aspect spell out negative consequences from point of view of the organization and call for immediate attention of the decision makers.^{21, 22, 23}

Section-(c)

Cost associated with attrition phenomenon

It must be mentioned that the cost of the attrition phenomenon to the organization has a very significant damaging role to play. This considerably reduces the efficiency of the entire organizational set up. There are various types of costs which get involved in the attrition phenomenon. These may be listed and briefly discussed as under.

(i) Exit Costs:

The exit costs occur as a result of the employees leaving the organization. These will include termination expenses and even litigation expenses connected in some cases of departure. This category of cost would be very significant when departure of the workers occurs in an involuntary fashion²⁴.

(ii) Recruitment and employment costs:

Once the employees leave the organization their positions are required to be filled in which entails recruiting cost. The new process of recruitment in modern times would involve fresh advertisement, scanning of the responses, conduct of written tests (if required), short-listing of candidates for personal interviews which are phased over

several stages before the ultimate selection of the candidates. The appointment of the selected candidates and the time the selected candidates may take to join the organization could also constitute some element of costs. All these aspects need to be considered and attributed to the cost of recruitment as an employment cost²⁵.

(iii) Job related training costs:

The candidates so selected may have to be given the orientation training which also would involve considerable expenditure not just in terms of money but also in terms of the time lost of the trainers and also of the selected candidates who cannot be put on the job straight away. Further, in addition to the orientation training cost, the selected candidates may be required to undergo training on the job which could be considered as job related training activities. In all these situations the selected candidates are required to be paid handsome compensation (while in training). The element of cost associated with this activity is very considerable and assumes quite a significant proportion as it includes a time for training, the salary of trainers and the employee benefits to the trainees even when they are not participating in the actual work of the organization.²⁶

(iv) Productivity losses:

In the entire gamut, the cost of productivity lost has got to be accounted for. Although, this cannot be strictly quantified but the actual figure may indicate a tremendous loss to the organization.²⁷

(v) Hidden costs

The **quality problems**²⁸ would invariably surface and the **customer dissatisfaction**²⁹ will also result. The **loss of expertise and knowledge**³⁰ would also be on record and are many occasions, in the turnover occurs in respect of employees with very high level of skill and efficiency. This element would also be very significant.

In industrial parlance, the time over run is always treated as the cost overrun. In the turnover phenomenon the management time for mitigating the turnover problems could be considerable and would result in several elements of cost which may not always be quantified.

(vi) Temporary Replacement costs:

This also comes up when the vacancies created by the quitting employees are required to be filled in by the temporary personnel whose efficiency and accountability may always be in doubt.³¹

These are several elements of costs which are associated with the attrition phenomena.

It may also be pointed out that these are the negative aspect of the attrition phenomenon and quite naturally, are required to be looked into by the decision makers of the organization.

Having said that, it must always be appreciated that the turnover is phenomena which would always occur and in this context, one should appreciate that turnover always happens. The companies which believe in zero attrition only fool themselves. This happens because employees keep on moving due to reasons already discussed. Nothing can stop these employees from moving on. So, rather than achieving zero attrition, companies could focus on identifying whom they want to keep so that they have healthy attrition rate. In this context, it may be pointed out that **some turnover is desirable**³².

Zero attrition is not desirable mainly because of two reasons. Firstly, if all employees continue to stay in the same organization, most of them will be at the top of their pay scale which will result in excessive manpower costs. Secondly, new employees bring new ideas, approaches, abilities & attitudes which can prevent the organization from becoming stagnant. In this view of the matter, one must point out that there are some positive aspects to the attrition phenomenon which could spell out benefits for the organization in terms of fresh ways of thinking and a totally different style of functioning adopted because of new personnel recruited in the organization.

Part-III

Quantification aspect

For purposes of quantification, it may be useful to conceive of attrition phenomenon as follows-

'A reduction in the number of employees through retirement, resignation or death'³³

It may be also pointed out that the attrition rate is a more meaningful concept and could be defined as the rate of shrinkage in the size or number of employees.

It must be emphasized that the attrition rate has always been a sensitive issue for all organizations. Calculating employee turnover rate is not that simple as it seems to be. No common formula can be used by all the organizations. A formula had to be devised keeping in view the nature of the business and different job functions. Calculation of rate is not only devising a mathematical formula. It also has to take into account the root of the problem by going back to the hiring stage.

In the best of worlds, employees would love their jobs, like their coworkers, work hard for their employers, get paid well for their work, have ample chances for advancement, and flexible schedules so they could attend to personal or family needs when necessary. And never leave. But then there's the real world. And in the real world employees, do leave, either because they want more money, hate the working conditions, hate their coworkers, want a change, or because their spouse gets a dream job in another state. So, what that turnover costs? And what category of employees is likely to have the highest turnover? Who is likely to stay the longest?

Nevertheless, there is no standard formula to calculate the attrition rate of company.

This is because of certain factors such as:

- (a) The employee base changes periodically may be each month. So if a company has 1,000 employees in April 2004 and 2,000 in March 2005, then may take

the base as 2,000 or as 1,500 (Average for the year). If the number of employees who left is 300, then attrition figure could be 15 percent or 20 percent depending upon what base one takes.

- (b) Many firms may not include attrition of fresher who leave because of higher studies or within three months of joining.
- (c) In some cases, Attrition of poor performers may also not be treated as attrition.

In a simplistic fashion, for calculating attrition rate the following simple formula may be used.³⁴

$$\text{Attrition} = \left(\frac{\text{No. of employees who left in the year}}{\text{Average employees in the year}} \right) \times 100$$

The above cited formula describes the per cent attrition in the year, while more stress is given on the average strength of the employees in a specific year for calculating quotient of attrition.

Although, following formula may describe attrition in much practical way-

Rate of Attrition=

$$\text{((No. of Attritions x 100) / (Actual Employees + New Joined)) / 100}$$

The above formula may describe the rate of shrinkage in the size or number of employees in more practical way.

In India, the average attrition rate in BPO sector is near about 30-35 percent. It is true that this is far less than the prevalent attrition rate in the US market (observed to be around 70 percent), but the challenge continues to be greater considering the proportionate growth of the industry in the country. Keeping low attrition level is a major challenge as the demand exceeds the supply of good agents by a big margin. Further, the salary growth plan for each employee is poorly defined. All this only encourages poaching by other companies who can offer a higher salary³⁵.

It would be quite obvious therefore that the cost of attrition would be very high not only to the organizations but also to the society. These aspects have been considered in details in section (ii), subsection (c) of this chapter.

It appears desirable to point out, at this stage, that attrition does not occur only in country like India; but it is a universal phenomena and takes place all over the world-whether in the developed industrial advanced economies of Western Europe, USA, Canada or Japan in the Far East. The attrition is also witnessed in the developing countries of Latin America, Africa and the oil extractive countries of the middle-east or in the densely populated peasant economies of Asia. However, the quantum of this problem, the reasons causing it and the solutions offered have always displayed a substantial difference from one region to another. It may appear as if that the attrition phenomenon is universally present in the Rich North Countries as also in the Poor South countries. It goes without saying that the nature, character of the attrition phenomena witnessed in the context of the diversified countries is bound to be different. Further, the causative factors and also the remedial measures would be different. These differences are understandable in consideration of the fact that, the basic structure of the economies is different. It may also be pointed out that with respect to any given economy the attrition phenomenon would be different for different time period, since every economy is bound to evolve, over a period of time, and is bound to have different structures and as it graduates from the developing category to the developed one.

It may also be useful to indicate very briefly the attrition rates as witnessed in the countries of US, Australia, Europe and India and compared with global average in the following table. This substantiates the observations made earlier.

Attrition Rates in different countries -2003:

US - 42%

Australia - 29%

Europe - 24%

India - 18%

Global Average - 24%

Source-Times News, New York (2003)

According to a study³⁶ the No.1 reason for this growing attrition rate is compensation unfairness. 21% of the organizations who took part in the survey said that their employee left the organization because they got offers from other organizations offering better pay packages. The no. 2 reason was less growth opportunities and no.3 reason was role stagnation.

The study also revealed that the top employee retention strategy being used by the organizations in Asia was to pay above the industry standards, providing opportunities to employees to learn new skills and provide work life balance. While the discussion centers around the quantification of the attrition phenomena several issues in this context crop up. These may be briefly considered in the following-

At the very outset it must be pointed out that an appropriate definition of attrition has got to be structured and several components which get into it have got to be specified. There is no unanimity regarding what should be included in the turnover phenomenon and what needs to be excluded. In some organizations attrition is treated as an avoidable turnover. It is very often suggested that the deaths or disabilities due to professional hazards and retirement should not be included into turnover. However, this is not always accepted as a universal phenomenon. Without going into the details it may be mentioned that an appropriate definition of attrition has to be structured which would keep changing with the space and time.

On several occasions the demographics have come into play for purposes of working out turnover rates. In this context the demographics have been including regions, divisions, branches, and plants always as sex, age and personal characteristic of individual employees. All these aspects are certainly relevant and too much attention would lead to confusion of the issue.

The attrition has got to be considered from the point of view of the **critical assessment of the job groups**³⁷. In the context of industrial unit where state-of-art technology is adopted in several production processes, several employee groups may assume prominence over others because of the critical technological inputs they furnish. Such highly skilled employee groups are very often in short supply and high attrition rate

in this category of employees could be very detrimental to the smooth functioning of such an organization.

As a matter of routine, the turnover or attrition rates are calculated on a monthly, quarterly, or half yearly basis and reported to the decision makers for appropriate action. **The turnover costs**³⁸ associated with the periodical statements have got to be calculated and considered while structuring the total cost of the production.

The turnover phenomenon is usually considered against the backdrop of bench mark. Such **bench marking targets**³⁹ could be with respect to an industrial unit or in a comparative fashion as between different industrial units. It may be pointed out that in this connection a custom- designed bench mark project could be developed and historical aspects in regard to the turnover phenomena could be considered. The historical perspective of bench marking could indicate an excellent opportunity for the decision makers to understand how, when and why a particular measure resorted to for mitigating the impact of attrition is not delivering appropriate results. It may also be possible to develop **trigger points for action**⁴⁰ to identify and develop for deciding on the implementation of an appropriate measure.

It may be pointed out that the phenomenon of attrition is different both in qualitative & quantitative terms, as one thinks of different parts of the world. It is also different within a country. It is true that within a country. All the sectors are facing attrition. But the reasons and effects of attrition in every sector are different.

Precisely in this view of the matter, the attrition phenomenon in India (Pune Region of the state of Maharashtra) is examined in the context of a manufacturing industry (TATA Motors Ltd.) and the IT sector (Represented by a group of IT companies) for purposes of a comparative assessment of this phenomena.

Part-IV

Driving factors and causative forces for the attrition phenomenon

Against the background of conceptualization of attrition phenomena (section-(i)), types of attrition (section-(ii)) and the quantification of attrition phenomenon (section-(iii)), an attempt is being made in the present section to list and discuss various factors and forces which lead to the attrition phenomena or those which could reduce the magnitude of attrition phenomena.

The factors and forces which cause attrition and lead to a turnover of workforce are very complex in nature but it appears that most of these factors have a psychological bearing which gets externally manifested resulting in the workforce turnover.

To begin with, when an employee joins an organization, it will always take some time for him to develop a **sense of belonging**⁴¹ to the place where he works. In other words, the employee has to develop the **loyalty to the organization**⁴². In the present day globalization context the entire world has become a big village and industrial set up has been spread all over the globe cutting across the national, regional and continental barriers. Acquisitions and mergers are the order of the day and movement of resources and workforce at all levels has gathered momentum across frontiers. In such an environment, it is very difficult to expect the company or the organizational loyalty from various constituents of the work force at all levels. As a matter of fact, the retention of the worker or the embeddedness becomes a significant conceptual tool to reduce the damages which attrition can cause. It is easy to appreciate that if the length of the retention time or the duration of embeddedness of workers is high, the attrition rate would be low and conversely, if the time of retention is low and the duration of embeddedness is also low, the turnover phenomenon would be of a very high order and would give a very high attrition rate. Lack of company / organizational loyalty, thus play a significant role in causing the attrition and could be treated as one of the significant drivers of the attrition.

The work force has always displayed changing characteristic in regard to the behavioral pattern and the old time concept of sticking to an organization, no longer holds good today. But it appears that the workers keep hopping (like monkeys) from one

tree top to another. As a result of this change in the psychological attitude of workers and as a result also of the availability of suitable job opportunities across the globe, the **desire for challenging and useful work** gets satisfied. Additionally, the workers of today need **autonomy** as an inbuilt mechanism in the style of thinking as a result of which they are always clamoring for **flexibility and independence**. The workers expect to function in an environment where the flexibility to organize and control their work and work environment co-exist. Non existence of these aspects would lead to a higher attrition rate while their presence will considerably reduce the attrition rate.⁴³

Along with the changes in the psychological pattern and environmental settings, the entire attitudes of workers have undergone sea change. The workforce of today is no longer interested in time pay scale, the pattern that existed in yester years, but is looking forward to the **performance based rewards**⁴⁴ which are expected to be directly proportional to the achievement. Further, a very strong need is felt for **recognition, for participation, accomplishment and contributions**⁴⁵. The workforce is no longer satisfied to mere monetary rewards, although they are essential. The performance is expected to be recognized, participation appreciated, and accomplishments and contribution noted. These would offer psychological satisfaction to the workforce in addition to the monetary benefits which are, of course, expected. It must be pointed out also that, with very frequent changes in the technology-up-gradation, the existing workforce is required to acquire new skills to be in a position to handle the technologically superior inputs. The employees of today consider the acquisition of skill as a more dominating factor in relation to job seniority. And as a result, the employees are looking forward to the employers for providing them with opportunities for job related training programs which would permit continuity in the opportunities to develop their own skills and efficiencies. Availability of all these features would tone down the attrition phenomena while its non availability would accelerate it.

It has been very widely recognized that, an atmosphere to permit **career growth** in all directions should be placed at the disposal of workforce. It is suggested that the career growth need not always be upwards but it could involve lateral movement. Thus, when one talks of the opportunities for career growth in all directions, one is suggesting

the possibilities of growth both in the vertical and horizontal directions. Additionally, the desire to develop a leading edge is also witnessed in the present day workforce. This desire culminates into competitiveness and therefore results in competitive compensation being offered time to time. This aspect also plays a very significant role in relation to the attrition phenomenon.

One cannot always be materialistic in the matter of satisfying the expectations and aspirations of the workforce all the time. The management has to provide with a **caring and supportive environment**⁴⁶ and should avoid harsh and matter of fact attitude toward the workers. Apart from this, the workers up today are looking for **work-life balance**⁴⁷ in whatever jobs they choose to settle in. A common scenario in present day in an industrial set up where the workers get paid at a substantially higher rate but they hardly get any time to spend and enjoy the high monetary benefits they are endowed with. In such environment it is an element of leisure which would improve the quality of life to the workers. It is obvious; therefore, that appropriate handling of these matters would bring down the attrition rate while ignoring these aspects which appear to be trivial would increase it.

Thus, several factors and forces which would have a strong bearing on the attrition phenomenon, either to accelerate it or to decelerate it have been listed and discussed. If the organization chooses to reduce the intensity of the attrition phenomena and mitigate the damages resulting from it, then appropriate steps at the right time are required to be taken. It may also be suggested that these steps will keep changing with the time and place and would not have any universal applicability.

Part-V

Diagnosing attrition phenomenon

It may be noted, at the outset, that the attrition phenomenon does not occur in any industrial group of companies all of a sudden. It is certainly not a phenomenon happening like bolt from the blue. Before the attrition happens and it assumes an alarming proportion, several indications are obtained for a sensitive and meaningful management to take note of and act in a meaningful fashion so that the damage inflicted by attrition is the least.

In the present section an attempt has been made to identify some of the factors and forces which can be relied upon to indicate the beginning of the attrition activity in the company. One may refer to these indications as the diagnostic aspect of the attrition phenomenon. On the basis of the study, an abbreviated version of the diagnostic phenomenon of the attrition can be made out and the issues related to this context can be discussed and studied.

Initially, the employees who get dissatisfied with their jobs or experience a dilution in their organizational commitment, usually, are on the course to take decisions to leave the job. Some of the employees quit the jobs immediately or some others undertake a job search in the market and quit after they have landed a job which they considered suitable and desirable. Till such time the employees in this category continue with the old employer with an appreciable degree of dissatisfaction as if they are merely marking time.

The reasons for dissatisfaction could be many, such as, the job content being repetitive and meaningless, conflicting environment, vague job assignments or excessive workload.

Discord with the co-workers and direct conflict with superiors, inadequate compensation constitute another set of factors. On many occasions, the initial expectations from the job or organizations are not met. This could also create dissatisfaction in the minds of employees. In addition, inequitable and disproportionate

rewards and benefit, insecurity of job, several conflicts between work and non work roles required to be played by the employees could also be causative factors for dissatisfaction. While these factors create a negative impact on the mind of employees, there are some positive elements also which might, to whatever extent, negate the impact of these negative factors. There could always be expectations of securing better positions inside the firms, attractive internal positions, compensation benefits in terms of accumulated pensions and seniority benefits, commitment enhancing job environment and the internal commitment to the loyalty of the firm. These and similar issues would create a positive impact on the minds of employees, detracting them from the attrition course. It may also be pointed out that employees might fit even they are more satisfied because of certain un-avoidable reasons over which an organization cannot have control.

The *decision to quit* taken by the employees is the single most significant example. Such decisions are quite indicative of the intensions of the employees which can be verified and quantified with a view to predicting the turnover. This is accomplished with the help of small survey which would indicate whether the employee intends to quit or continue. For instance, a question specifically asked in this regards as to whether a employees would be inclined to quit, got response 'definitely yes' (over 60 per cent of responses), while 'definitely not' (about 10 per cent) and remaining 30 per cent also, were not sure as to whether they would like to continue or quit. Such responses, periodically obtained, could be used as diagnostic tools to predict the occurrence of attrition phenomenon and even indicates the quantitative aspect of it.

Some studies have also been conducted to indicate the level of *job satisfaction*⁴⁸ or otherwise. This study also indicates and highlights the specific aspect of the work environment which could lead to job satisfaction. All said and done, it must be appreciated that a pay package is the most attractive factor making for job satisfaction as the pay and satisfaction are strongly correlated for the continuation of the employees in the company. A negative correlation between pay and satisfaction also causes a very considerable level of dissatisfaction and would result in a higher degree of turnover. Some studies have also indicated the organizational commitment which is quite different from job satisfaction.

Part-VI

Approaches for managing attrition phenomena

The gravity of the damage which the attrition phenomena can inflict on the industrial corporate houses was recognized and several steps were taken to mitigate the hardships caused by the attrition phenomenon. These approaches were never systematic nor were they well coordinated. At the same time these approaches displayed a great degree of variance as between different situations. As a result, a standardized strategy was not apparent in most of the situations where the attrition phenomenon was playing havoc. In this section, an attempt has been made to bring about a degree of standardization and some severance of uniformity in strategic approaches which can be considered for reducing the impact of attrition phenomenon. This approach may be styled as *strategic accountability approach*⁴⁹. It would involve eight steps to be taken in a certain sequence. The *step one* will involve exact measurement of the attrition phenomena with a view to monitoring the data relating to turnover and retention. The *step two* would indicate the cost involved in the process indicated in the step one and these will include the loaded cost. In *step three* an attempt will be made to offer a diagnosis of the causes and emphasize the requirement that the retention of the labour force be considerably improved upon. *Step four* will involve exploration of a wide range of solutions that may be available at the relevant time. The *step five* would be about identifying the needs of the organization and bring about matching of the solutions to current needs. In *step six* an attempt will be made to forecast the value of retention solutions, it has to be appreciated that on several occasions the solutions offered could be top heavy and may not be economically feasible. The *step seven* will involve calculation of Return On Investment (ROI) of retention solutions. And the *step eight* will involve introduction of various adjustments which are required to be made during the implementation of each one of the steps and give a roadmap for future continuation. (See *Figure - 1.2*)

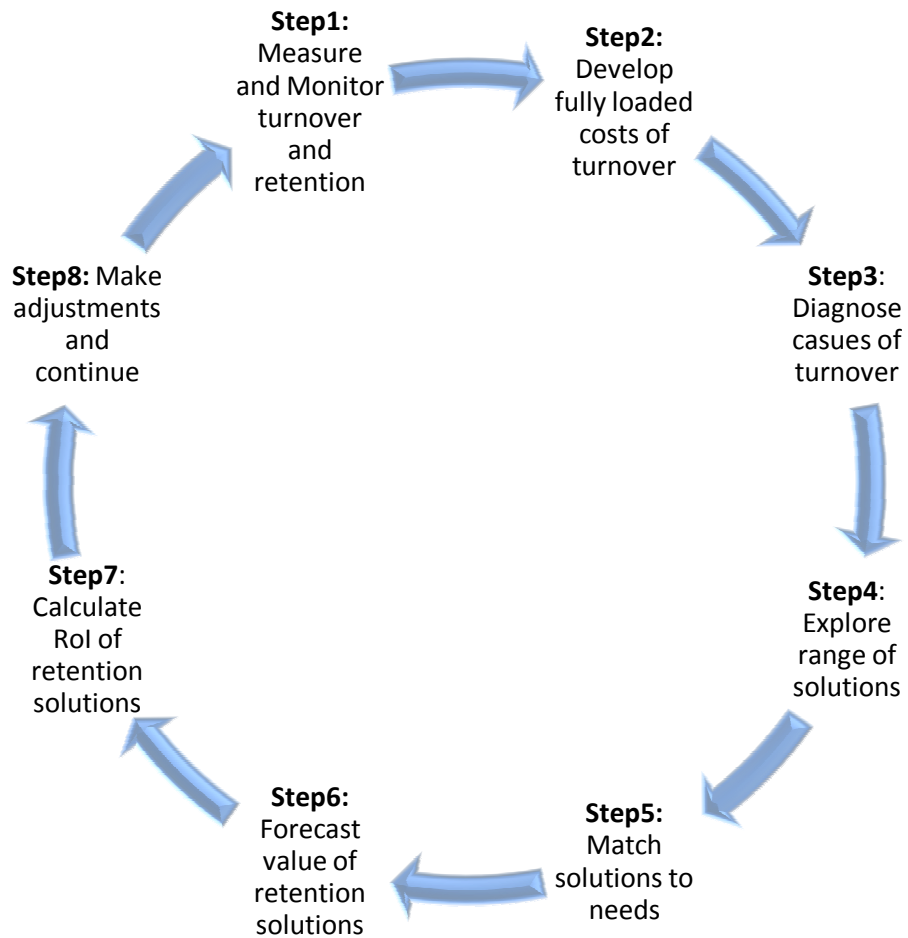


Figure - 2.2: Strategic Accountability Approach

Source: Adapted from “Managing Employee Retention” by Jack J. Phillips and Adele O. Connell, 2003, p. 23

Part-VII.

Solutions to mitigate the damage caused by attrition phenomenon

Against the background of the discussion relating to several aspects of the attrition phenomenon, an attempt has been made in this section, to discuss and elaborate several solutions offered and implemented.

It appears necessary to indicate, at the very outset, that the attrition phenomenon, although studied at a **MICRO** unit level of a factory or group of factories or a group of service sector establishments, cannot be studied without at least a tangential reference to **MACRO** level parameters of the economy in which the attrition phenomenon is being studied. Without going into the details of the macro level parameters, it may be mentioned that the levels of income, the levels of employment, the levels of prices and several related factors may have to be considered before the attrition phenomenon at the micro level could be discussed. When one talks in terms of level of income, employment and prices obtained in the context of an economy, one would have to face the situation where income, employment and price levels would keep fluctuating in accordance with cyclical fluctuations in an economy. The concerned government would be actively associated with evolving measures and chalk out programs to stabilize the levels of income, employment and prices through fiscal measures, monetary measures and / or direct control policies. Again, without going into the details of the policy format of the government aimed at stabilizing an economy, one may merely point out that the fiscal measures would involve appropriate taxation measures and spending programs, while the monetary policies implemented by the Central Banks of the respective economies, would involve Bank Rate Policies, Open Market operations and adjustments of Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR). The direct control measures for purposes of achieving stabilization at the macro level of economy would involve the direct intervention in the market by the government with a view to assisting the fiscal and monetary policies, so that the economy gets stabilized within a reasonable time dimension. Only for sake of exhaustiveness, one may point out that, when the economy is at higher levels of income and employment and is experiencing a lot of inflationary pressure, the government will have to adopt suitable measures for stabilization of the

economy (such as imposition of higher level taxes) and appropriate expenditure programs (reducing the level of expenditure). A suitable monetary policy would have to be implemented by the central bank which would involve higher bank rates and open market operations such as, sale of securities to mop up additional quantities of money in the economy. At the same time, the CRR and the SLR would have to be appropriately moved up with a view to reducing the quantity of money in the economy. At higher levels of inflation a direct control mechanism may also be required to be put in place so as to supplement the effects of the monetary and fiscal measures already set in motion. As against this, when the economy is experiencing a downturn in the business cycle, and much lower level of income and employment and lower level of prices as well, an exactly opposite policy format is required to be structured with a view to stabilizing the economy. For instance, the lower bank rates to promote investment could be thought of along with the open market operations involving purchase of securities which would naturally result in additional purchasing power being made available to the economy. In addition, suitable adjustments in regard to CRR and SLR (some point reduction) may also be thought of for increasing the quantity of money in circulation. Appropriate direct control measures may also be thought of (which may include direct buying of commodities in the market to boost the demand for commodities and naturally increase the level of prices). This probably, would be the appropriate time to build up the buffer stock of the essential commodities for releasing it when the economy is experiencing of upswing.

In accordance with discussion in earlier paragraphs, the macro level parameters operating in a certain set up of a country would have a very strong influence on the attrition phenomenon. For instance, when the economy is experiencing an up spring of the trade cycle the rate of attrition is likely to be very higher because with higher levels of income and employment, more job opportunities would be available for the workers to switch form one job to another. While, when the economy is experiencing the downswing of the trade cycle, the level of unemployment is already high, the job opportunities are very few and the workers may not find it convenient or feasible to give up the present employment and switch over to another. In such a situation the attrition rate will be much lower.

Against the background of the discussions of the macro level parameters of the economy which would certainly influence the attrition phenomenon several solutions at the micro level may now be considered. These solutions may be considered in four categories, namely,

(a) Recruiting new employees,

(b) Establishing an appropriate work environment,

(d) Creating equitable pay and performance processes, and

(d) Building motivation and commitment. Some aspects of each one of these solution set may now be considered.

A. Recruiting new employees

The standing of the organization in the market set up with a strong image backed up by a strong positive *organizational image*⁵⁰ could definitely curtail the attrition rate. This is obviously because of the fact that the employees would be invariably attracted to such an organization where they would be very proud of working with and would not like to leave it very easily. Apart from the image considerations of the organization, its *performance of the market* has got to play a very significant role. The workers will stick to an organization without wanting a change if the organization has a solid performance future and is likely to improve and maintain the profitability in days ahead. Such an organization would naturally attract the employees. The point to be emphasized is that the organization should not only have a strong foundation and a positive image in the society at the present time period but should also have a bright future meaning that the present characteristic associated with the image and the performance would be maintained and continued in the future as well.

The recruitment procedures followed in such organizations should be indicative of a fair and equitable selection programs and the job offered should be made in reasonable time after the *selection procedure* is completed. It needs to be further appreciated that an *appropriate job fit*^{51, 52, 53} has to be achieved so that the story of round pegs in a square hole does not occurred. For this purpose, the selection of only those employees in a job

which match their skills and talents is required. Such a selection would match the expectations and the skill requirements in a job which may be continued in reasonable time span. Once a certain employee is recruited by adopting a suitable selection process it is necessary that an organization arranges for him the *orientation and initial training*⁵⁴ programs. This would result in providing a formal orientation and socialization which would enable the employee to adapt quickly to the job team, work team and the organizational culture.

b. Establishing an appropriate work environment

As has been observed already, the solutions to the attrition phenomenon could be visualized both at the macro and micro levels. In the context of the micro level solution sets several factors and variables will have to be considered and appropriate policy frames would have to be formulated. The second solution set involves establishments of appropriate work environment at the industrial unit level (MICRO). In this context several factors will play a significant role and would have a strong bearing on the magnitude of the attrition phenomenon. Some of these factors may be discussed in following paragraphs.

Job satisfaction^{55,56} is a very significant variable which would influence the attrition rate. The job satisfaction as such, could be visualized in a variety of style and fashion but basically it would mean that the job and work environment should be so coordinated as to meet the needs of the employees. This would naturally result in the satisfaction of the employees with the key aspects of the job and therefore, the tendency to switch job may considerably diluted.

Additionally, *work place design* has to be appropriately formulated, structured and implemented. This would involve creation of professional, attractive work areas, supporting the job functions which would enhance the efficiency of the employees and make considerable additions to the productivity of the unit. As a result, the need for having attractive, comfortable productive work settings will be met. This is beneficial not only from the point of view of the management but would also infuse confidence in the employees which might act as a deterrent for mobility of the workforce.

Quite apart from these issues, the need of the workers *to feel safe*⁵⁷ in the work place has got to be attended to. For this purpose, a sustainable work place safety program has got to be formulated to ensure the feelings of safety in the minds of the employees. As may be observed, the safety considerations have formed special mandatory provisions in the industrial policy statements and these have assumed statutory and mandatory positions as well. Such provisions have been made in practically every capitalistic and socialistic country of the world, whether it belonged to the rich north and poor south countries.

The employees must have a reasonable degree of *job security*^{58,59} offered to them and specifically created for them by the employers. There is always a need in the psyche of the employees to have a secured job which would offer confidence regarding the continuance of the employees. And for this purpose, policies and programs have got to be structured for sustaining a viable work force stability and security.

The industrial organization, as it goes about operating and functioning over a period of years, develops its own *organizational culture*^{60,61}. Such an organizational culture which supports individual values, respect, and dignity are some of the attitudes the employees are always looking for. It is necessary to appreciate the human aspect of the workforce has got to be given due considerations. Therefore, the creation development and sustenance of a culture that provides individual values and respects would be very significant from the point of view of influencing the attrition phenomenon.

In recent times, *life balance*⁶² has been recognized and even appreciated in most of the corporate houses as a significant factor influencing the psyche of both of the workforce and management. It is always considered desirable to work operate and function in an environment brings about the balance between work, family and personal interest. To achieve this objective several family supports and life balance programs are created and promoted from time to time. These certainly plays significant role in reducing the magnitude of the attrition phenomena.

*Work Diversity*⁶³ is also one of the very significant aspects which merits considerations in the context of mitigating the damages of the attrition phenomena.

Stereo type pattern of work is not appreciated by the employees as it results in the generation of boredom. Therefore, several programs and policies need to be formulated for building and supporting a fair and equitable diversity so as to ensure freedom from stereo type work pattern and boredom originating from it.

c. Creating equitable pay and performance processes

It needs to be appreciated that, pay packets or the salary or the wages which are offered to the employees constitute the most significant aspect of his association with the industrial establishment. Therefore, structuring of an attractive remuneration for the services rendered at any level would have to be considered as easily the most significant factor of the attrition phenomenon. Attractiveness or otherwise of the pay packets would determine, to a large extent, the magnitude of the attrition rate. It has got to be further appreciated that the pay packets has got to be structured over a period of time and therefore suitable modifications in its regard would have to be introduced keeping in mind the changes in the circumstances.

Therefore, *pay*⁶⁴, has to be paid fairly and equitably. A pay system that is fair, equitable and competitive would have to be evolved and programmed in consideration of several other variables.

In addition to the considerations of pay, the other *benefits*⁶⁵ which industrial establishments offer would also have a considerable impact on the attrition rate. These benefits have to be competitive and suitable to the individual needs and aspirations. To serve this aim suitable feasible employee benefit programs need to be tailored and implemented. It needs to be mentioned that these programs would have to keep changing with the time and exigencies of the situations should be considered for bringing about appropriate changes in such programs.

Yet another significant variable which would have very significant relation with the attrition phenomena could be *job performance*. It is not always that the all employees have the same degrees of skills and efficiency in the course of discharge of their responsibilities and even the loyalty and the sense of belonging could vary from one employee to another. In such situation recognition by the management in respect of the

performance level of employees and conferring on superior performance a certain reward could be considered with a view to lowering an attrition rate. Such a program should be appropriately tailored and implemented for achieving the desired results.

d. Building motivation and commitment

In several industrial organizations, apart from the pay packets, special attention is paid to the way the employees are treated by the management. In this context, the *quality of leadership*^{66,67} would play a very prominent role. A leader who commands respect will be in a position always to inspire the employees and would be able to provide leadership, mentoring, develop and training and so on to ensure the desired results. To this end, the industrial establishment is required to chalk out and adopt appropriate schemes and procedures so that the attrition phenomenon is witnessed at a minimum level.

In the management parlance it is always stated that the responsibility and the authority, to take decision, must go together. On many occasions it is witnessed that the management passes on the responsibilities to the employees but keeps to itself the authority to take decisions even on day today matters. It is not necessary to go into all the ramifications associated with such a policy of the management, but it appears reasonable to suggest that *empowerment*^{68, 69} of the employees during the course of the fulfillment of their assignments would be definitely called for. Such an empowerment of the employees would involve that the decisions be allowed to be taken by personnel on spot. And for this purpose, a suitable structuring of 'manage and empowerment program' should be appropriately structured and implemented.

In any industrial organization an effort of the employees involves *team work*^{70, 71, 72}. An employee must feel that he is a part of a supportive team and for this purpose; creation of team building program to facilitate building up of effective productive teams is called for.

It is true that, industrial establishment and business enterprises will always be looking for maximizing profit and would always chalk out policies and programs which would help them to achieve such an objective. However, apart from this materialistic stand point, the industrial houses today are attending to several societal concerns and are

required to operate in an environment which is *trustworthy and ethical*^{73, 74, 75}. To serve these areas the industrial establishments of today are chalking out various programs to discharge the *Corporate Social Responsibility (CSR) programs and adopt Cause Related Marketing (CRM)*. Thus, it will be seen that the corporate houses are moving on the grounds of ethicality and trustworthiness and are not confined only to the mundane issues of profit maximization.

In considerations of various stand points, several corporate industrial establishments develop for the employee's team building programs for improving the employee commitment at the organizational levels. Such *organizational commitment*^{76, 77, 78} enables organization to develop the team and enhance the sense of belonging of the employees to the organization.

The present day industrial set up is required to offer *professional growth and career advancement*⁷⁹ for purposes of retaining employees and reducing the attrition rate. It has to be mentioned that special attempts are being made for developing variety of skills and competencies to enable the employees to grow and prosper with the organization. The modern era concept is that the employees and the organization grow together and complement each other in the process of growth and development. For this purpose, an organization is required to offer a variety of training and development programs to improve the skills, so that a career management system can be put in place.

Quite apart from this, the present day academicians and the decision makers in the corporate houses have been developing a different approach to combat the ill effects of the attrition phenomena and, to whatever extent possible, minimize the attrition rate. This is being attempted in the context of various settings and environment in different countries and at the global level. The new approach does not relate to the movement of labour unit from one job to another placement in a corporate house (which is the essence of the attrition phenomena), but involves an investigation into the duration or length of time during which the labour unit rests or gets embedded in the present assignment. Obviously, this approach would clearly indicate that longer is the duration of embeddedness, the frequency of the occurrence of the attrition phenomena is likely to be lower and the value of the attrition rate is likely to be smaller. In this context a research

paper published by the Marquette University⁸⁰ regarding ‘Job Embeddedness: A Theoretical Foundation for Developing a Comprehensive Nurse Retention Plan’ is worth considering. Yet another research attempt in 2009 by the Institute of Behavioral and Applied Management is worthy of a mention⁸¹. This aspect has been developed although in a cursory fashion while offering concluding observations to the present study in Chapter-7.

References

-
- ¹ Source: <http://www.merriam-webster.com/dictionary/attrition>
- ² Source: <http://www.oxforddictionaries.com/definition/english/attrition>
- ³ Longman Dictionary of Contemporary English, Longman Group Ltd., 1995, p-71.
- ⁴ Source: <http://en.wiktionary.org/wiki/attrition>
- ⁵ Dell, D., and Hickey, J. Attracting and Keeping Top Employees. New York: the Conference Board, 2002
- ⁶ Phillips, P., Retaining Your Best Employees, Alexandria., Va.: American society for Training and Development, 2000
- ⁷ Campion, M. (1991). Meaning and measurement of Turnover: comparison of alternative measures and recommendations for research. *Journal of applied psychology*, 76, 199-212
- ⁸ Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal : An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior*, 37, 60-78
- ⁹ Hom, P.W., & Griffeth, R. (1995). Employees turnover. Cincinnati, OH: South-Western
- ¹⁰ Campion, M. (1991). Meaning and measurement of Turnover: comparison of alternative measures and recommendations for research. *Journal of applied psychology*, 76, 199-212
- ¹¹ Abelson, M.A. (1987). Examination of avoidable and unavoidable turnover. *Journal of Applied Psychology*, 72, 382-386.
- ¹² Labelle C D, Shaw K and Hellenack L J (1980), "Solving the Turnover Problem", *Datamation*, Vol 15, pp. 21-32.
- ¹³ Dell, D., and Hickey, J. Attracting and Keeping Top Employees. New York: the Conference Board, 2002
- ¹⁴ Mandel, M. J., & Farrell, C. (1992, July, 13). The immigrants, *Business Week*, 114
- ¹⁵ Motorola sues Intel, (1999, March, 12). Associated Press. Retrieved March, 12, 1999. From the World Wide Web: <http://wireap.org>. \FRONTID= TECHNOLOGY & PACKAGEID= BIZCOMPUTERS.
- ¹⁶ Glassop, L.I. "The Organizational Benefits of Teams." *Human Relations*, February 2002; 55(2): 225-249.
- ¹⁷ Phillips, P. (2002) (Ed.). Retaining Your Best Employees. Alexandria., Va.: American society for Training and Development

-
- ¹⁸ Schlesinger, L.A., & Hesklett, J.L.(1991, September-October). The service-driven service company. *Harvard Business Review*, 69, 71-81
- ¹⁹ Cappelli, P. (2000), January/February).A market-driven approach to retaining talent. *Harvard business review*. 78-103-111
- ²⁰ Philips, J. J., Connell, Adele, *'Managing Employee Retention- A strategic Accountability Approach*, HR Society for Human Resource Management, 2003, pp 5-6
- ²¹ Salancik, G.R., & Pfeffer, J. (1978), A social information processing approach to job attitude task design. *Administrative Science Quarterly*, 23, 224-253
- ²² Mueller, C. W., & Price, J. L. (1989).Some consequences of turnover: A work unit analysis. *Human Relations*, 42, 389-402
- ²³ Sundstrom, E., DeMeuse, K.P., & Futrll,D. (1990). Work teams : Applications and effectiveness. *American Psychologist*, 45 (2), 120-33
- ²⁴ Philips, J. J., Connell, Adele, *'Managing Employee Retention- A strategic Accountability Approach*, HR Society for Human Resource Management, 2003, p-26
- ²⁵ Cascio, W. F. (2000). *Costing human resources*. Cincinnati, OH: South-western
- ²⁶ Hom, P.W.,& Griffeth, R.(1995). *Employees turnover*. Cincinnati, OH: South-Western
- ²⁷ Cascio, W. F. (2000). *Costing human resources*. Cincinnati, OH: South-western
- ²⁸ Bowen, D.E., & Schneider, B. (1988). *Services Marketing and Management : Implications for organizational behavior*. In B. Stew & L. Cummings 9Eds.0, research in organizational behavior (vol.10,pp.43-80) Greenwich, CT: JAI)
- ²⁹ Heskett, J. L., Sasser, E., Jr., and Schlessinger, L. A.*service Profit Chain*. Boston, Mass: Harvard Business School, 1997
- ³⁰ Ettore,B. (1997,May).How are companies keeping the employees they want. *Management Review*, 49-53
- ³¹ Cascio, W. F. (2000). *Costing human resources*. Cincinnati, OH: South-western.
- ³² PhD Thesis of Dr. Mrs. Bharatikumar on Attrition: Study on Services Sector In Pune, submitted to University of Pune, pp-124-125
- ³³ Eqbal, Naila, "ANALYZING CAUSES OF ATTRITION RATE AND GIVING THE SOLUTION THROUGH MASLOW'S HIERARCHY OF NEED IN BPO INDUSTRY", *RGC Research Journal*, Vol.-I, issues-IV, October-December2012, p-1.

-
- ³⁴ Eqbal, Naila, “ANALYZING CAUSES OF ATTRITION RATE AND GIVING THE SOLUTION THROUGH MASLOW’S HIERARCHY OF NEED IN BPO INDUSTRY”, RGC Research Journal, Vol.-I, issues-IV, October-December2012, p-2
- ³⁵ Keith K and McWilliams A, “The Wage Effects of Cumulative Job Mobility”, Industrial and Labour Relations Review, Vol. 49, pp-121-137
- ³⁶ Hewitt’s Attrition and Retention Study, Asia Pacific, 2006
- ³⁷ Mollie Lombardi, Jayson Saba, “Talent Assessment Strategies: A Decision guide for organizational Performance”, Aberdeen Group, March 2010, p-6
- ³⁸ LaBelle, C D., Shaw, K. and Hellenack L J, “Solving the Turnover Problem”, Datamation, Vol. 15, 1980, pp. 21-32
- ³⁹ Vassilis Kelessidis, “Benchmarking: INNOREGIO: dissemination of innovation management and knowledge techniques”, Thessaloniki Technology Park, 2000, pp:2-6
- ⁴⁰ [Kathleen Goolsby](#), “Action plans for managing attrition in an outsourcing service providers resources”, Article published on www.outsourcing-center.com, March 15, 2011
- ⁴¹ Ronald Fischer, “REWARDING EMPLOYEE LOYALTY: AN ORGANIZATIONAL JUSTICE APPROACH”, International Journal of Organisational Behaviour, Volume 8 (3), 486-503
- ⁴² Ronald Fischer, “REWARDING EMPLOYEE LOYALTY: AN ORGANIZATIONAL JUSTICE APPROACH”, International Journal of Organisational Behaviour, Volume 8 (3), 486-503
- ⁴³ Jack J Phillips and Adele O Connel, “Managing Employee Retention: A Strategic Accountability Approach”, HR SOCIETY, USA, 2003
- ⁴⁴ Ong Tze San and Yip Mei Theen, “The Reward Strategy and Performance Measurement (Evidence from Malaysian Insurance Companies)”, International Journal of Business, Humanities and Technology, Vol. 2 No. 1; January 2012
- ⁴⁵ Department of Human Resources, University of Colorado Boulder, “Guide to Motivating Employees”, July 2012, pp. 9-14.
- ⁴⁶ Joyner, J. “Corporate Culture Defines Success”, Computing Canada, May 18, 2001; 27 (11): p. 26.
- ⁴⁷ Guest, D., “ENOP Symposium on work-life-balance: an Introduction”., Social Science Information”, Vol. 41, 2., pp-253-254.

-
- ⁴⁸ SHAFIQ ZAREEN and SUREKHA RANA, "Job Satisfaction and Attrition-A Study of Selected Call Centres in NCR", *Indian Journal of Applied Research*, Volume : 4 | Issue : 4 | Special Apr Issue 2014, pp. 85-86
- ⁴⁹ Philips, J. J., Connell, Adele, *Managing Employee Retention- A strategic Accountability Approach*, HR Society for Human Resource Management, 2003, p. 19.
- ⁵⁰ Shoemaker, C., and Lantos, G.P., "Marketing Corporate Image", *Journal of Consumer Marketing*, 2000, 17(4/5), p.459
- ⁵¹ Mitchell, T.R., Holtom, B.C., Lee, T.W., Sablinski, C.J., and Erez, M. "Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover." *Academy of Management Journal*, 2001;44(6): 1102-1121
- ⁵² O'Reilly, C.W. Chatman. J., and Caldwell, D. F. "People and Organizational Culture: A Profile Comparison Approach to Person Organization Fit." *Academy Journal*, 1991: 34: 487-516
- ⁵³ Chan, D. "Cognitive Misfit of Problem-Solving Style at work: A Facet of Person Organization Fit." *Organizational Behavior and Human Decision Processes*, 1996: 68; 194-207
- ⁵⁴ Galvin T. "Birds of a Feather." *Training*, March 2001; 38(30):58
- ⁵⁵ Devenport, Tom, *Human Capital: What It Is and Why People Invest in It*. San Francisco, California: Jossey-Bass Publishers, 1999
- ⁵⁶ Tamosaitia. W., and Schwenker, M. "Recruiting and Retaining Technical Personnel at a Contractor-Operated Government Site." *Engineering Management Journal*, March 2002; 14(1):29
- ⁵⁷ "American Society of Safety Engineer's Economic Downturn Survey Finds Employer Increase in Realizing Value of Workplace Safety." *US Newswire*, January 24, 2002
- ⁵⁸ Ashford, S.J., Lee, C., and Bobko, P." Content, Causes, and Consequences of Job Insecurity: A Theory-Based Measure and Substantive Test." *Academy of Management Journal*, 1989; 32: 803-829
- ⁵⁹ Shaw, J.D., Delery, .E., Jenkins, G.D., and Gupta, N. "An Organization Level Analysis of voluntary and Involuntary Turnover." *Academy of Management Journal*, 1998; 41(5): 511-525
- ⁶⁰ Joyner, J."Corporate Culture Defines Success." *Computing Canada*, May 18, 2001; 27 (11):26
- ⁶¹ Stein, N. "Winning the War to keep Top Talent." *Fortune Magazine*, May 2000; 132-137

-
- ⁶² Jahn, E.W. "The Impact of Perceived Organizational and Supervisory Family Support on Affective and Continuance Commitment: A Longitudinal and Multi-Level Analysis." Dissertation Abstracts International: Section A: Humanities and Social Sciences, July 1998; 59(1-A):0237
- ⁶³ Corzo, C. "Boca Raton, Fla.-Based Medical Staffing Firm Puts Brakes on High Turnover Rate." The Miami Herald, Sept. 11, 2000
- ⁶⁴ Aversa, J. (1999, September 4) Unemployment falls to 4.2%. Associated Press. Retrieved September 6, 1999, from the world wide web : http://www.azcentral.com/business/0904_economy.shtml
- ⁶⁵ Bennett, N., Blum, T.C., Long, R.G., & Roman, P. M. (1993). A firm-level analysis of employee attrition. *Group and Organization Management*, 18, 482-499
- ⁶⁶ Kaye, B., and Jordan-Evans, S. *Love'Em or Loe'Em: Getting Good People to Stay*. San Francisco, Calif.: Berrett-Koehler Publishers, 1999
- ⁶⁷ Buckingham, M., and Coffman, C. *First, Break all the Rules*. New York: Simon and Schuster, 1999
- ⁶⁸ Wellins, Richards *Empowered Teams: Creating Self-Directed Work Groups that improve Quality, Productivity, and participation*. San Francisco: Jossey-Bass, January 1991
- ⁶⁹ Dennison, D.R. "Bringing Corporate Culture to the Bottom Line." *Organizational Dynamics*, 1984; 13(2):5-22
- ⁷⁰ Glassop, L.I. "The Organizational Benefits of Teams." *Human Relations*, February 2002; 55(2): 225-249.
- ⁷¹ Edwards, R.L.R. "The Morale and Satisfaction of Midlevel on Intent to Leave." Dissertation Abstracts International Section A: Humanities and Social Sciences, August 2001; 62(2-A): 482
- ⁷² Cappeli, P. "A Market-Driven Approach to Retaining Talent." *Harvard Business Review*, January/February 2000; 79(1):103
- ⁷³ Tan, H.H. and Tan, C.S.F. "Toward the Differentiation of Trust in Supervisor and Trust in Organization." *Genetic, Social and General Psychology Monographs*, 2000; 126(2):241-260
- ⁷⁴ "World Class Advice from Three Market Leaders" *HR Focus*, August 2000; 77(8):1
- ⁷⁵ "Ethics Plans Pay off in Staff Retention and Profits." *HR Briefing (Aspen)*, June 15, 2001:7

⁷⁶ Boshoff, C., and Mels, G. “The Impact of Multiple Commitments on Intentions to Resign: An Empirical Assessment.” *British Journal of Management*, September 2000; 11(3);255-272

⁷⁷ Walsch, M.W. “Luring the Best in an Unsettled Time: Money Isn’t Everything.” *New York Times*, January 30, 2001; 150(516);G-1

⁷⁸ Blau, G.J., and Boal, K.B. “ Using Job Involvement and Organizational Commitment Interactively to Predict Turnover.” *Journal of Management*, September 2000; 11(1); 115-127

⁷⁹ Story, M. “Winning the Battle for Talent,” *New Zealand Management*, March 2002; 49(2):39

⁸⁰ By Brooks Holton, Bonnie O’Neill, Originally published in *The journal of nursing administration*, Volume 34, No. 5 (May 2004)

⁸¹ It relate to ‘Albanian Turnover: Is the Job Embeddedness Construct Predictive in an Albanian Context?’ by Wendy S. Harman, Michael Blum, Julia Stefani, Ada Aho.

CHAPTER-3

RESEARCH METHODOLOGY

Keeping in mind the title of the present study namely, 'Attrition-a comparative empirical study of its intensity, causative factors and remedial measures in the manufacturing and services sector enterprises in Pune (India-2004-05 to 2009-10), the present chapter has been designed. As has been indicated in the title of the present study, it has to be pointed out that, the study has been conducted in the *empirical research* settings. To accommodate various aspects of empirical research methodology, this chapter has been divided into seven sections as follows:-

In *section-(i)*, introductory observations have been offered emphasizing the time, space and activity specificity of the attrition phenomena. In *section-(ii)*, a statement of the research problem undertaken in this study has been made. In *section-(iii)*, Aims and objectives of this study have been mentioned. *Section-(iv)* brings out the hypothesis structured for the present study. *Section-(v)* presents details regarding database, both primary and secondary. *Section-(vi)* brings out the significance of the study. *Section-(vii)* deals with the details regarding time span, scope and limitations of the study.

Section-(i)

Introductory Observations

The present study relates to a comparative assessment of causative factors in regard to the attrition phenomena and the remedial measures resorted to in the context of manufacturing sector and the services sector.

It needs to be appreciated, at the very outset, that the topic under consideration has several specificities associated with it. For instance, this study has to be time specific, space specific and activity specific.

Time specificity of the study should be indicative of the fact that the investigation in regard to Attrition phenomena conducted in previous time period may not be totally applicable either to the present time period nor would it be very significant from the future time spans. This is indicative also of the fact that whatever inferences are derived on the basis of field investigation in regard to the attrition phenomena will be

relevant only to the specific time span in which the study was conducted and its relevance in the subsequent time span will only be tangential. Therefore, any empirical study relating to attrition phenomena will have to be on a continuous basis.

Further, the study relating to attrition phenomena has to be *space specific* also. This should indicate the fact that the study of attrition phenomena conducted in the context of developed economy may not hold strictly relevant for the under developed or the developing economies. Even within the sphere of developed economies, space specificities would become very relevant because the dimensions of the problem could have their own peculiarities. Very broadly speaking, the global economy can always be disaggregated as between the developed and the developing world. In regard to the former, the economies of Western Europe, the USA, Canada and Japan could be clubbed in this category. The rest of the world, barring Australia and Newzealand located in the Far East and the Scandinavian countries of Europe, could be considered as advanced primaries. Even with respect to the remaining developing world situated in Asia, Africa and Latin America, a further disaggregation can be made. For instance, the Asian, The African and the Latin American economies are basically agricultural primary producing countries, while the Middle Eastern gulf economies are primary producing but are specializing in the extractive activities (Oil). A further distinction between the Asian and African economies on one hand and the Latin American economies on the other is also possible. The Asian and African economies can be classified as 'Densely populated peasant economies' while the Latin American economies are agriculturally predominant economies although they do not experience the same intensity of population pressure.

The reason why all these details with respect to the global economies are being furnished is that the attrition phenomena at any point of time or during any specified period of time keeps occurring in all these regions and quite naturally, therefore, the nature, content and even the intensity of the attrition phenomena are different. Quite obviously, therefore, the remedial measures would have to be substantially different.

Coming to the *activity specificity* of the attrition phenomena, it needs to be pointed out that in any economy, the attrition phenomena has greater relevance in the matter of its occurrence in the manufacturing sector (secondary sector of the

economy) and in the services sector (tertiary sector of the economy). It needs to be appreciated that the causative factors in the manufacturing sector and the services sector would be substantially different and the remedial measures required to be adopted would be different also. Needless to point out that the impact of the attrition phenomena in the manufacturing and services sector would be understandably different and the remedial measures required to be followed to set right the damage would also be different.

In the present study, it needs to be pointed out that the attrition phenomena is being studied in the context of the Indian economy relating to a specific region of the state of Maharashtra which is one of the most progressive advanced and industrialized state of India. As has been already mentioned, it is well known that the Pune region, along with the regions of Mumbai and Nasik forms a golden triangle in the State of Maharashtra and accounts for around 90 per cent of industrial employment, value addition in the industry and industrial investment in the State of Maharashtra. As has been observed already, in this region, apart from the manufacturing activity (concerning manufacturing of sugar, chemicals, automobile industry, fabrication units etc.), the services sector has been gaining prominence in recent times. The Information Technology (IT) sector hub developed in this region is making considerable contribution to the income and employment levels of the region.

Considering all these aspects, it was thought desirable to study the phenomenon of attrition in a comparative fashion involving two major activities, namely, manufacturing and services. In regard to the manufacturing activity automobile industry (TATA Motors Ltd. along with 31 other automobile companies) was picked up as representative units of the manufacturing sector while the IT sector was considered to be representing the services sector with 27 companies. The reason behind this selection of industries may be justified as; automobile industry has a major role to taking Pune City at its highest industrial development peak and also with regard to the IT sector, Pune is looking at it as a potential to prosper economically.

Section-(ii)

Statement of the research problem

Against the background of these introductory observations it appears useful to state the research problem being handled in this study.

As has been emphasized in the preliminary observations (Section-i) of the study, any investigation regarding the attrition phenomena has to be a continuous process. In this view of the matter, the problem being studied would have various dimensions particularly a comparative assessment of the intensity of attrition phenomena in the manufacturing sector and the services sector in the context of Pune metropolitan region. After having assessed the causative factors in two different scenario (manufacturing sector and service sector), the emphasis has been to identify the impact of various causative factors in these two settings. Further, the remedial measures which were adopted would also have different dimensions in the two settings considered. The extent to which these remedial measures produced the desired effect could also be a matter of great concern during the course of the study. It needs to be appreciated that the time specificity of the problem has got to be underlined. As a result, the output of the study would have to be the inputs into the decision making and designing of policy for mitigating the impact of attrition phenomena in the two settings during the specific time dimension¹.

Section-(iii)

Aims and objectives of the study²

Against the background of these introductory observations (Section-i) and the statement of the research problem (Section-ii), it may be pertinent to present the aims and objectives of the study as follows:-

1. To assess and quantify the present status of the attrition phenomena in the manufacturing sector (represented by the automobile industry- TATA Motors Ltd. along with 31 automobile sector companies) and services sector represented by IT industry with 27 IT companies.
2. To analyze the causes of attrition and present a comparative analysis of the causative factors in two sectors mentioned above.

3. To observe remedial measures adopted in the context of two sectors mentioned above to minimize the impact of attrition and to make a comparison of the remedial measures (in the light of Job embeddedness) adopted in the two sectors mentioned above.

Section-IV

Hypothesis of the study

As a matter of fact, the introductory observations (Section-i), statement of the research problem (section-ii) and aims and objectives of the present study (section-iii) would naturally lead to the structuring of the hypothesis for the present study³. The list of hypotheses has been furnished as follows:-

H1- Excessive workload and heavy stress coupled with lack of relaxation would lead to a higher level of attrition in the manufacturing sector (in relation to the context of causative factor for attrition phenomena)

H2- The management with appropriate policy mix can go a long way in reducing the level of attrition in the manufacturing sector (in relation to the context of remedial measures)

H3- Excessive workload and heavy stress coupled with lack of relaxation would lead to a higher level of attrition in the services sector

H4- The management with appropriate policy mix can go a long way in reducing the level of attrition in the services sector

H5- The employees in the manufacturing sector are more embedded than those in the services sector resulting in lower level of attrition (in relation with the comparative assessment of reasons for attrition and to offer remedial measures)

Section -V

Data Base of the study

In consideration of a various aspects of the present study including the statement of the problem (section-ii), aims and objectives (section-iii), and hypotheses

(section-iv), the details regarding data base have been presented in the present section (section-v).

The study is naturally based on two types of well known data sources - the primary and the secondary. These two sources of data would need some elaboration which has been offered in the subsequent paragraphs.

a. Primary data:-

The primary data collected for this study has been based on a pre-structured questionnaire (*a copy attached in Annexure-1*). The questionnaire has been designed after reviewing relevant literatures^{4,5,6,7}. Further, this questionnaire has been finalized on the basis of the responses obtained from initial canvassing of the questionnaire. This was followed by personal interviews of the respondents to check and ascertain the authenticity of the answers provided to several questions raised⁸. Basically, this questionnaire tool has been used to investigate causes of attrition phenomena and its intensity in terms of impacts of attrition on various factors at workplace.

(i) Sample drawn from manufacturing sector (represented by 32 companies along with TATA Motors Ltd.)

For purposes of collecting data at centre point, the automobile manufacturing unit, very reputed in the Pune metropolitan township, was selected (representing as present workplace) and permission from the respective management was obtained. After obtaining permission from this reputed unit comparative assessment of the attrition phenomena has been made with other 31 automobile companies representing as previous workplace (the list of these companies has been presented in the Chapter no. 4, in table No. 4.1). The unit so selected was Tata Motors Ltd. In this unit, about 650 questionnaires were canvassed and 349 responses were considered to be reasonably accurate having a considerable degree of reliability^{9,10} and authenticity (indicated in *Table No. 3.1*, also indicates data on service sector and interpreted in the section that follows). The rejection of 301 responses was made on the basis of personal interviews conducted. It will be seen, therefore, that almost 50 per cent of the questionnaires canvassed had to be rejected on various grounds and the balance 50 per cent was considered worthy of inclusion for the processing and tabulation of the data.

Table No. 3.1

**Details about the canvassed questionnaires accepted / rejected
(Absolute numbers and per cent ages in brackets)**

S.N.	Name of the Company	Questionnaires		
		Canvassed	Rejected	Accepted
I	II	III	IV	V
1	Manufacturing Sector	650 (100)	301 (46.30)	349 (53.70)
2	Services Sector	650 (100)	375 (57.69)	275 (42.31)
	Total	1300 (100)	676 (52.00)	624 (48.00)

Source: Field investigation

It may be worthwhile to find out various reasons for the rejection of the circulated questionnaires. In this regards, **Table No. 3.2** brings out the details about various reasons for rejecting the questionnaires and their non inclusion for purposes of processing and tabulation. As will be seen, that out of 301 questionnaires rejected, 178 (59.13 per cent) have been rejected for incomplete information given by the respondents. A further 78 questionnaires (25.91 per cent) have been rejected for patently inconsistent responses, while another 22 questionnaires (07.30 per cent) got rejected because of miss-match of the information furnished. Another 23 questionnaires (07.66 per cent) had to be rejected because of the fact that the sample had to be representative of the universe.

Table No. 3.2

**Details about the reasons for rejection of the questionnaires
(Absolute numbers and percentages in brackets)**

S. N.	Name of the Company	Total Rejected Questionnaires	Reasons for Rejecting Questionnaires			
			Incomplete information	Inconsistent Information	Mismatch of the information	Any other
I	II	III	IV	V	VI	VII
1	Manufacturing Sector	301 (100)	178 (59.13)	78 (25.91)	22 (07.30)	23 (07.66)

Source: Field Investigation

Table No. 3.3 brings out the way in which the workforce in manufacturing sector is divided averagely into various categories namely, machinist, supervisor, engineer / Jr. Manager, middle manager, senior manager and any other category. These details have been furnished in absolute numbers as also in terms of percentages to the total. Against this information obtained at the macro level, in the sample randomly selected for the study, an attempt has been made to ensure the identical percentages for the various categories are included in the sample.

This has been done with a view to ensuring the fact that the sample drawn is truly representative of the universe. As will be seen, the workforce in the Tata Motors was around 6000 and was divided between various categories such as a machinist (including welders, fitters, helpers etc.) numbering 5015 and accounting for 83.58 per cent of the total workforce. The category of the supervisors numbered 195 and made for 3.25 per cent of the total workforce. In case of the category of engineers and junior managers the numbers stood at 320 and constituted 5.33 per cent of the total workforce. In case of the category of middle managers, the number was 175 and made for 2.92 per cent of the total workforce. In case of the category of senior managers, the number stood at 96, making for 1.58 per cent of the total work force. The category of any other includes several workers who could not be classified elsewhere. These accounted for 200 numbers and make for 3.33 per cent of the total workforce. It needs to be pointed out that the total number of workforce has been approximated on the basis of interviews by relevant officers of the Tata Motors (*furnishing information on the basis of anonymity*) and further cross checked by the information furnished by the trade unions. This proportionate of staffing pattern observed in the Tata Motors is ideal enough as on an average same proportionate can be observed with some negligible changes in any automotive manufacturing unit in and around Pune. Thus other 31 companies that have been considered as representing previous workplaces also have the same proportionate of workforce operative in it. The point which has been tried to highlight here in this discussion is that, the sample of this study is significantly a true prehensive of the universe in automobile sector.

Table No. 3.3

Distribution of workforce into various categories (in numbers and per cent ages) and in the sample (in numbers and per cent ages)

S. N.	TATA Motors Ltd. as representative unit	Total	Machinist	Supervisor	Engineer / Jr. Manager	Middle Manager	Sr. Manager	Any other
I	II	III	IV	V	VI	VII	VIII	IX
1	* Workforce	6000 (100)	5015 (83.58)	195 (3.25)	320 (5.33)	175 (2.92)	96 (1.58)	200 (3.33)
2	**Sample	349 (100)	279 (79.94)	12 (3.44)	21 (6.02)	11 (3.15)	7 (2.01)	19 (5.44)
* Approximate estimate given by relevant officers of the company and also the trade unions ** Source :Field investigation								

In case of the sample drawn, the total number of workforce stood at 349, of which 279 (79.94 per cent) belonged to the category of machinist; 12 (3.44 per cent) belonged to the category of supervisors; 21 (6.02 per cent) have been of the category of engineers and junior managers; the category of middle managers had a number of 11 making for 3.15 per cent of the total sample while the category of senior managers stood at 7 making for 2.01 per cent of the sample. The category of any other numbered 19 and makes for 5.44 per cent of the sample.

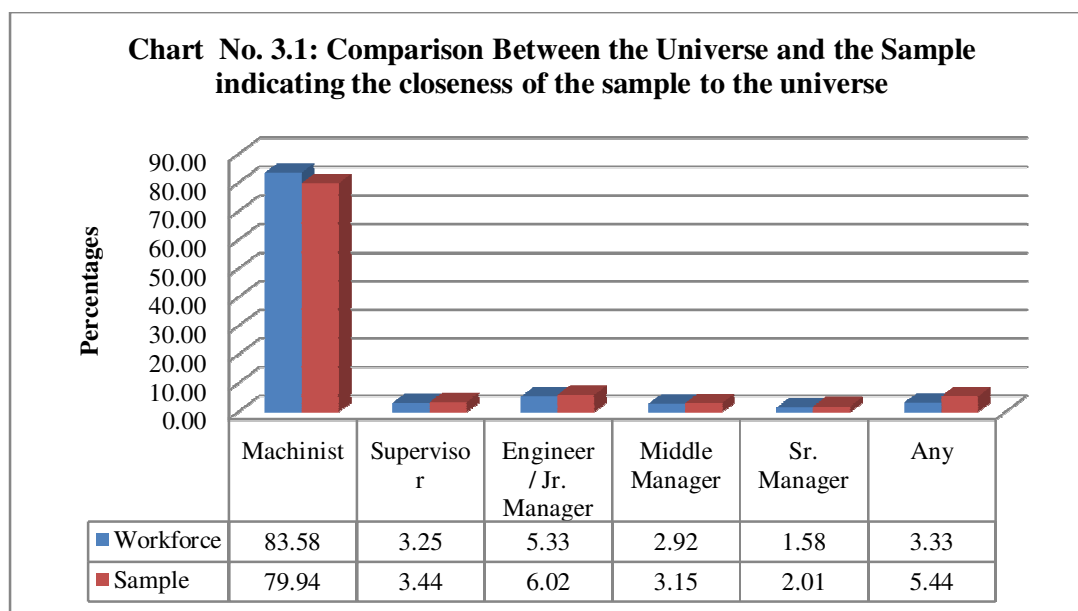


Chart No. 3.1 furnishes required details in this context. It indicates that the sample drawn for the purposes of the study has a very close proximity to the universe in regard to the actual distribution of the work force and the one obtained in the sample.

(ii) Sample drawn from Service Sector

In the case of service sector, the IT industry was considered. The required permission was not officially granted for the collection of the data for representing present workplace. Nevertheless, the required information was collected informally from the workforce who obliged to furnish the details as required in the canvassed questionnaire *on the basis of strict anonymity*. As regard to representing previous workplace 26 IT companies were considered.

As will be seen from **Table No. 3.1**, in this case also 650 questionnaires were canvassed and after having ascertained the authenticity of responses, 275 respondents were ultimately selected for purposes of further tabulation and processing. It may be pointed out that in case of services sector the percentage of rejection is more than 50 per cent (which was the case in manufacturing sector) and stands at around 60 per cent (57.69 per cent to be exact).

As will be seen from **Table No. 3.4**, in case of service sector, the reasons for rejection of the canvassed questionnaire and the non inclusion of the responses for further tabulation and processing, originated from various reasons. Incomplete information caused the rejection of 58.40 per cent of questionnaires, while inconsistent information caused the rejection of 18.40 per cent of rejected questionnaires. Mismatch of the information caused the rejection of 15.46 per cent of the canvassed questionnaires while 07.74 per cent of the rejections were due to any other unspecified reasons.

Table No. 3.4
Details about the reasons for rejection of the questionnaires
(Absolute numbers and percentages in brackets)

S. N.	Name of the Company	Total Rejected Questionnaires	Reasons for Rejecting Questionnaires			
			Incomplete information	Inconsistent Information	Mismatch of the information	Any other
I	II	III	IV	V	VI	VII
1	I.T. Company	375 (100)	219 (58.40)	69 (18.40)	58 (15.46)	29 (07.74)

Source: Field investigation

(iii) Sample stratification:-

The questionnaires canvassed to the respondents in both the manufacturing sector and services sector have been on the basis of random sampling technique which was further stratified with the help of the respondents level in the organization¹¹. The stratification in case of manufacturing sector has been achieved on the basis of the categories of workers and their respective percentages to the total workforce. However, in case of the IT sector, the stratification has been achieved on the basis of status / designation, details of which were furnished by the respondents on the basis of strict anonymity. The proportion of the respondents in the sample belonging to various categories in manufacturing sector as mentioned above has been utilized for stratification, while in case of service sector, the stratification norms have been obviously different (status / designation the details furnished by the respondents on the basis of strict anonymity).

The listed categories more or less corresponded to the actual spread of these categories in the actual distribution of work force whether in the manufacturing sector or the services sector. As a result, the sample (both in the Manufacturing and Services Sector) drawn for the present study could be considered a true and more reliable representation of the universe. This is what was attempted to be accomplished in the sample for collecting primary data from both the manufacturing and service sector. And after ensuring that the sample ultimately selected was truly representative of the universe, the collected data were further subjected to tabulation and processing with the help of SPSS Package.

(iv) Analysis of the data

It needs to be pointed here in this section that, quantification aspect of the data base has been presented with the help of tables and appropriately illustrated by the pie charts and bar diagrams wherever thought necessary. Further analysis in the context of establishing relationships between parameters has been conducted with application of correlation coefficient technique. In general, investigated data has been analyzed by using appropriate statistical techniques such as, mean, standard deviation and calculation of frequencies and hypothesis testing has been made using one sample 't' test and chi-square test according to the structure and scale of data for hypothesis. The

properties of the data have been studied for selecting appropriate test for hypothesis testing.

b. Secondary data

The secondary data regarding attrition phenomena is available in plenty in the context of a developed and the developing countries and for several decades in past. All these data are available on the internet as also, will be easily seen from the chapter on literature review. In addition to this internet source of information, the data on attrition phenomena are available in the Indian context also. Several books and journals have been analyzing these phenomena and lots of literature in this connection is also available in several periodicals and reports of the Government, Association of Industry and Chambers of Commerce. All these sources of secondary data have been relevant to the time period that is 2004-05 to 2009-10 as mentioned in the title and also for the region and the related concerned activity. Some of this material has also been utilized during the course of the present study. The secondary data was also obtained from several renowned libraries in Pune, some of them are: British Council's Library, Pune, Jaykar Library of Savitribai Phule Pune University, Pune, Library of Gokhale Institute of Politics and Economics, Pune and the library of Vaikunthlal Mehta Institute of Cooperative Management and studies, Pune, the library of Tilak Maharashtra University, Pune and library of Maratha Chambers of Commerce, Industries and Agriculture, Pune.

c. Personal Interviews

In addition to the primary and secondary data indicated above, the present study is also based on several interviews of employees, employers, trade unions and the Government officials concerned with various issues related to the present study. Although, all these personal interviews have not been formally tabulated nor were they quantified, although their impact in the understanding of the problem of the researcher cannot be minimized^{12,13}.

Section-vi

Significance of the study

It is abundantly clear that the attrition phenomenon, over years and even over generations, has resulted in a substantial loss of work force and its labour hours. It

hardly needs to be emphasized that this loss is irreparable and cannot be retrieved. In this view of the matter, the present study is eminently significant to the decision makers in the industry and the policy formulators in the Government. In addition, mitigation of attrition would enhance the levels of production and productivity and on an overall basis, promote socio economic welfare¹⁴.

It may be pointed out also that the attrition phenomenon has been occurring in the context of every type of economy in the world whether developed, developing or under developed. And hence its significance hardly needs any emphasis.

Section-vii

Time span, scope and limitations of the study

The time span prescribed for the present study commences from 2004-05 and extends over to 2009-10 which has mainly considered for the referencing literature for secondary data and to appropriately compliance for assessing present status of the attrition phenomena. In spite of this, considering the extensive nature of the problem, it appears difficult to confine one-self only to this time period as some of the issues could well get beyond this time period and may also have relevance to the earlier time period by way of the legacy of the past.

As has been mentioned earlier, the study has relevance to the time period as also to the geographical region in which it gets conducted. Apart from this, the activities in respect of which the study is conducted would also have significance. In the present case, the study is conducted in the Pune Metropolitan region for activities - manufacturing and services sector. As the Pune city has observed to be well developed in automobile manufacturing activity and witnessed great potential to establish and support IT sector. Thus, these two sectors has been considered for the study as automobile industry has selected to representative for manufacturing sector and IT activity has been selected for service sector considering the profile of Pune city. It needs to be emphasized that the inferences and conclusions derived from this study would generally be useful in the context of the activities studied for the regions under consideration. The inferences and conclusions of this study may be made with appropriate modifications keeping in mind the exigencies of the other situations. This must be underlined as the limitations of the study.

The object and scope of the problem are confined to the geographical context of very significant region in INDIA, namely the PUNE city which is recognized as Information Technology and Automobile Industry hub of India. The inferences and conclusion derived from this study may be useful in the context of other industrial activity and other regions only by making appropriate modifications.

References

-
- ¹ R. L. Ackoff, *The Design of Social Research*, Chicago University Press, Chicago, 1961
- ² C. R. Kothari, *Research Methodology: Methods and Techniques*, New Age Publication, 2007, P-2
- ³ C. R. Kothari, *Research Methodology: Methods and Techniques*, New Age Publication, 2007, Pp-13-14
- ⁴ Vera Bitsch and Michael Hogberg, *Employee Retention: Components of Job Satisfaction of Green Industry Employees*, Selected Papers prepared for presentation at the American Agricultural Economics Association Annual Meeting, Denver, Colorado, August 1-4, 2004
- ⁵ *Employee Satisfaction Survey Report, Prepared for: ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES, April 2008*
- ⁶ Lise M. Saari and Timothy A. Judge, EMPLOYEE ATTITUDES AND JOB SATISFACTION, *Human Resource Management*, winter 2004, Vol. 43, No. 4, Pp. 395–407 © 2004 Wiley Periodicals, Inc. published online in Wiley Inter Science (www.interscience.wiley.com).
- ⁷ JACK ZIGON, *How To Measure EMPLOYEE PERFORMANCE*, Published by-Zigon Performance Group, 604 Crum Creek Road. Media, PA 19063-1646, USA, 2002
- ⁸ Donald R. Cooper et al, *Business Research Methods-9th Edition*, Tata McGraw-Hill, 2006, p-268
- ⁹ C. R. Kothari, *Research Methodology: Methods and Techniques*, New Age Publication, 2007, pp-73-75
- ¹⁰ James Dean Brown, **Likert items and scales of measurement**, *SHIKEN: JALT Testing & Evaluation SIG Newsletter*. March 2011. 15(1) 10-14, <http://jalt.org/test/PDF/Brown34.pdf>
- ¹¹ Donald R. Cooper et al, *Business Research Methods-9th Edition*, Tata McGraw-Hill, 2006, p-416
- ¹² C. R. Kothari, *Research Methodology: Methods and Techniques*, New Age Publication, 2007, Pp-97-99

¹³ Donald R. Cooper et al, Business Research Methods-9th Edition, Tata McGraw-Hill, 2006, pp-265-266

¹⁴ Marie Jahoda, Morton Deutsch and Stuart W. Cook, Research Methods in Social Relations, p-4

CHAPTER-4

PROCESSING, TABULATION AND ANALYSIS OF THE DATA:

MANUFACTURING SECTOR (REPRESENTED BY AUTOMOBILE INDUSTRY)

In the present chapter an attempt has been made to process and tabulate the field data obtained on the basis of structure questionnaires canvassed amongst workers of various categories in the manufacturing sector, for comparison of intensity, causative factors and remedial measures in present workplaces and previous workplaces with the help of TATA Motors Ltd and other 31 automobile companies. Data relating to various parameters have been obtained on the basis of field investigations and personal interviews (wherever possible and whenever thought desirable). An attempt was made basically to stress and quantify the impact of various parameters on the attrition rate in the manufacturing sector.

Considering the format of the questionnaire which was designed for collecting the field information, the present chapter has been divided into four parts and subdivided into various sections and sub-sections. *Part-I* deals with (A) demographic / general information of workers and also highlights (B) the professional information of the workers. In *Part-II*, an attempt has been made to furnish details regarding the role of workers (section-C) while section-D brings out details about the skills and competence levels of the workers. In *Part-III* the perceptions and views of the workers have been elicited. In section-(E) the expectation of the workers and their views regarding the organization / management / decision makers in the company have been studied. In section-(F) the job satisfaction and levels of organizational commitment have been emphasized. In Section-(G) details regarding the job embeddedness have been obtained but have been analyzed in chapter-7 while the details regarding the team work of workers at various levels and of various categories of manufacturing sector with the help of automobile industry have been considered in this section. In section-(H) the perception of employees in respect of the behavior of their supervisors have been detailed. In section-(I) attention has been focused on the attitude of employees in respect of various aspects relating to the work culture. Each one of these parts and sections has been further subdivided into various subsections in consideration of the data obtained during the course of field investigation.

As will be seen from the chapter on research methodology several hypotheses were structured and formulated for conducting the present study. In *Part-IV* of the present chapter, an attempt has been made to stress the hypothesis and indicate the level to which they have been either validated or invalidated.

PART-I

Section-(A): Demographic / General Information:

In this section, the information obtained from the field investigation has been compiled, processed and tabulated in 4 tables and the analysis in this regard has been based on the basis of the comprehension of each one of the parameters relevant to concerned table.

Considering *Table No. 4.1*, it needs to be pointed out that the employees of the present workplace have been drawn from several companies in and around Pune, Nashik. Some of the employees have been recruited from Chakan as well. It needs to be mentioned that Pune and Nashik have developed into an Automobile hub in recent times. Therefore, it is not surprising that the present workplace employees should have been recruited after they had gained experience in the automobile counterparts of the other companies. This aspect gives sufficient background to compare these previous workplace experiences with the present workplace. It was possible to list 31 such companies which supplied trend and experienced workers to the present workplace and it appears that, these workers, also readily moved into the present workplace. These, 31 companies have been considered to investigate for previous workplaces in a comparative fashion.

Table No. 4.1

List of companies (considered for representing previous workplace)

S. N.	Company's Name	Sr. No	Company's Name
I	II	I	II
1	ADVIK PVT LTD, CHAAKAN	17	MAHINDRA FORGINGS LTD
2	AIRFONE INDIA LTD	18	MAHINDRA FORGINGS LTD
3	AAKAR TOOLS LTD	19	MAS DIE CASTING PVT LTD
4	ALFAFORM COMPANY PVT LTD	20	MATCHWELL DIE CASTERS
5	AUTOLINE INDUSTRIES LTD	21	NAMO ELECTRICS

S. N.	Company's Name	Sr. No	Company's Name
6	BOSCH INDIA LTD	22	PANASE AUTO PVT LTD
7	DATAKRUPA ENGINEERING	23	POOJA CASTING
8	ENKEI CASTALLOY LTD	24	RAJ PROCESS EQUIPMENTS AND SYSTEMS PVT LTD
9	GOODYEAR TYRES LTD	25	RACOLD THERMO LTD
10	GOVARDHAN MILK AND MILK PRODUCTS LTD	26	S.M. AUTO PVT LTD
11	HONDA MOTORCYCLE AND SCOOTER INDIA PVT LTD	27	SEMCRO ELECTRICALS PVT LTD
12	HYUNDAI MOTOR INDIA LTD	28	SHARADA MOTORS LTD
13	ENDURANCE TECHNOLOGIES PVT LTD	29	SUZLON ENERGY LTD
14	JBM AUTO LTD	30	TATA JOHNSON
15	MAHINDRA AND MAHINDRA LTD	31	TATA MOTORS LTD, PUNE
16	MAHINDRA AND MAHINDRA LTD, NASHIK	32	TRIMURTI CORN AGRO FOODS PVT LTD, PUNE

Source: Field investigation

The present study as covered 349 of such workers directly recruited by the present workplace and also those coming in from the automobile hub and the following analysis and presentation of processing and tabulation of data is confined to 349 workers drawn into the sample representing 32 automobile companies in a systematic random fashion.

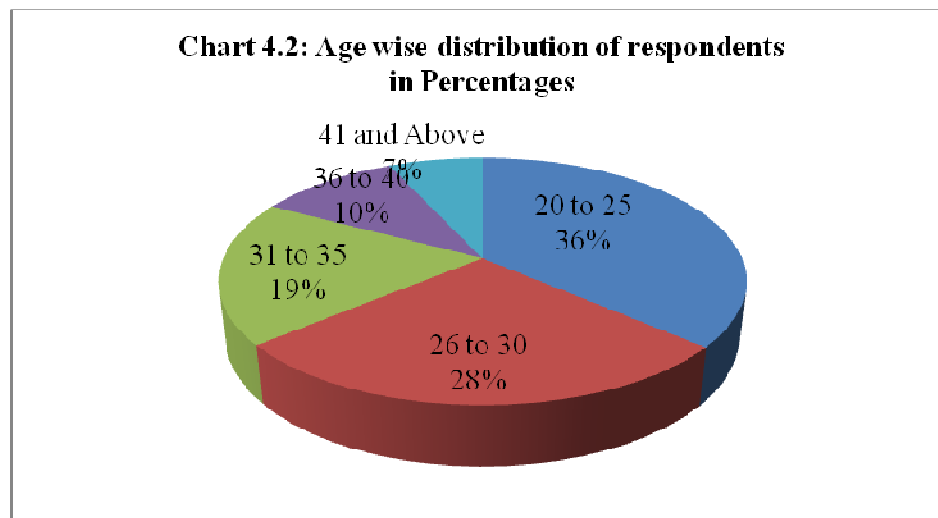
Table No. 4.2, and *Chart No. 4.2* furnishes details about the demographic composition of 349 workers drawn into the sample and there sex-wise distribution. Equally pointed out, that well over 90 per cent of the workers has been mails while the balance has been females at the aggregate level. These distribution of male and female categories does not hold good for the various categories of the age wise distribution of workers and it is seen that in the younger age group (between 20-25 years of age), the proportion of females is a little over 6 per cent but in the other categories of the age groups the female percentage is quite insignificant working out to less than 1 per cent (except to the category of 36 to 40 years where it stands at 1.71 per cent).

Table No. 4.2

AGE and GENDER wise distribution of the respondents

S.N.	Age	Female	Male	Total
I	II	III	IV	V
1	20 to 25	21 (6.01)	106 (30.37)	127 (36.38)
2	26 to 30	2 (0.57)	94 (26.93)	96 (27.50)
3	31 to 35	1 (0.28)	65 (18.62)	66 (18.91)
4	36 to 40	6 (1.71)	30 (8.59)	36 (10.31)
5	41 and Above	0 (0.00)	24 (6.87)	24 (6.87)
6	Total	30 (8.59)	319 (91.41)	349 (100.00)

Source: Field Investigation



The age of distribution of workers responding to the questionnaire canvassed has been presented in form of Chart No. 4.2. It would be seen that, almost two third of the workforce appears to be in the category of younger age group of 20 to 25 and 26 to 30, taken together about one fifth (19 per cent) has been in the age group of 31 to 35 and about one tenth in the category of 36 to 40. These categories taken together account for about one third of the workforce, while the balance 7 per cent is made up of workers to the senior age group of 41 and above.

Thus, it would be seen that almost two third (61 per cent) of the workforce is in younger age group and these amenable to training involving improvement in the skills and efficiency. About one fifth of the workforce in the age group of 31 and 35 years can at best be offered training while the workers in the age group of 30 to 40

(constituting 10 per cent) may form the senior category of workers experienced and trained.

About 7 per cent of the workers belong to the age group of 41 years and above constituting senior most cadres in terms of age and as such would be belong in to the supervisory grades setting an example for the lower age group of workers and inducting them into the culture of the organization.

Only one comment that may be offered at this stage appears to be that, the age wise composition of the workers of present workplaces appears to be ideal in the sense that its seeks an appropriate blend of the junior and senior categories of workforce constituting an efficiency prone team of workers and representing automobile sector with some negligible variations.

Table No. 4.3 brings out the details regarding distribution of workers according to their technical or otherwise qualifications, it would be seen that a little over one third (34.96 per cent) of the workers were educated up to HSC levels while a little less than one fifth (18.05 per cent) had the education up to the HSC level coupled with the I.T.I. (Industrial Training Institute) courses. A little over one tenth of the workforce (12.89 per cent) had education at the graduate level while workers with under graduate education and I.T.I. training accounted for 3.29 per cent of the workers. In the proportion of graduates and undergraduates in the workers is understandingly quite low (6.59 per cent and 2.58 per cent, respectively). In an enterprise like the TATA Motors the workers with only ITI qualifications would be preferred and as a result this category of workforce accounts for almost one fifth (19.77 per cent) of the workers. There is a sprinkling of workers having diplomas constituting a little less than 3 per cent (2.88 per cent).

Table No. 4.3

Distribution of respondents according to the QUALIFICATION

S.N.	Qualification of the respondents	In numbers	In Percentages
I	II	III	IV
1	Up to H.S. C.	122	34.96%
2	HSC and I.T.I.	63	18.05%
3	Under Graduate	45	12.89%
4	Under Graduate and I.T.I.	8	2.29%
5	Graduate	23	6.59%

S.N.	Qualification of the respondents	In numbers	In Percentages
6	Post Graduate	9	2.58%
7	Post Graduate and I.T.I.	1	0.29%
8	I.T.I.	69	19.77%
9	Diploma	9	2.58%
10	Grand Total	349	100.00%

Source: Field Investigation

Having had a look at the qualifications of the workers responding to the canvassed questionnaire, it appears that the workforce is more oriented towards technical qualification rather than towards the formal education like as the graduate, post graduate.

In *Table No. 4.4* the respondent workforce has been distributed considering the specialization pattern. It would be seen that, almost three fourth (72.78 per cent) of the workforce has been in the possession of technical qualification while the balance is made up of workers gone from commerce, arts and science faculties.

Table No. 4.4

Distribution of respondents according to the SPECIALIZATION

S.N.	Specialization of the respondents	In numbers	In Percentages
I	II	III	IV
1	Technical	181	51.86%
2	Technical, Commerce, Science	7	2.01%
3	Technical, Computer	1	0.29%
4	Engineer	65	18.62%
5	Commerce	12	3.44%
6	Arts	58	16.62%
7	Science	12	3.44%
8	Other	13	3.72%
9	Grand Total	349	100.00%

Source: Field Investigation

All these demographic details discussed in above section gives sufficient reasoning as all the 349 respondents are appropriate representative of the automobile industry.

Section-(B): Professional Information:

This section relates to the professional information obtained during the course of investigation and has been presented and analyzed in 5 tables.

Table No. 4.5, and corresponding chart no. 4.5 brings out the professional experience of the responding workers in terms of the length of the respective professional experience. It would be seen that almost half (48 per cent) of the workers have a professional experience of less than 5 years while, a little less than one third (30 per cent of the workers had the professional experience ranging between 5 and 10 years. These categories taken together account for little more than three fourth (78 per cent) of the workforce while the balance 22 per cent of the workers have a professional experience of more than 10 years.

Thus it will be seen that, the respondents of automobile industry representing manufacturing sector appears to display a judicious combination of professional experience of the workers in terms of the length of such an experience.

Table No. 4.5
Professional experience of the respondents

S.N.	Professional experience of the respondents	In Percentages
I	II	III
1	Up to 2 years	22
2	2 to 5 years	26
3	5 to 10 years	30
4	More than 10 years	22
	Grand Total	100.00%

Source: Field Investigation

Table No 4.6, and the corresponding *Chart No. 4.6* indicates the details about the background of workers more specifically in respect of the organizations in which they were working before joining the present workplace. It would appear that a little over one fourth (28 per cent) of the workers had started their career at present workplace only while the rest of the workers were drawn in with various lengths of experience in different organizations. It may be pointed out that 57 per cent of the workforce had an experience of working in 2 to 5 organizations before joining the present workplace, while, 15 per cent of the workers had the experience of working in

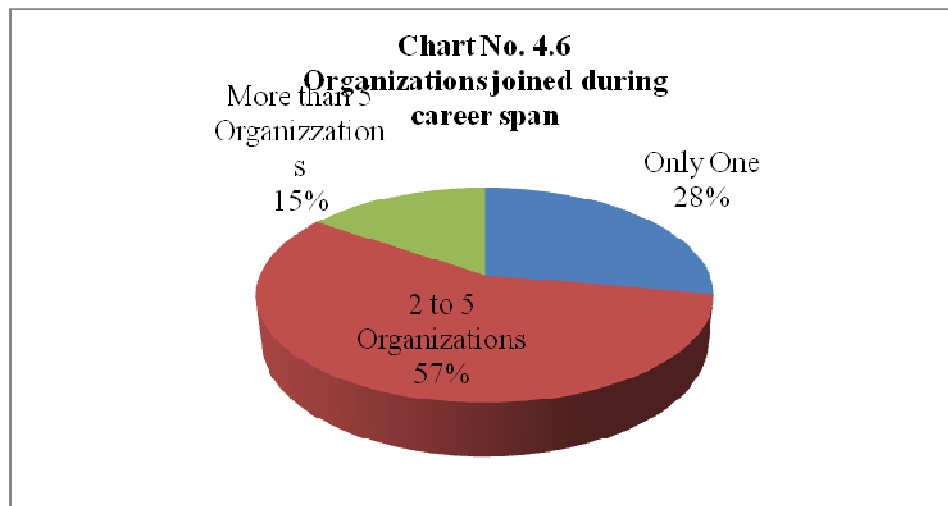
more than 5 organizations before they ultimately settled in the workforce of the present job. Thus it will be seen that the workforce of present assignment consist of workers recruited directly by the present workplace without any previous experience as also of workers with experience of working in other organizations as well. This classification is significant from point of view that the decision makers at present workplace would have to structure suitable and appropriate training programs for the workers for making the career with them as also for workers who joined them after having had an experience in other organizations. In the context of present study of attrition phenomena this manner of disaggregation of workforce would gain significance as will be brought out in the subsequent analysis.

Table No. 4.6

Organizations joined during career span

S.N.	Organizations joined during career span	In Percentages
I	II	III
1	Only 1	28
2	2 to 5	57
3	More than 5	15
	Grand Total	100.00%

Source: Field Investigation



It has to be appreciated that after all, the attrition phenomena involving the mobility of the workers would naturally depend up on the way they have been treated during the course of their employment. Apart from the relationship of workers as among themselves or between them and their superiors, the most significant aspect has to be the recognition given to the workers by rewarding them suitably for their

performances in the works assigned to them from time. *Table No. 4.7* and the *Chart No. 4.7* bring out the details regarding the promotions given to the workers from time on the basis, hopefully, of the performance. It will be seen that little over two fifth (44.69 per cent) of the workers have gained promotions at least one time. A little less than one third (30.37 per cent) got the promotions on an average two times. Less than one fifth (15.18 per cent) were given promotions three times in their career while those receiving promotions for 4 times accounted for only 6.59 per cents of the workers. Quite understandably, the percentages of the workers gaining promotions accounted for only 2.29 per cent of the total workers while those receiving promotions for 5 times accounted for even less than 1 per cent (0.85 per cent). Thus it will be seen that never mind how the workers were recruited whether from the companies constituting automobile hub or the directly by the company, their retention to the company would directly depend up on in the way they were treated in terms of their promotions conferred on them from time to time. It would also be cleared that no worker responding to the canvassed questionnaire was seen to be lacking even a single promotion and quite a few of them although a percentage of such workers understandably declined. This would clearly establish the efforts of the automobile company to offer promotions to the deserving workers who came up to the expectation of the company in respect of their performances. The policy of the company, therefore, appears to be performance related and would thus consider to be preventing the attrition rate from rising to alarming levels.

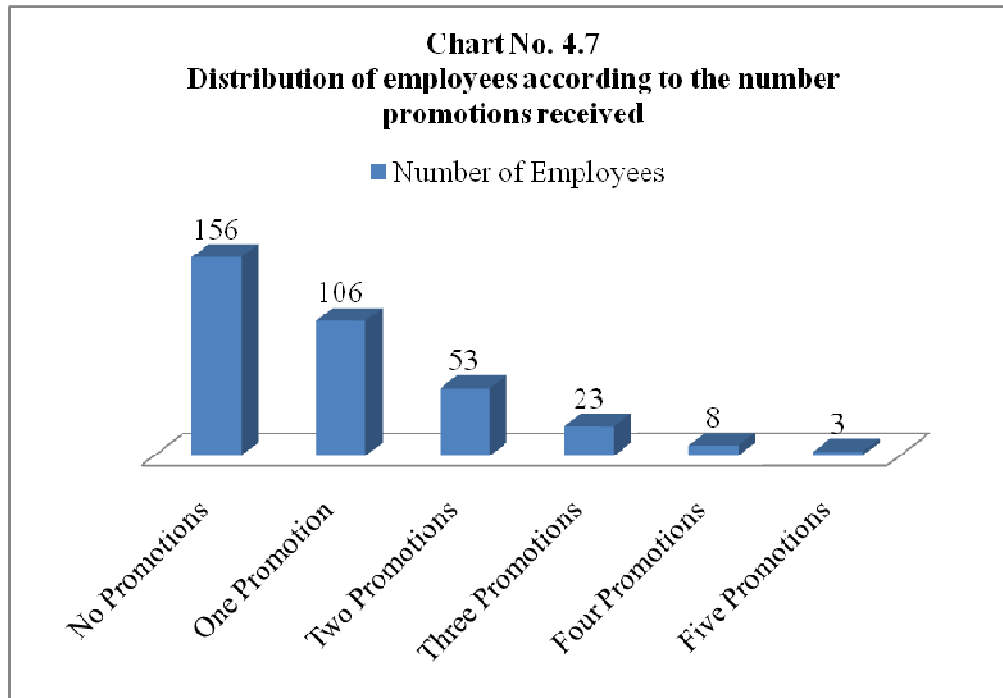
Table No. 4.7

Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED

S.N.	Average Performance of the Respondents	Total Promotions Received by the Respondents						Grand Total
		No Promotions	One	Two	Three	Four	Five	
I	II	III	IV	V	VI	VII	VIII	IX
1	More below the company standard	7 (4.87)	6 (5.66)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	13 (3.72)
2	Slightly below the company standard	43 (27.56)	10 (9.43)	3 (5.66)	2 (8.69)	7 (87.50)	1 (33.33)	66 (18.91)
3	Exactly as per the company	83 (53.20)	52 (49.00)	31 (58.49)	15 (65.21)	1 (12.5)	2 (66.66)	184 (52.72)

S.N.	Average Performance of the Respondents	Total Promotions Received by the Respondents						
		No Promotions	One	Two	Three	Four	Five	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX
	standard							
4	More above the company standard	13 (8.33)	31 (29.24)	18 (33.96)	(0.00)	(0.00)	(0.00)	62 (17.76)
5	Slightly above the company standard	10 (6.41)	7 (6.60)	1 (1.88)	6 (26.08)	(0.00)	(0.00)	24 (6.87)
6	Grand Total	156 (100.00)	106 (100.00)	53 (100.00)	23 (100.00)	8 (100.00)	3 (100.00)	349 (100.00)

Source: Field Investigation



It has to be appreciated also that getting recognition from the company on the basis of performance levels and getting conferred the promotions constitute a way of looking at the proposition, but along with the promotion the level of increment offered in the pay package certainly constitute a more significant and positive steps towards retaining of workers and reducing the attrition rate. This aspect was looked into during the course of this study and responses were sort as to whether the workers who got promotions were satisfied or not satisfied because of the increment levels in the salary structures. It will be seen from the *Table No. 4.8* and the *Pie Diagram No. 4.8*

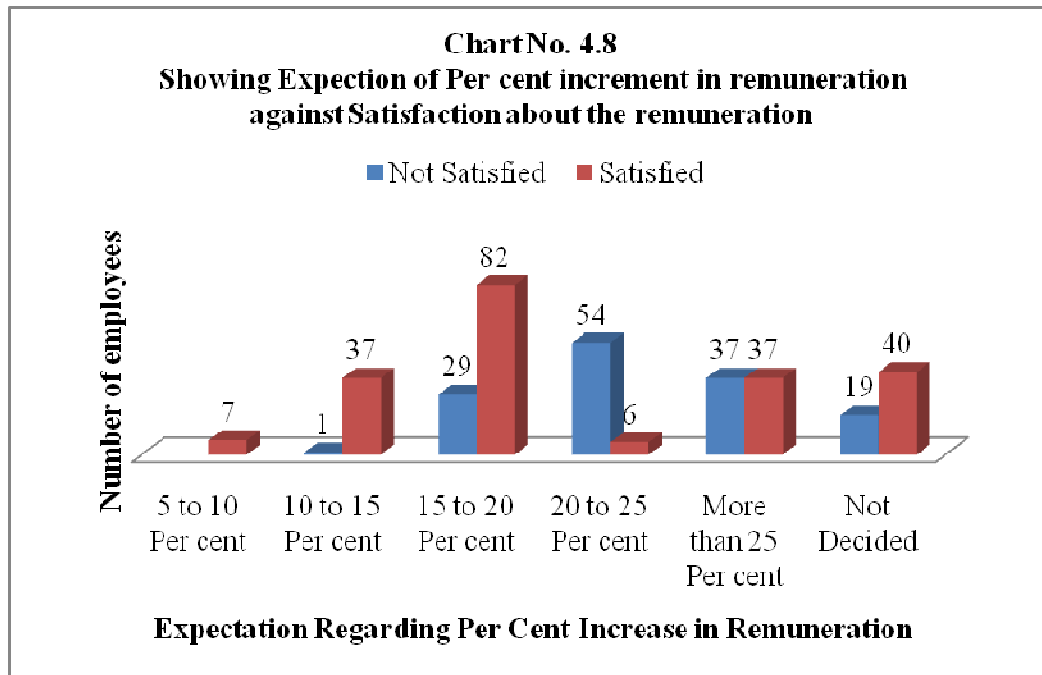
that almost four fifth (59.89 per cent were satisfied) with the implementation of pay packages while two fifth (40.11 per cent) were not satisfied. One cannot be philosophical in issues such as a monetary return in the event of promotions but one can certainly think in terms of correlating a satisfaction rate with the attrition phenomena. In a very general way it may be possible to suggest that 3 out of 5 workers receiving pay packages on getting promotions were satisfied. With such increments while 2 out of 5 do not appear to be satisfied with the increment in the pay package after the promotions. The policy makers in the company would have naturally to concentrate on the 2 out 5 workers who do not appear to be satisfied with monetary increments retaining them in their jobs and thereby bring about a reduction in attrition rate.

Table No. 4.8

Showing expectation of percent increment in remuneration against satisfaction about the remuneration

S.N.	Expectation regarding percent increase in remuneration	No. of Respondents	
		Satisfied	Not satisfied
I	II	III	IV
1	5 to 10	7	0
2	10 to 15	37	1
3	15 to 20	82	29
4	20 to 25	6	54
5	more than 25	37	37
6	not decided	40	19
	Total	209	140

Source: Field Investigation



It would be seen that the dissatisfaction from the increments offered in the pay packages could be a strong reason for quitting the present job and move over to a better company offering the remuneration as per expectations. Almost all the workers who were not satisfied in the pay packets increments appear to be confident of getting the new job with the expected remuneration although the time dimension for such a situation appears to be different about 40 per cent of the dissatisfied workforce appeared sure of getting the job with expected remuneration within one month's time while the remaining 60 per cent of the dissatisfied workers thought it possible to get such jobs within a span of 2 to 3 months. This aspect has been presented in **Table No. 4.9** and the **Chart No. 4.9**. This aspect has got to be given a serious consideration by the powers that be and appropriate working solutions could be thought of to retain the dissatisfied workers who appear to confident to receive the jobs with expected remuneration within a very reasonable time of less than about three months.

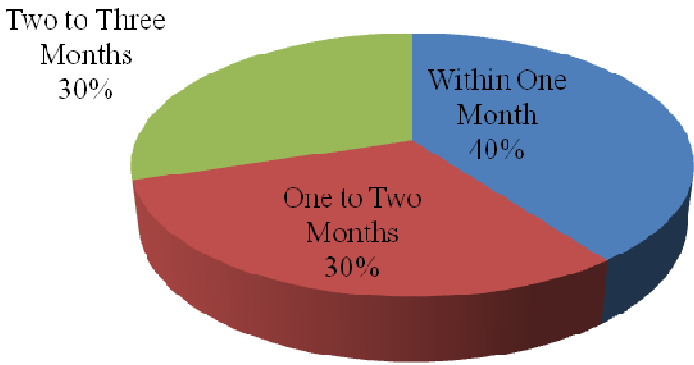
Tabel No. 4.9

Showing the changes to get new job as per expected remuneration

S.N.	To get new job as per expected remuneration	Percentages
I	II	III
1	Within one month	40
2	1 to 2 months	30
3	2 to 3 months	30

Source: Field Investigation

Chart No. 4.9
Showing the chances to get new job as per expected remuneration (Number of employees-in Per cent)



PART-II

The present part has been divided into two sections. *Section-(C)* processed and analyzes the information obtained during the course of investigation with the help of 10 tables in which details regarding several parameters have been presented and studied. *Section-(D)* of the present part relates to skills of the workers and the parameters closely associated with them. The information in this regard obtained from the field investigation has been presented in 12 tables and relevant observations in respect of the data studies have been brought out therein.

Section-(C) Role played by respondents:

The analysis presented in the above paragraphs constitutes a meaningful introduction to the understanding and appreciation of various aspects relating to the attrition phenomena in respect of workers in the automobile industry representing manufacturing sector. Against this background, in PART-II, an attempt has been made to analyze parameters which are associated with the job related variables with a view to examining the role of these variables in promoting or preventing of attrition phenomena.

To begin with, in the *Table No. 4.10* and *Pie Diagram No. 4.10*, the distribution of workers has been presented according to the designation. The distribution of the workers according to the designation in the sample has been made in accordance with such a distribution as was actually obtained from the workers in automobile industry representing manufacturing sector. This was done with a view to making the sample truly representative of the universe, therefore, as will be seen that the machinist account for almost 80 per cent (79.94 per cent) of the sample while the other categories of the employees distributed according to the designations constitute a percentage which is understandably much lower. For instance, the category of engineer / Jr. Manager account only 6 per cent of the workers while the middle manager level and the senior manager level account for 3.15 per cent and 2 per cent, respectively. The workers belonging to the category of the supervisors account for 3.47 per cent while those workers not falling under any specified category make for 5.44 per cent of the total. The entire exercise of the attrition phenomena will naturally

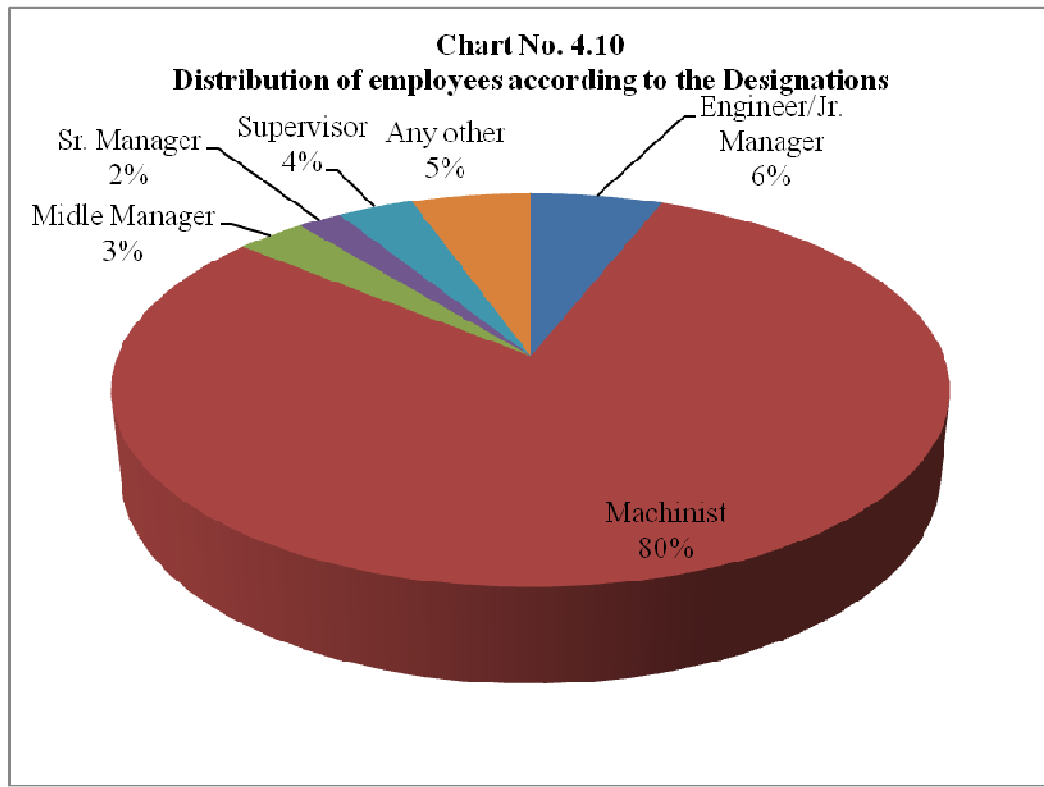
relate to these categories of workers and would understandably differ as between these different categories.

Table No. 4.10

Distribution of employees according to the Designations

S.N.	Designations	No. of Employees (in Percentages)
I	II	III
1	Engineer/Jr. Manager	6.00
2	Machinist	79.94
3	Middle Manager	3.15
4	Sr. Manager	2.00
5	Supervisor	3.47
6	Any other	5.44

Source: Field Investigation



An attempt has been made to get the views of the respondents on a five point scale in respect of their comparative assessment of the present job as against the previous job in various companies they have come from. For purposes of the appreciation of these aspects 28 per cent respondents were not considered because they belongs to the present workplace right from the start of their career. As such for

purposes of this aspect from study the relevant number of respondents works out to only 321. It may be pointed out that the respondents' comparative assessment of the present job vice a vise a previous job has been presented in **Table No. 4.11** on the basis of seven parameters, namely, a) actual use of complex and or high level skills; b) requirement of cooperative endeavor while working with other workers; c) simple and repetitive nature of the job; d) the feedback received from the seniors and or supervisors; e) the possibility of utilizing personal initiative and judgment in carrying out the assignment; f) freedom to complete the execution of the job assigned; and g) the level of satisfaction attained by the respondents in the course of execution and completion of the job.

Table No. 4.11
Comparison for job description related to Present Job and Previous Job

S. N.	Parameters	Present Job (Previous Job) – In Percentages					
		Strongly Accurate	Slightly Accurate	Uncertain	Slightly Inaccurate	Strongly Inaccurate	*N/A
(a)	<i>Required to use number of complex or high level skills</i>						
	Observations	85 (48)	8 (12)	3 (5)	4 (5)	0 (2)	0 (28)
(b)	<i>Required lot of cooperative work with other workers</i>						
	Observations	65 (32)	31 (25)	3 (5)	1 (6)	0 (4)	0 (28)
(c)	<i>Job is simple and repetitive</i>						
	Observations	13 (9)	20 (20)	31 (16)	8 (6)	28 (21)	0 (28)
(d)	<i>Seniors and supervisors never give any feedback</i>						
	Observations	30 (25)	19 (19)	7 (4)	17 (18)	28 (6)	0 (28)
(e)	<i>Any chance to use personal initiative or judgment in carrying out the work</i>						
	Observations	38 (26)	21 (27)	15 (5)	12 (6)	13 (9)	0 (28)
(f)	<i>Freedom to completely finish the piece of work that began our self</i>						
	Observations	65(23)	26 (24)	5 (17)	0 (2)	3 (6)	0 (28)
(g)	<i>I am very pleased with my job</i>						
	Observations	48 (19)	36 (28)	1 (4)	12 (17)	3 (4)	0 (28)

* N/A- Not applicable, because under this category all employees are fresher and worked in only one organization.

Highlighted area: shows significant incremental change in opinions of the employees regarding characteristics of the present and previous employment

Source: Field Investigation

With respect to the *parameter-(a)* namely, requirement to use several complex and higher level skills 85 per cent strongly agreed that they were required to use higher levels of skills in comparison to the previous job while a very small proportion of about 8 per cent slightly agreed with the proposition while and insignificant 3 per cent of the respondents were not certain about the level of skills they are required to adopt in comparison to the level in the previous job. This will clearly indicate the fact that one of the allurements for the respondents to continue with the present workplace could be that their job assignment offers them an opportunity to use high and complex level of skills (this opportunity was denied to them in their previous job assignments). This, by itself, could be considered as a strong reason of respondents to continue with the present workplace because an opportunity to utilize the skill is offered to them. Naturally, this would constitute a reasonably strong factor preventing the mobility of the respondents from present workplace, to elsewhere in the automobile hub of the Pune region.

The requirement of cooperation into coworkers (*parameter-(b)*) is a very significant variable determining the health of the work culture in any organization. In respect of this aspect also 65 per cent of the respondents strongly agreed to the existing of a cooperative work culture in the present workplace while the agreement level of 31 per cent was not so strong. Even so, these two categories taken together account for 96 per cent of the respondents strongly agree to the cooperative culture to worker that exist in present workplace which appears to be of a far higher and superior level in comparison to the one which existed in the previous assignments in companies the respondents have come from. This aspect could also be treated as strong binding force for the workers to be together and develop, over a period of time, a type of fellow-feeling among them. It goes without saying that such a binding force among the workers will definitely act as a distraction for them to leave the assignment and thereby reduce the attrition rate.

In the event of a job being of a purely repetitive nature (*parameter-(c)*) a certain feeling of boredom usually gets developed and the workforce is not very eager to continue to a very long time in a job which has merely repetitive and simple characteristic. 13 per cent of the respondents strongly agreed that the job was of very repetitive nature while about 20 per cent slightly agreed with the proposition to the job

being of repetitive nature thus about one third of the respondents thought present job could be of a repetitive nature while the remaining two third thought otherwise. This aspect also would have a strong bearing on whether the workers are keen on quitting the present jobs or continue to stay with it.

In any organization apart from the cooperative spirit amongst the coworkers, response and feedbacks of the seniors and superiors (*parameter-(d)*) constitutes a very significant aspects determining the work culture of the organization for any good work which has been done by a team of workers a pat on the back by the seniors and supervisors is always very well come and the kind of appreciation that it carries with it leaves a very positive and healthy feelings among the workers. In case of the respondents 30 per cents strongly agreed with the proposition that no feedback or appreciation was ever received from the seniors while 19 per cent agreed with the preposition that no feedback ever received. This is a very strong factor which could considerably reduced a sense of belonging to the organization and might prompt the workers to leave it for other job there by increasing the rate of attrition. In case of present workplace this factor appears to be playing a negative role in reducing a rate of attrition and it may be work while for the decision makers to consider handling this aspect with the greater degree of sensitivity and care.

In the course of the execution of the assignment the workers, on many occasions, are required to use their personal initiative and judgment (*parameter-(e)*) in accomplishing the task assigned to them. Such a freedom to workers would bring about a sense of binding with the organizational culture and would naturally bring about the reduction in the attrition rate. In the context of this parameter 38 per cent of the respondents strongly agreed that in the present workplace they were offered all the necessary space and scope to use personal initiative and judgment while executing the assigned task, while, 21 per cent of the respondents agreed to this preposition. Thus, about 60 per cent of the respondents appear to be comfortable with the extent of freedom given to them in the execution of the job while the balance 40 per cent does not appear to be agreeing with this proposition. This aspect also needs to be looked into by the decision makers in the present workplace as it can have a determining effect on the rate of attrition.

In case of present workplace or for that matter any organization which has a positive way of looking at the work culture, the workers are given a very high level of freedom to complete and finish the job (*parameter-(f)*) from starts to finish. This actually means that the workers are at liberty to choose the style of functioning in the execution of the job once it is assigned to them. This aspect clearly is indicative of the confidence level of the seniors and superiors in regard to the workers who can be relied up on to finish the job which they have started. In case of present workplace under consideration 65 per cent of the workers probably strongly believe that they enjoy such a freedom while 26 per cent agree with the proposition. The two categories taken together account for well over 90 per cent of the respondents to believe that they have freedom to complete the job they have been assigned. This is also the strong factor which could bring about the reduction in the attrition rate.

All said and done, in the ultimate analysis, it is desirable to find out whether the respondents are pleased with the job (*parameter-(g)*) that they have been assigned and the one which they have required to execute. 48 per cent of the respondents strongly agreed that they were pleased with the job while 36 per cent neatly agreed with the proposition. Thus well over 80 per cent of the respondents in present workplace indicated agreement to the proposition that they were pleased with the job while those who did not agreed with the job constituted a very small proposition of around 16 per cent. This aspect would go a long way in reducing the mobility of the workers away from present workplace and thereby reduced the rate of attrition in present workplace under consideration.

It needs to be mention that a comparative scenario of the present workplace with the previous job of the respondents has been quantitatively presented in the above Table no. 4.11. It may be mentioned in a very general way that all the positive parameters appear to be in favor of the jobs in present workplace in relation to those jobs in the previous company. In regard to the negative parameters, present workplace jobs appear to have been placed by the respondents at a much lower level in comparison to their previous assignment. Thus it will be cleared in the present workplace assignments appear to be positively strongly assists in comparison to previous jobs, while the negative parameters, and quantitatively have been placed at a lower level in relation to the previous assignment. Both these aspects taken together

would certainly go a long way in reducing that the attrition rate once the workers joined the present workplace.

An attempt has been made for comparing the average satisfaction level of the respondent workers in the present job and the previous job in the automobile hub in the Pune Region. The average satisfaction level index of the respondent workers in the two workplaces has been worked out on the basis of eleven parameters listed in **Table No. 4.12**. And the factors considered are (a) amount of job security, pay and fringe benefits; (b) opportunities for personal growth and development; (c) policies to impart training whenever required; (d) policy to communicate well defined targets so that there is no ambiguity about what is expected. In regards to these four parameters the deviation level has been on the positive side working out to more than one indicating there by that all these parameters attained favorable values for workers in the present workplace in relation to their quantifies values in previous jobs. It may not be out of place to suggest that these parameters would play a definitive role in causing retention of these workers in the present workplace and bring about a reduction in the attrition rate.

Table No. 4.12
Showing index comparison of average satisfaction level of respondents for present job and previous job

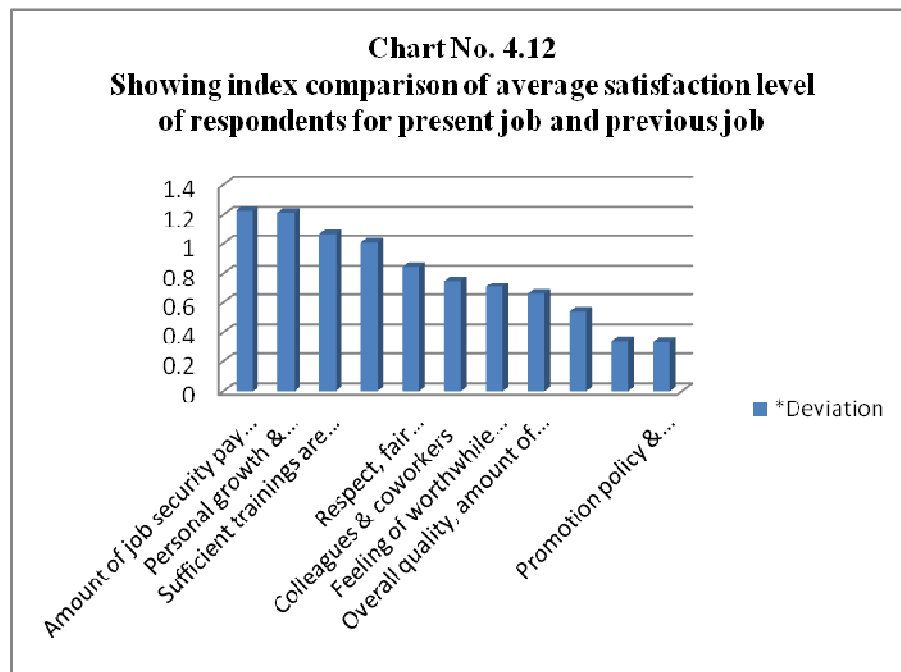
S.N.	Index (Factors of job satisfaction)	*Deviation
I	II	III
(a)	Amount of job security pay & fringe benefits	1.226190
(b)	Personal growth & development	1.214286
(c)	Sufficient trainings are giving when required	1.063492
(d)	Targets are clearly defined & communicated	1.007937
(e)	Respect, fair treatment, support & guidance u receiving from ur superiors	0.845238
(f)	Colleagues & coworkers	0.750000
(g)	Feeling of worthwhile accomplishment for doing this job	0.706349
(h)	Overall quality, amount of challenge	0.658730
(i)	Ample opportunity available for career growth	0.539683
(j)	Your role clearly communicated to you	0.341270
(k)	Promotion policy & practices are fair	0.337302

* Deviation between satisfaction level of present job and previous job.
(Formula for deviation=arithmetic mean (level of satisfaction for previous job) - arithmetic mean (level of satisfaction for present job)

Source: Field Investigation

At the same time there are several other parameters like (e) respect, fair treatment, support and guidance given by the superiors; (f) the attitudes of colleagues and coworkers; (g) a feeling of pride on accomplishment of a satisfactory job; (h) overall quality and the extent of challenge; (i) availability of opportunities for career growth; (j) communication of clear role; and (k) fair degree of promotion policy and practices adopted by the company.

The factors from (a) to (d), as will be seen from the *Bar Chart No. 4.12*, indicate a higher and a more positive level of satisfaction level in the present workplace job in comparison to the job in the previous companies. While, the seven factors listed from (e) to (k) go to indicate, according to a perception of workers, that the position obtained in the previous job appear to be better in the previous company than in the present company.



It may be noted that, the deviation level of the satisfaction obtained in the present job in relation to previous job in other companies has been obtained with the help of the following formula-

“Deviation=arithmetic mean (level of satisfaction for previous job) - arithmetic mean (level of satisfaction for present job)”.

It needs to specifically mentioned that the deviation level obtained in respect of these eleven parameters is not additive therefore a composite index of satisfaction level has not been worked out. However, the negative scores given by the respondents in respect of seven factors listed from (e) to (k) would certainly be a matter of concern policy makers in the present workplace, since the value of these parameters obtained above the zero level mark would go a long way in reducing the attrition rate.

Table No. 4.13
Showing physical difficulties observed at work place and its effect on efficiency
(No. of employees in percentages)

S. N.	Physical Problems	Frequency of occurrence Present (in brackets – Previous)						Total
		Never	Rarely	Sometime	Frequently	Always	* N/A	
I	II	III	IV	V	VI	VII	VIII	IX
(a)	Headache	33 (38)	39 (21)	24 (7)	4 (0)	0 (6)	0 (28)	100 (100)
(b)	Twinges	55 (34)	16 (18)	26 (14)	3 (2)	0 (4)	0 (28)	100 (100)
(c)	Muscle Trembling	66 (42)	17 (19)	11 (6)	4 (5)	2 (4)	0 (28)	100 (100)
(d)	Lack of appetite	53 (44)	25 (15)	12 (6)	3 (4)	7 (3)	0 (28)	100 (100)
(e)	Sickness	36 (17)	40 (29)	16 (24)	7 (1)	1 (1)	0 (28)	100 (100)
(i)	Increase in errors due to above problems	48 (33)	33 (29)	16 (9)	1 (2)	2 (0)	0 (28)	100 (100)
(ii)	Effect on efficiency	68 (43)	18 (17)	4 (9)	4 (1)	6 (2)	0 (28)	100 (100)

* N/A- Not applicable, because under this category all employees are fresher and worked in only one organization.

Highlighted area: shows significant incremental change observed for the employees regarding characteristics of the present and previous employment

Source: Field Investigation

The respondent workers are mostly operating at the shop floor and are quite naturally get subjected to physical problems. This was so both in cases of the assignments at present workplace as also in case of jobs in the previous companies. All the physical difficulties could be treated as professional hazards and were identified as (a) headache; (b) twinges; (c) muscle trembling; (d) lack of appetite; and (e) sickness. It may be seen from table 4.13 which brings out the views of the respondents in regard to above listed physical hardships and their comparative levels in the present job and the in the previous company. It would be seen that the

frequency of occurrences of these physical handicaps in present workplace was of a much lower order than in the previous assignment. The effect of these was felt on two major variables namely, (i) increase in the errors due to the above listed problems; and (ii) the effect it would entail on the efficiency of the workers. All these responses relating to parameters from (a) to (e) and there cumulative impact on items (i) and (ii) would clearly indicate that the position obtained in the present workplace, as brought out on a five point scale, appears to be more positive and favorable for the workforce than was obtained in previous jobs in other companies. Considering the fact that, the present workplace would always offer a far more congenial work culture than the previous companies such a situation was to be expected and it would certainly reduce the attrition rate because of a positive impact on a psyche of a workers.

Quite apart from this, the impact of the factors leading to professional hazards listed above their impact on the generation of errors during the course of execution of job would be an interesting factor and the comparison of such an impact in present workplace in relation to the previous job will also constitute a healthy work culture. It will be seen that in present job the impact of the causative factors relating to professional hazards was of a much lower order than that of a previous job. Such an impact would definitely affect the efficiency of the workers. It would be seen that the efficiency of the present workplace was not affected to the extent of previous job.

It should be emphasized that, the attrition rate would be greatly influenced by the sense of belongingness of the workers to the company in which they are operating. It may also be pointed that the sense of belonging would be different as between the various categories of workers whether (a) engineers / Jr. Engineers; (b) machinist; (c) middle managers; (d) Sr. Managers; (e) supervisors; and (f) any other.

Table No. 4.14
Showing sense of belonging of respondents to formal and informal group at workplace (In Percentages)

S.N.	Designations of Respondents	Present Company			Previous Company			
		Yes	No	Grand Total	Yes	No	N/A	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX
(a)	Engineer / Jr. Manager	52.38	47.62	100.00	14.29	71.43	14.29	100.00
(b)	Machinist	55.20	44.80	100.00	19.71	51.25	29.03	100.00

S.N.	Designations of Respondents	Present Company			Previous Company			
		Yes	No	Grand Total	Yes	No	N/A	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX
(c)	Middle Manager	63.64	36.36	100.00	36.36	36.36	27.27	100.00
(d)	Sr. Manager	14.29	85.71	100.00	14.29	57.14	28.57	100.00
(e)	Supervisor	58.33	41.67	100.00	8.33	66.67	25.00	100.00
(f)	Any Other	21.05	78.95	100.00	5.26	68.42	26.32	100.00
	Grand Total	52.72	47.28	100.00	18.62	53.58	27.79	100.00

Source: Field Investigation

It would appear from the data furnished in *Table No. 4.14* that the sense of belonging of the respondents in present workplace is much higher than what it was in the previous company. This aspect is true of all the category of workers listed above. This is purely a psychological factor but even then it has considerable impact on whether the workers would like to continue in the present assignment or would like to change for a job in some other company.

As the workers operate in any industrial establishment, whether they like it or not, they get attracted and attached to some groups of their choices and liking. These groups normally get constituted formally and as such, have the approval and even the blessings of the management. The question however is whether such an attachment to formal groups of the workers having the recognition of the management produces any impact on the level of efficiency during the course of the job they are supposed to execute. Quite naturally the pattern and extent of such an impact would depend on the category which the worker belongs.

The respondent workers were questioned on these counts and the scores obtained have been presented in *Table No. 4.15*. Without going into the details it appears possible to suggest that the fact of belonging to the formal groups or not belonging to it does not produce a considerable impact on the efficiency level of the workers. This is the perception of the workers in present job at all levels and one wonders if there is any point in creation of such formal groups if the idea is to create cohesion among workers in the hope that it would improve the efficiency level.

Table No. 4.15
Showing EFFECTIVENESS of sense of belonging of respondents to FORMAL
group at workplace on the efficiency of respondents

S. N.	Designation	Belongs to Formal Group								
		Yes					Yes Total	No	No Total	Grand Total
		*1	*2	*3	*4	*5				
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
(a)	Engineer / Jr. Manager	24%	0%	29%	0%	0%	52%	48%	48%	100%
(b)	Machinist	15%	2%	15%	14%	9%	55%	45%	45%	100%
(c)	Middle Manager	9%	18%	18%	9%	9%	64%	36%	36%	100%
(d)	Sr. Manager	0%	0%	0%	0%	14%	14%	86%	86%	100%
(e)	Supervisor	42%	0%	0%	8%	8%	58%	42%	42%	100%
(f)	Any Other	5%	0%	5%	0%	11%	21%	79%	79%	100%
	Total	16%	2%	15%	11%	9%	53%	47%	47%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always. Source: Field Investigation

Another significant factor in any industrial set up is the prevalence of the trade unions and the status of workers in respect of joining the trade unions and in the course of time, developing a sense of belonging and affiliation to the trade unions. It is generally observed that in several industrial establishments in India, the rule of one union per industry is not followed. As a matter of fact, in practically every industrial set up several trade unions exists and they function according to the directives given by their masters who are usually politicians belonging to several political parties in the country. As a result, the strength of the trade unions is weakened and the inter-union rivalry creates fractions and divisions among workers. Against this generally accepted background, in this regards the respondents from present workplace were questioned and the responses obtained have been presented in **Table No. 4.15 (A)**. These responses have been obtained from the workers at all levels and belonging to various categories such as (a) Engineers / Jr. Managers; (b) Machinist; (c) Middle managers; (d) Sr. Manager; (e) Supervisor; (f) any other category. The responses obtained related to the perceptions of the workers at the present work place as also in the previous work place.

Table No. 4.15(A)

Showing sense of belonging of respondents to Employees Union at workplace

S.N.	Designations	Belonging to Union						
		Present Work Place			Previous Work Place			
		Yes	No	Total	Yes	No	N/A	Total
I	II	III	IV	V	VI	VII	VIII	IX
(a)	Engineer / Jr. Manager	71.43%	28.57%	100.00%	0.00%	85.71%	14.29%	100.00%
(b)	Machinist	67.74%	32.26%	100.00%	2.15%	68.82%	29.03%	100.00%
(c)	Middle Manager	90.91%	9.09%	100.00%	9.09%	63.64%	27.27%	100.00%
(d)	Sr. Manager	85.71%	14.29%	100.00%	0.00%	71.43%	28.57%	100.00%
(e)	Supervisor	58.33%	41.67%	100.00%	0.00%	75.00%	25.00%	100.00%
(f)	Any Other	94.74%	5.26%	100.00%	0.00%	73.68%	26.32%	100.00%
	Grand Total	70.20%	29.80%	100.00%	2.01%	70.20%	27.79%	100.00%

Source: Field Investigation

Without going into the further details, it appears reasonable to suggest that the quantification of the suggestions does not appear to offer any specific indication. By and large, it may be suggested that a strong trade union with a majority of workers belongs to it and actively participating in its activities would act as a deterrent on the management to retrench the workers according to their whims and wishes and thereby bring about an increase in the attrition rate. This however does not seem to operate in the context of workers either in present workplace or in the previous companies in which they were doing the jobs.

Strong trade unions with workers actively participating in their activities would naturally offer a higher degree of protection to the workers in the matter of the retention of their jobs and thereby bring about reduction in attrition rate. In such a situation the trade unions would exert considerable influence on the decision making of the management. The perception of such influence of the workers in present job was sought and attempt was made to quantify it. The details obtained from the respondent workers have been presented in *Table No. 4.16*. These responses have been processed on a five point scale and quite naturally these were different for different categories of workers, namely, (a) Engineers / Jr. Managers; (b) Machinist; (c) Middle managers; (d) Sr. Manager; (e) Supervisor; (f) any other category. In all these categories the responses obtained clearly indicate a very high proportion of a lack of influence exerted by the trade unions on the management decisions. One need

not go into the details of the quantified responses but it would be obvious that the lack of trade union's strengths causing poor impact on the decision making of the management is not a very healthy state of affair and could lead to a higher rate of attrition.

Table No. 4.16

Showing influence of employees union in management decision making

S. N.	Designation	Never	Rarely	Sometim e	Freque ntly	Always	Grand Total
I	II	III	IV	V	VI	VII	VIII
(a)	Engineer / Jr. Manager	71.43%	4.76%	9.52%	0.00%	14.29%	100.00%
(b)	Machinist	55.91%	22.94%	11.83%	2.15%	7.17%	100.00%
(c)	Midle Manager	72.73%	0.00%	9.09%	9.09%	9.09%	100.00%
(d)	Sr. Manager	85.71%	14.29%	0.00%	0.00%	0.00%	100.00%
(e)	Supervisor	58.33%	8.33%	25.00%	0.00%	8.33%	100.00%
(f)	Any Other	73.68%	0.00%	26.32%	0.00%	0.00%	100.00%
	Grand Total	59.03%	19.20%	12.61%	2.01%	7.16%	100.00%

Source: Field Investigation

The mobility of workers from one industrial organizational setup to another could be a result of a variety of factors causing such movements. Fourteen parameters have been listed which would make for movement of the workers possible. These factors are (a) Improving experience; (b) Career growth; (c) Compensation; (d) Independence while performing job; (e) Work culture; (f) Better designation; (g) Role is clear; (h) Learning in job; (i) Challenging job; (j) Bearable work stress; (k) Good relation with supervisor; (l) Parental mobility; (m) No role stress; and (n) Never desire work one organization. All these factors are a combination of variables which would pool the workers from the previous workplace to the fresh one. At the same time the much seen factors could be responsible for pushing the workers from the previous job to the newer assignments. It has to be emphasized, however, that the permutations and combinations of these factors would be different and their quantitative assessment also be different when they are operating either on the pull side and push side.

It needs to be mentioned that the type of industrial activity, whether manufacturing or providing services would also determine both the qualitative and

quantitative assessments of the respondents in respect of whether they would like to continue with the present assignment or to change over to the fresh job. Whichever way the respondents react would affect the factor of mobility and quite naturally affect the mobility of the workers and influence the attrition rate.

Fourteen such factors influencing the decision of workers whether to continue in present job or to move to a new one have been identified. And the perceptions of the respondents were obtained on the basis of pre-structured questionnaire and quantified on a five point scale to assess the relative significance of each one of these fourteen variables which were responsible for causing or preventing attrition phenomena. These details have been presented in *Table No. 4.17* and *Pie Diagram 4.17*. It may be mentioned that most of these parameters are identical and have a tendency to operate with different levels of significance depending up on the nature of environment whether manufacturing or the service oriented.

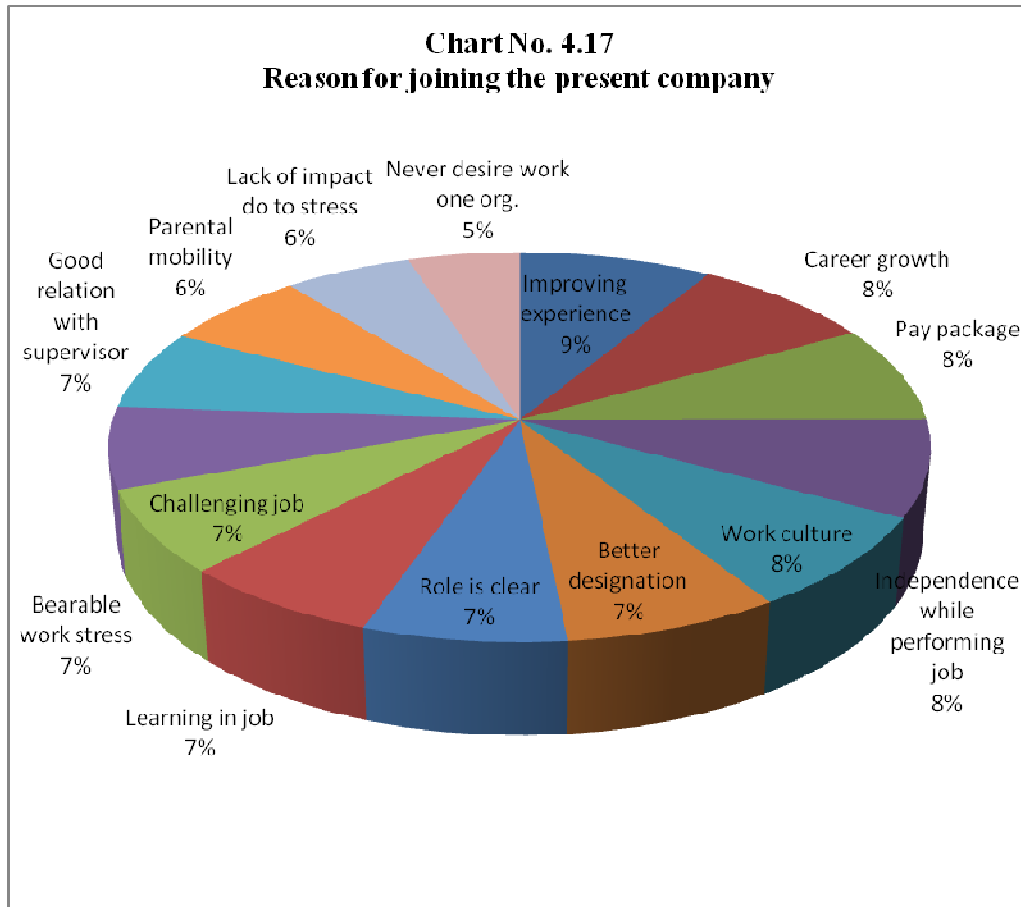
Table No. 4.17
Showing the reasons for joining the present company
(Arranged by higher priority)

S. N.	Factors under consideration	Percent of Despondences
I	II	III
(a)	Improving experience	8.70
(b)	Career growth	8.21
(c)	Pay package	8.05
(d)	Independence while performing job	8.00
(e)	Work culture	7.93
(f)	Better designation	7.48
(g)	Role is clear	7.03
(h)	Learning in job	7.00
(i)	Challenging job	6.95
(j)	Bearable work stress	6.77
(k)	Good relation with supervisor	6.62
(l)	Parental mobility	6.50
(m)	Lack of impact do to stress	5.74
(n)	Never desire work one org.	5.03
	Grand Total	100.00

Source: Field Investigation

The reasons mentioned by the respondents for moving to present workplace in the order of preference have been improving experience (8.70 per cent); career growth

(8.21 per cent); compensation / pay package (8.05 per cent); independents while performing job (8.00 per cent); work culture (7.93 per cent); better designation (7.48 per cent); cleared role (7.03 per cent); learning facilities in the jobs (7.00 per cent); challenging job (6.95 per cent); and bearable stress (6.77 per cent). The other factors making significant contribution included good relation with supervisors (6.62 per cent); parental mobility (6.50 per cent); lack of impact due to stress (6.50 per cent); and never strong desire to move from one place to another (5.03 per cent).



It must be mentioned that the quantification of the reaction of the respondents in this regard has to be treated only as indicative and a firm quantification level need not be assigned to each one of the parameters. The reason obviously being that, most of these parameters have psycho-social bearing and they do not lend to easy quantification. Nevertheless, the quantified responses reasonably indicate the style of thinking of respondent workers and could be considered as fairly supportive reasons as to why the workers shifted from the previous jobs to the present job.

However, it is not sufficient to consider the proposition of mobility purely from the angle of movements towards present workplace, but it should be looked into from the angle as to why the respondents like to switch over from the earlier jobs and the quantified reasons for taking such a decision. These details have been presented in *Table No. 4.18* and illustrated in the *Pie-Diagram No. 4.18*.

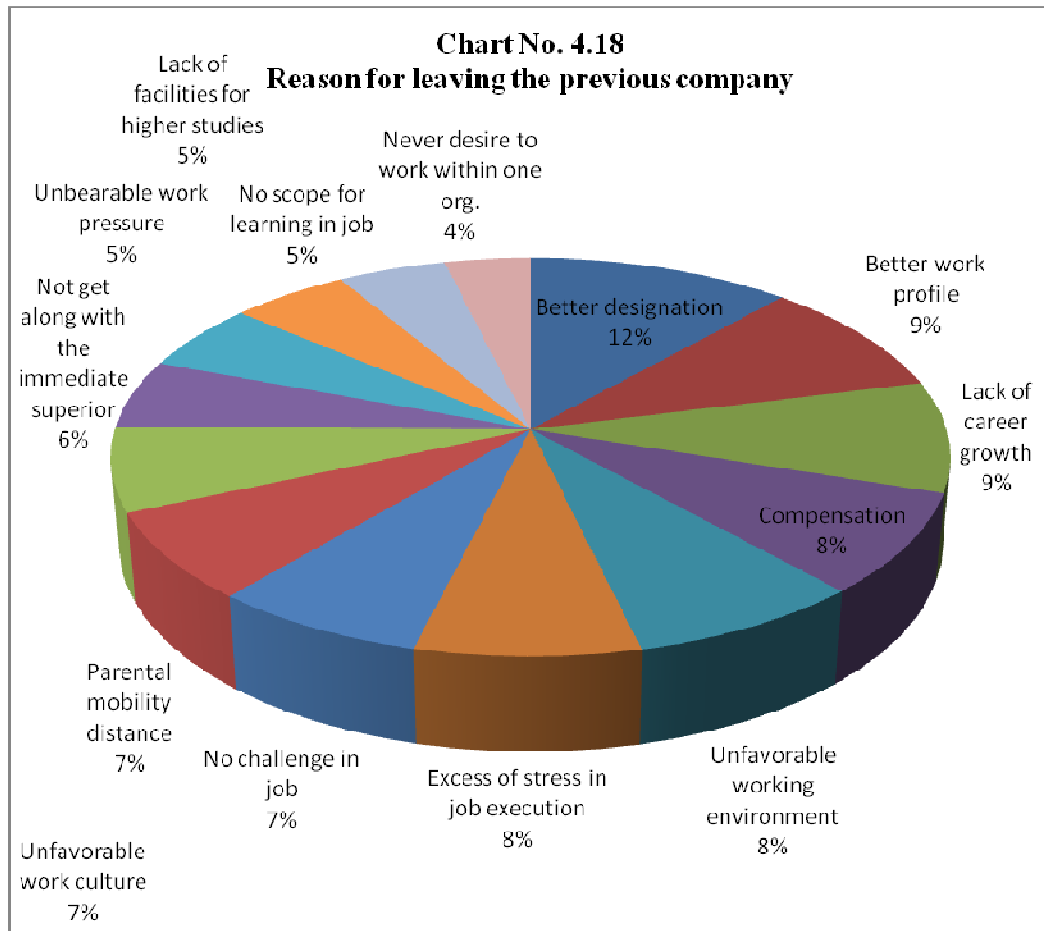
Table No. 4.18
Showing the reasons for leaving the previous company
(Arranged by higher priority)

S.N.	Factors under consideration	Percent of Despondences
I	II	III
(a)	Better designation	11.61
(b)	Better work profile	9.46
(c)	Lack of career growth	9.00
(d)	Compensation	8.26
(e)	Unfavorable working environment	7.97
(f)	Excess of stress in job execution	7.62
(g)	No challenge in job	7.27
(h)	Parental mobility distance	7.19
(i)	Unfavorable work culture	6.83
(j)	Not get along with the immediate superior	5.56
(k)	Unbearable work pressure	5.49
(l)	Lack of facilities for higher studies	5.19
(m)	No scope for learning in job	4.78
(n)	Never desire to work within one org.	3.78
	Grand Total	100.00

Source: Field Investigation

In this context, the factors which were operative in the minds of workers for getting out from previous jobs were; (a) better designation (11.61 per cent); (b) better work profile (9.46 per cent); (c) lack of career growth (9.00 per cent); (d) compensation / pay package (8.26 per cent); (e) unfavorable working environment (7.62 per cent); (f) excess of stress in job execution (7.27 per cent); (g) lack of challenge in the job (7.27 per cent); (h) parental mobility (7.19 per cent); (i) unfavorable work culture (6.83 per cent); (j) not getting along with immediate superior (5.56 per cent); (k) unbearable work pressure (5.49 per cent); (l) lack of facilities for pursuing higher studies (5.19 per cent); (m) no scope for learning in the

job (4.78 per cent); and (n) never desire to work within one organization only (3.78 per cent).



As earlier, it must be pointed out, that all these factors with their permutations and combinations have a very strong psycho social bias and easy quantification appears to be difficult. Nevertheless, the quantified values could be treated as of indicative nature only. Quite apart from these observations, in the following paragraphs an attempt has been made to bring about relationship between several other parameters and an effort has also be made to quantify these relationship as they would affect the attrition phenomena and influence the rate of attrition.

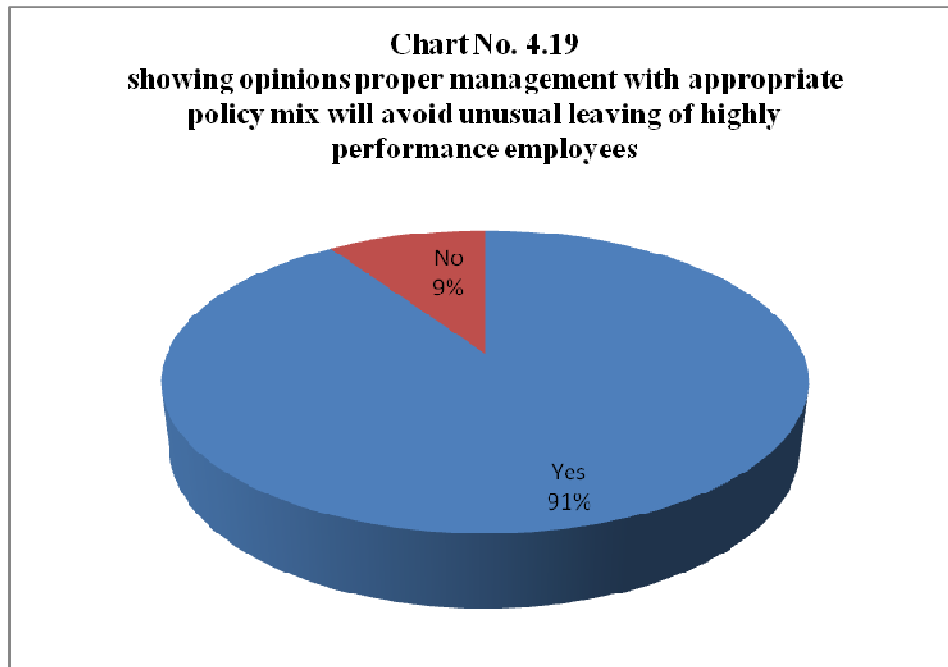
To reduce the impact of attrition and bring about the lowering down of attrition rate, it goes without saying that the management has to design appropriate policy mix and evolve schemes and procedures to achieve this object. It is quite natural that such a policy mix will have to be different for different category of workers and the appropriateness of such a policy would be relevant to a category of

workers being considered. During the course of the present study respondents are questioned in regard to the appropriateness of the policy of the present workplace and responses obtained were understandably different for the different categories of workers. These responses have been presented in *Table No. 4.19* and illustrated in the *Pie Diagram 4.19*.

Table No. 4.19
Designation wise distribution of opinions regarding ‘proper management with appropriate policy mix will avoid unusual leaving of highly performing employees’

S.N.	Designation	Opinion		
		Yes	No	Grand Total
I	II	III	IV	V
(a)	Engineer / Jr. Manager	85.71%	14.29%	100.00%
(b)	Machinist	90.32%	9.68%	100.00%
(c)	Middle Manager	100.00%	0.00%	100.00%
(d)	Sr. Manager	71.43%	28.57%	100.00%
(e)	Supervisor	100.00%	0.00%	100.00%
(f)	Any Other	94.74%	5.26%	100.00%
	Grand Total	90.54%	9.46%	100.00%

Source: Field Investigation



In case of the category of; (a) engineers / Jr. Managers a little over of the 85 per cent of the respondents were of the opinion that the policy formulated in present workplace in this regards has been appropriate, while in the case of category (b) of machinist a little over 90 per cent of the respondents held similar view. In the category of (c) middle manager the entire (100 per cent) group of respondents was having similar view and same proportionate was obtained in case of category of (e) supervisors. In the category of workers belonging to (d) Sr. Manager the appropriateness of the policy was questioned and a little over 70 per cent of the respondents in this category agreed to the suggestions that the policy of the present workplace was desirable. Thus, it will be seen a very substantial proportion of the workers responding to the questionnaire and belonging to the various categories mentioned above were quite happy about the appropriateness about the policy mix structured by the present workplace which according their perception would prevent leaving of the assignment of present workplace.

Section-(D) Skills and Others Parameters:

In the present section, information obtained during the field investigation in the context of the skills of workers and various other related parameters has been processed, tabulated and analyzed category wised of the workers basically with the help of 4 tables. However, since the information was related to various aspects of the main parameter, it was thought desirable to subdivide each one of the table into several others for purposes of better comprehension of the collected information.

When the workers are recruited in the present job and are placed into various categories such as (a) machine operation (production), (b) machine operation (office), (c) clerical, (d) managerial, (e) leadership, (f) functional, (g) motivating other employees, (h) presentation skills, (i) problem solving ability, (j) error handling capacity, (k) soft-skills, (l) programming knowledge, (m) software knowledge. These workers are endowed with several skills and the question is as to whether they get opportunities to utilize those skills on a regular basis or once in a while. Therefore, the responses obtained were placed on a five point scale with a view to quantifying the frequency of use of the skills which the respondents posses and these responses were suitably quantified as indicated in the foot note of *Table No. 4.19 (A) to 4.19 (M)* illustrated by appropriate pie diagram for each one of the category of work force.

It may be cumbersome to offer comments with respect to each one of the categories specifically with respect to the functions performed by the respondents. Therefore, it was thought desirable to offer comments only in respect of the grand total for each of these categories and that too for the frequency of the uses described as always and numbered at five in *Table No. 4.19 (A) to (M)*.

Before going into the comments of the data presented in table no. 4.19 (A) to (M), it needs to be emphasized that, the quantified responses obtained from the respondent workers would constitute meaningful inputs for purposes of conducting human audit. So, in case of an occurrence of a vacancy in one category, the decision maker in present workplace can look around for suitable replacement from amongst the workforce operating in other categories. And only if such suitable replacement is not obtained, the decision maker of present workplace can think in terms of obtaining such replacements from outside. Such a policy format would be very useful from the point of view of the smooth functioning of the organization as the replacements would be made available from within the existing workforce, thereby, reducing the time and cost involved and would go a long way in improving efficiency of the establishment.

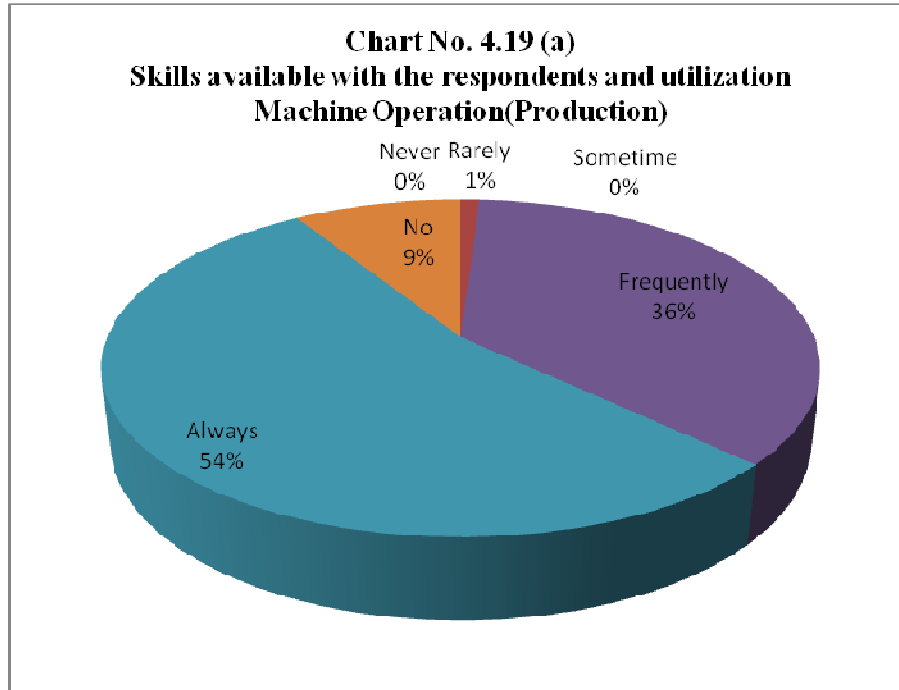
Table No. 4.19(a)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Machine Operation (Production)

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	79%	0%	0%	0%	37%	42%	21%	100%
2	Engineer / Jr. Manager	62%	0%	10%	0%	0%	52%	38%	100%
3	Machinist	100%	0%	0%	0%	39%	61%	0%	100%
4	Middle Manager	0%	0%	0%	0%	0%	0%	100%	100%
5	Sr. Manager	43%	0%	0%	0%	43%	0%	57%	100%
6	Supervisor	67%	0%	0%	0%	67%	0%	33%	100%
7	Grand Total	91%	0%	1%	0%	36%	54%	9%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation

Starting off with category (a) *machine operation (production)* the detailed responses have been presented in *Table No. 4.19(a)* illustrated in *Pie Diagram 4.19(a)*, 54 per cent of the respondents were of the view that they were required to use their skills always while 36 per cent used the skills frequently. 1 per cent of the respondents never used the skill while 9 per cent of the respondents in this category did not possess the specific skill. These details are well illustrated in accompanying pie diagram.



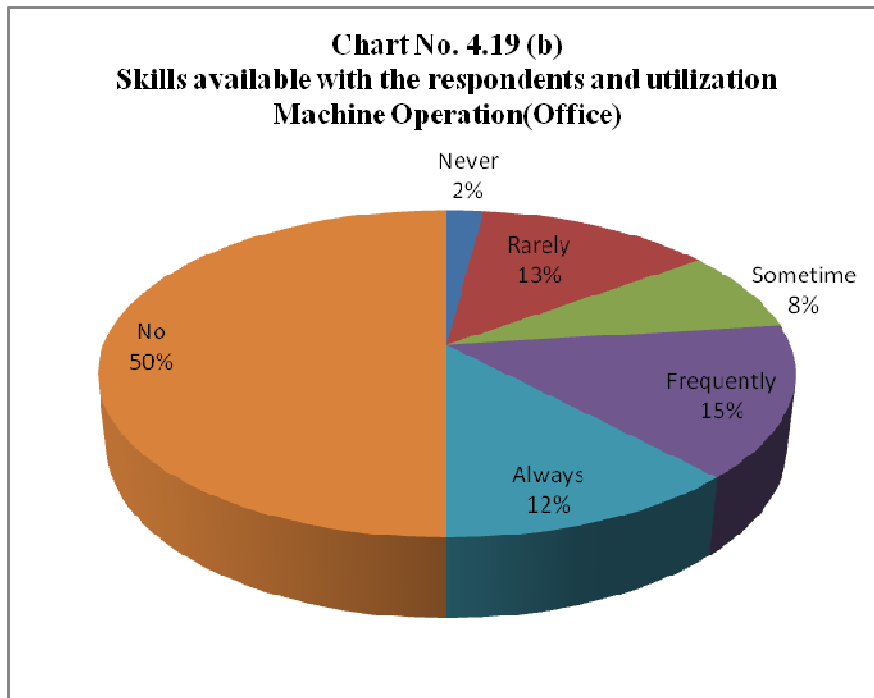
In respect of category (b) *machine operation-office*, the detailed responses have been presented in *Table No. 4.19(b)* and illustrated in *Pie Diagram 4.19(b)*, it would be seen that only 12 per cent utilized the skill always while only 15 per cent did so frequently and the balance 50 per cent did not possess this skill at all.

Table No. 4.19(b)
Designation wise distribution of skills available with the respondents and
utilization (Present Work Place)
Machine Operation (office)

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X

S.N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses					No	Total	
			*1	*2	*3	*4	*5			
I	II	III	IV	V	VI	VII	VIII	IX	X	
1	Any Other	11%	0%	11%	0%	0%	0%	0%	89%	100%
2	Engineer / Jr. Manager	81%	0%	14%	5%	62%	0%	19%	100%	
3	Machinist	50%	2%	14%	9%	11%	13%	50%	100%	
4	Middle Manager	64%	0%	9%	18%	27%	9%	36%	100%	
5	Sr. Manager	57%	0%	0%	0%	14%	43%	43%	100%	
6	Supervisor	42%	0%	0%	8%	25%	8%	58%	100%	
7	Grand Total	50%	2%	13%	8%	15%	12%	50%	100%	

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always
Source: Field Investigation



In regard to the category (c) *clerical*, the detailed responses have been presented in **Table No. 4.19(c)** and illustrated in **Pie Diagram 4.19(c)**, it will be seen that, only 14 per cent of the respondents used the skill always while only 9 per cent of them used frequently. It would be seen that 57 per cent of the respondents from this category did not possess this skill at all.

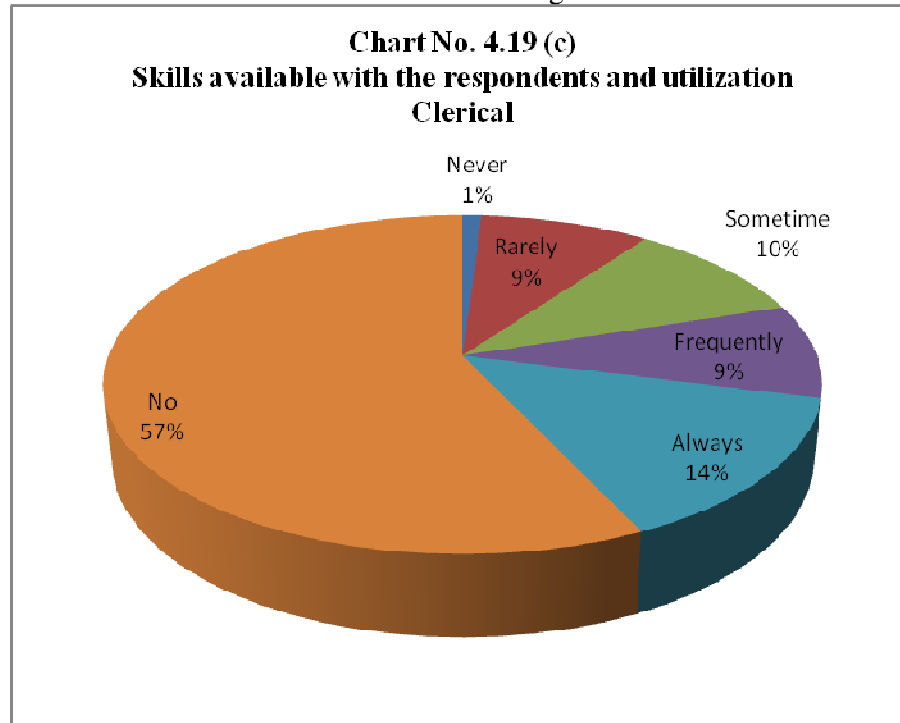
Table No. 4.19(c)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

Clerical

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	68%	0%	5%	21%	37%	5%	32%	100%
2	Engineer / Jr. Manager	76%	14%	19%	10%	5%	29%	24%	100%
3	Machinist	37%	0%	9%	9%	5%	14%	63%	100%
4	Middle Manager	55%	0%	0%	18%	18%	18%	45%	100%
5	Sr. Manager	57%	0%	14%	14%	29%	0%	43%	100%
6	Supervisor	67%	0%	0%	0%	42%	25%	33%	100%
7	Grand Total	43%	1%	9%	10%	9%	14%	57%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



In regard to the responses in category (d) managerial, the details are presented in *Table No. 4.19(d)* and illustrated in *Pie Diagram 4.19(d)*, it would be seen that only 15 per cent of the respondents were required to use the skills always while only 8

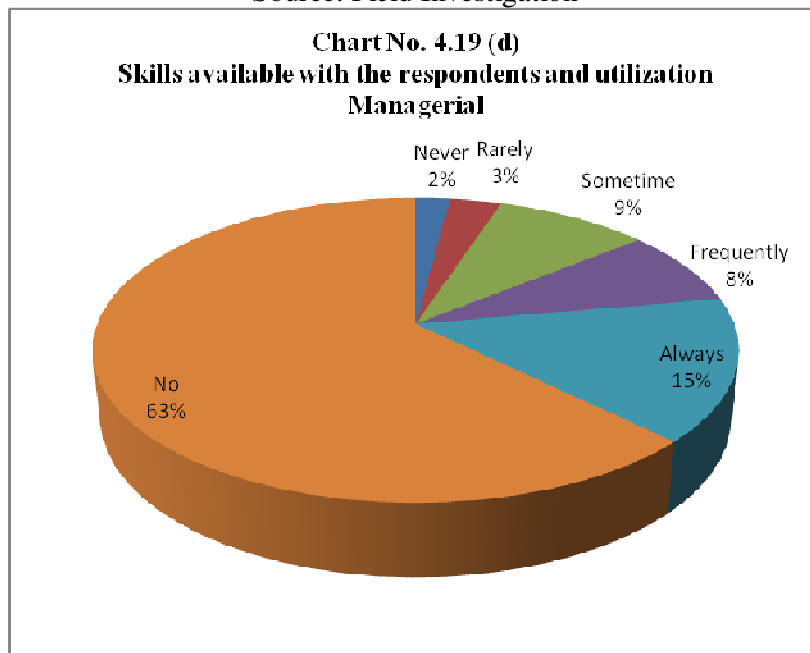
per cent of them use it frequently. It may be pointed out that 62 per cent of the respondents in this category did not possess the managerial skill at all.

Table No. 4.19(d)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Managerial

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	16%	0%	0%	11%	5%	0%	84%	100%
2	Engineer / Jr. Manager	90%	0%	14%	0%	33%	43%	10%	100%
3	Machinist	30%	3%	3%	9%	5%	11%	70%	100%
4	Middle Manager	91%	0%	0%	0%	27%	64%	9%	100%
5	Sr. Manager	86%	0%	0%	29%	0%	57%	14%	100%
6	Supervisor	75%	0%	0%	42%	33%	0%	25%	100%
7	Grand Total	38%	2%	3%	9%	8%	15%	62%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



In the *Table No. 4.19(e)*, leadership quality details have been indicated and illustrated in *Pie Diagram 4.19(e)*, it will be seen that only 16 per cent of this

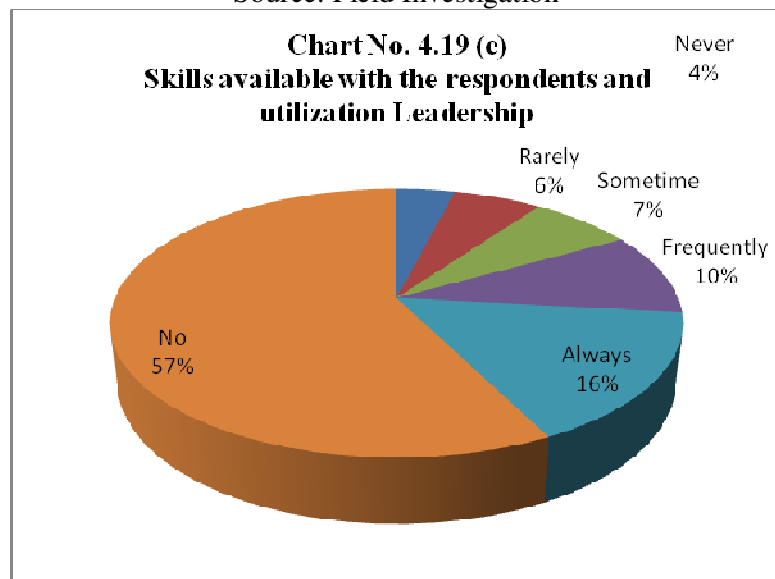
category used the leadership skills always while only 10 per cent used it frequently. 58 per cent of the respondents in this category did not possess the leadership skills at all.

Table No. 4.19(e)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Leadership

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	21%	0%	5%	5%	11%	0%	79%	100%
2	Engineer / Jr. Manager	81%	0%	0%	29%	19%	33%	19%	100%
3	Machinist	37%	5%	6%	5%	7%	14%	63%	100%
4	Middle Manager	82%	0%	0%	18%	27%	36%	18%	100%
5	Sr. Manager	86%	0%	0%	0%	29%	57%	14%	100%
6	Supervisor	75%	0%	8%	17%	33%	17%	25%	100%
7	Grand Total	42%	4%	6%	7%	10%	16%	58%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



The category of functional workers the details have been presented in **Table No. 4.19(f)** and illustrated in the **Pie Diagram 4.19(f)**. It will be seen that only 15 per

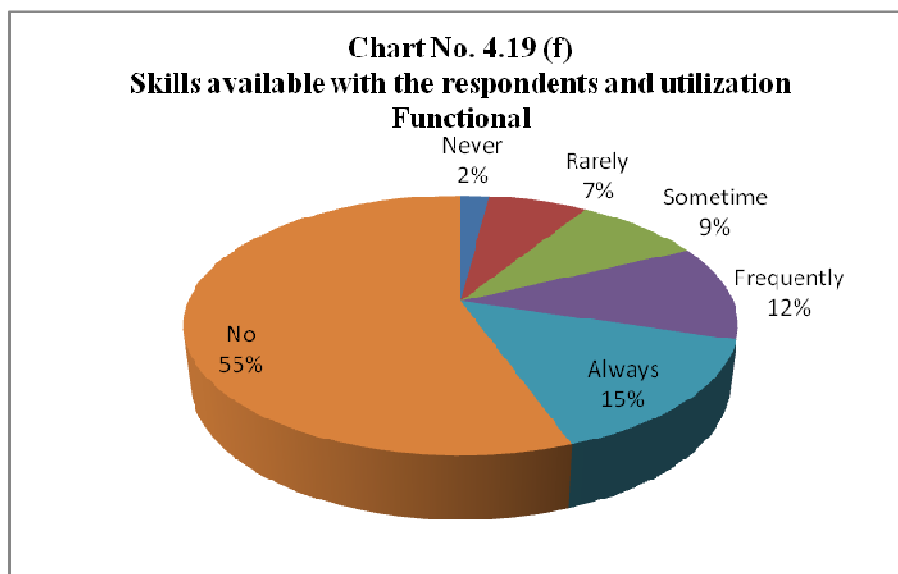
cent of the respondents in this category possess and utilized always the functional skills while 12 per cent utilized them frequently while 56 per cent did not possess such skills.

Table No. 4.19(f)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Functional

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	63%	0%	0%	0%	32%	32%	37%	100%
2	Engineer / Jr. Manager	71%	0%	0%	5%	19%	48%	29%	100%
3	Machinist	38%	2%	7%	9%	9%	11%	62%	100%
4	Middle Manager	73%	0%	27%	18%	9%	18%	27%	100%
5	Sr. Manager	71%	0%	0%	0%	43%	29%	29%	100%
6	Supervisor	50%	0%	0%	17%	25%	8%	50%	100%
7	Grand Total	44%	2%	7%	9%	12%	15%	56%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



During the course of work a certain category of workers is always pressed into use for motivating the other employees for performing their assigned tasks. The details in this regard have been presented in *Table No. 4.19(g)* and illustrated in *Pie Diagram 4.19(g)*. It will be seen that, only 21 per cent of the respondents from this category always were called up on to utilize these skills while 28 per cent were required to do so always. As many as 21 per cent in this category of respondents has been not possessed this skill at all.

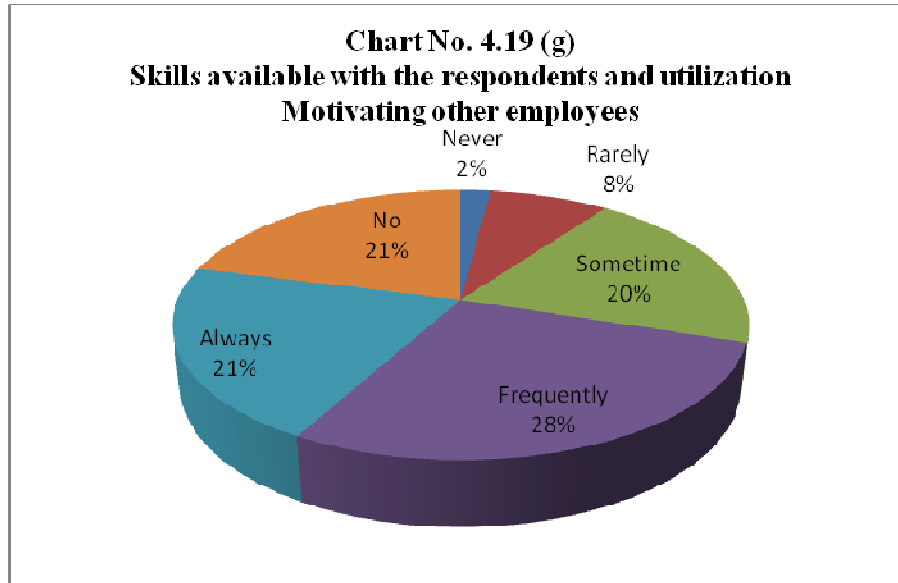
Table No. 4.19(g)

Designation wise distribution of skills available with the respondents and utilization (Present Work Place): Motivating other employees

S.N.	Designation	Used in your job							Total
		Yes (out of 349)	Frequency of Uses (in Percentages)					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	63	0	5	26	32	0	37	100
2	Engineer / Jr. Manager	90	0	10	5	38	38	10	100
3	Machinist	78	2	9	21	25	20	22	100
4	Middle Manager	100	0	0	27	45	27	0	100
5	Sr. Manager	100	0	0	0	57	43	0	100
6	Supervisor	83	0	0	25	33	25	17	100
7	Grand Total	79	2	8	20	28	21	21	100

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



In respect of the presentation skills the details have been presented in *Table No. 4.19(h)* and illustrated in *Pie Diagram 4.19(h)*. In this category 11 per cent of the respondents always used the skill while 17 per cent used it frequently. As a matter of fact 44 per cent of the respondents did not possess the skill at all.

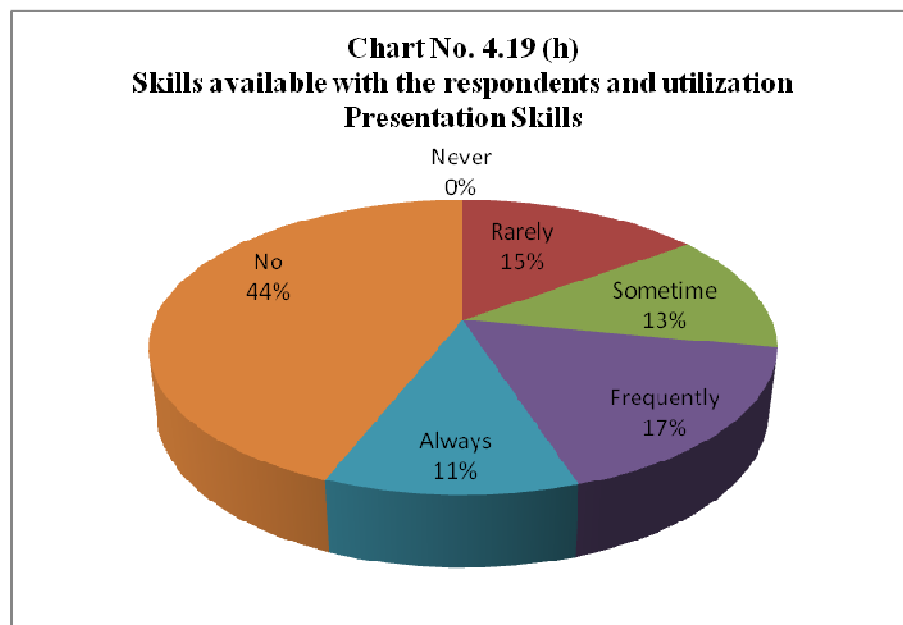
Table No. 4.19(h)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Presentation skill

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	74%	0%	11%	11%	37%	16%	26%	100%
2	Engineer / Jr. Manager	76%	0%	14%	14%	19%	29%	24%	100%
3	Machinist	50%	0%	16%	11%	14%	9%	50%	100%
4	Middle Manager	73%	0%	0%	36%	36%	0%	27%	100%
5	Sr. Manager	100%	0%	0%	14%	57%	29%	0%	100%

S.N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
6	Supervisor	83%	0%	17%	25%	25%	17%	17%	100%
7	Grand Total	56%	0%	15%	13%	17%	11%	44%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



In the work place several problems crop up from time to time and a particular category of workers with problem solving ability is required to be developed. In respect of this category the details of responses have been presented in *Table No. 4.19(i)* and illustrated in the *Pie Diagram 4.19(i)*. It will be seen that 21 per cent of the respondents in this category were always required to use this skills while 28 per cent of them use this frequently. It may be pointed out that 21 per cent of the respondents did not possess the problem solving ability.

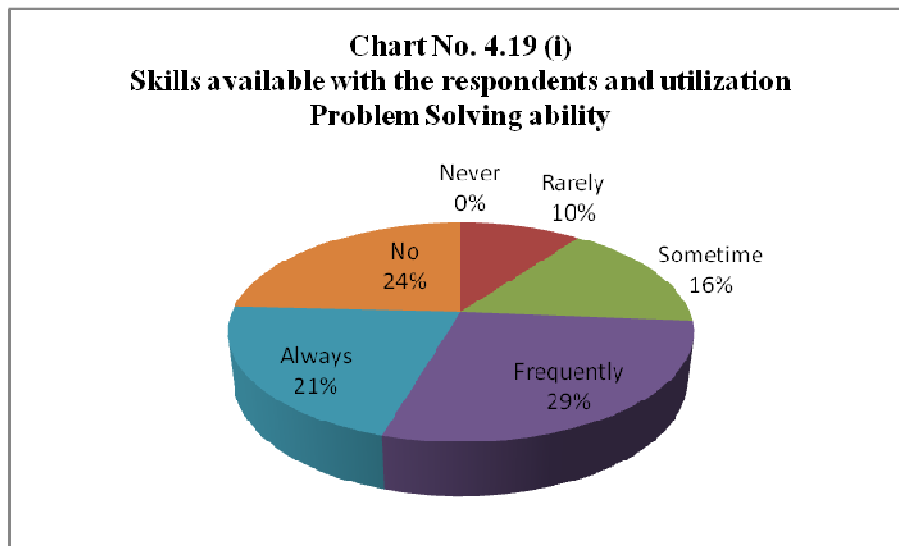
Table No. 4.19(i)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

Problem solving ability

S. N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	79%	0%	0%	32%	26%	21%	21%	100%
2	Engineer / Jr. Manager	86%	0%	14%	29%	14%	29%	14%	100%
3	Machinist	73%	0%	11%	14%	28%	20%	27%	100%
4	Middle Manager	82%	0%	9%	18%	36%	18%	18%	100%
5	Sr. Manager	100%	0%	0%	29%	57%	14%	0%	100%
6	Supervisor	92%	0%	17%	17%	25%	33%	8%	100%
7	Grand Total	76%	0%	10%	16%	28%	21%	24%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



In the work place during the course of day to day operations several errors occur and the workers required for purposes of handling these errors have to be

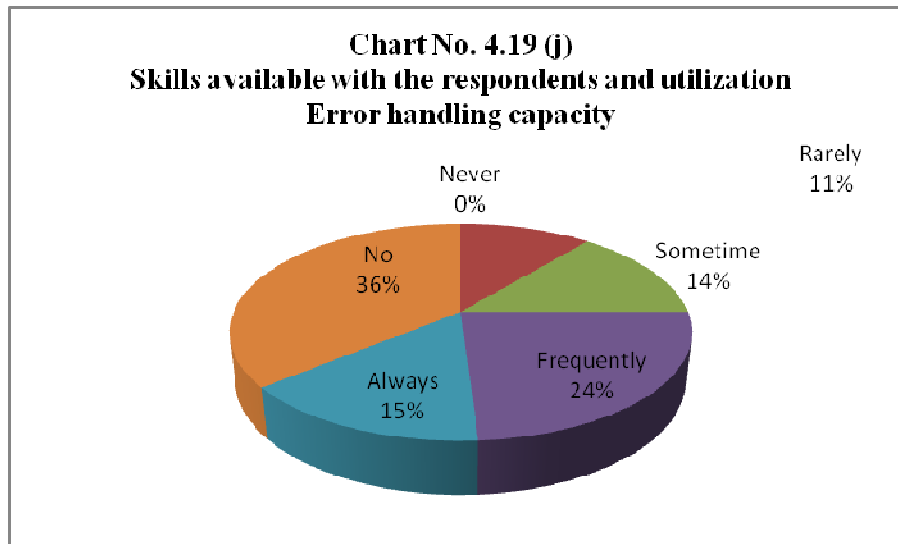
endowed with specific capacity. The details in this regards have been presented in *Table No. 4.19(j)* and illustrated in *Pie Diagram 4.19(j)*. It will be seen only 15 per cent of the workers responding in this category were frequently called up on to utilize the error handling capacity while 15 per cent used it always. It may be pointed out that 36 per cent of the respondents in this category did not possess this skill at all.

Table No. 4.19(j)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Error handling capacity

S. N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses							Total
			*1	*2	*3	*4	*5	No		
I	II	III	IV	V	VI	VII	VIII	IX	X	
1	Any Other	74%	0%	26%	26%	11%	11%	26%	100%	
2	Engineer / Jr. Manager	81%	5%	5%	38%	5%	29%	19%	100%	
3	Machinist	60%	0%	9%	9%	27%	14%	40%	100%	
4	Middle Manager	91%	0%	18%	36%	27%	9%	9%	100%	
5	Sr. Manager	86%	0%	0%	43%	0%	43%	14%	100%	
6	Supervisor	92%	0%	33%	17%	25%	17%	8%	100%	
7	Grand Total	64%	0%	11%	14%	24%	15%	36%	100%	

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



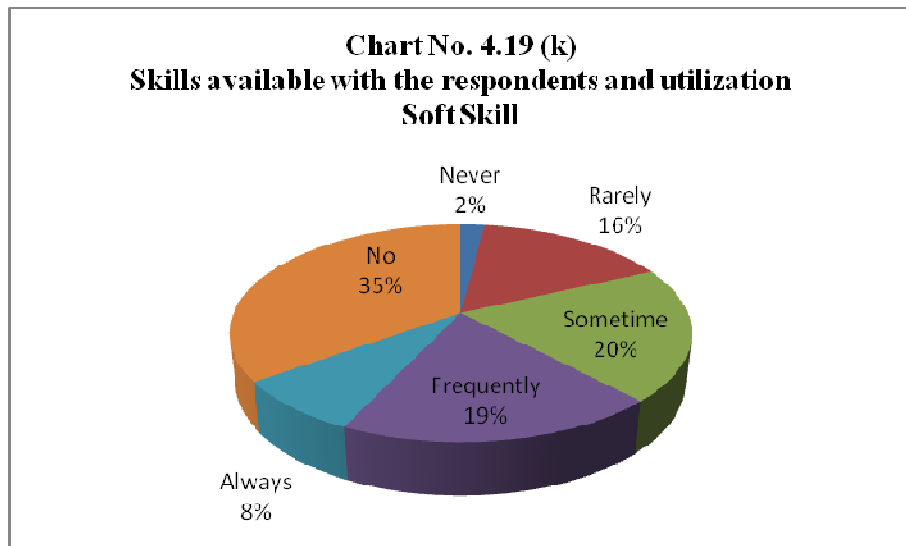
In the workplace soft-skills are required in several situations and the responses in this respect have been presented in *Table No. 4.19(k)* and illustrated in *Pie Diagram 4.19(k)*. It will be seen that 8 per cent of the responses in this category always use the soft-skills while 19 per cent of the respondents used frequently. It may be noted that 35 per cent of the respondents did not possess this skill at all.

Table No. 4.19(k)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place) Soft Skills

S. N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	84%	0%	5%	37%	32%	11%	16%	100%
2	Engineer / Jr. Manager	81%	0%	29%	19%	14%	19%	19%	100%
3	Machinist	60%	3%	15%	19%	16%	7%	40%	100%
4	Middle Manager	91%	0%	27%	9%	36%	18%	9%	100%
5	Sr. Manager	100%	0%	0%	43%	57%	0%	0%	100%
6	Supervisor	75%	0%	17%	25%	25%	8%	25%	100%
7	Grand Total	65%	2%	16%	20%	19%	8%	35%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



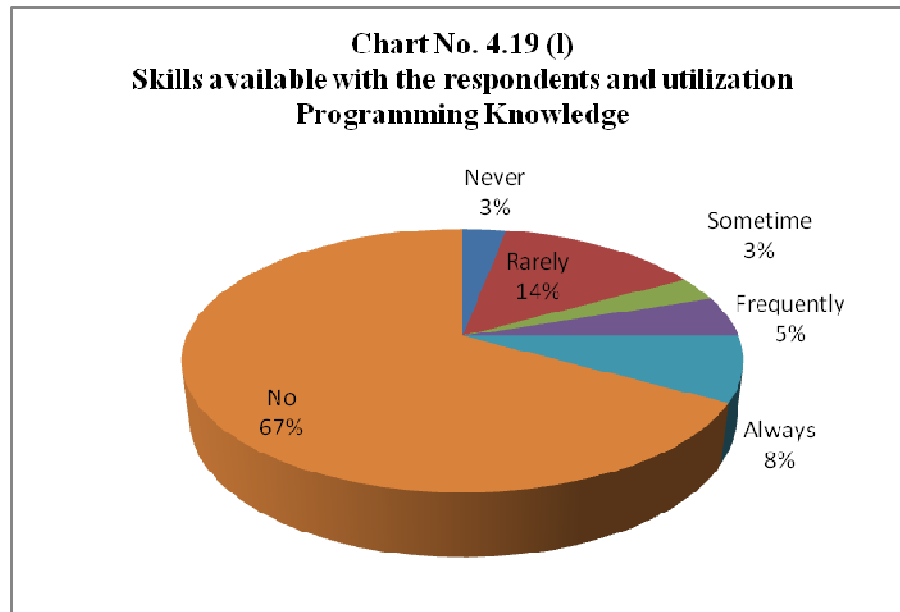
With the advent of computers and their very meaningful contribution in the workplace the workers are bestowed with programming knowledge and such workers form a category themselves. The details of respondents with programming knowledge have been brought out in *Table No. 4.19(l)* and illustrated in *Pie Diagram 4.19(l)*. It will be seen that only 8 per cent of the workers belonging to this category always utilize programming knowledge while only 5 per cent utilize it frequently. As a matter of fact 67 per cent of the respondents did not possess programming knowledge at all.

Table No. 4.19(l)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)
Programming knowledge

S. N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	21%	0%	11%	0%	5%	5%	79%	100%
2	Engineer / Jr. Manager	52%	5%	19%	0%	0%	29%	48%	100%
3	Machinist	32%	3%	15%	3%	5%	7%	68%	100%
4	Middle Manager	27%	9%	0%	0%	9%	9%	73%	100%
5	Sr. Manager	29%	0%	0%	29%	0%	0%	71%	100%
6	Supervisor	33%	0%	8%	8%	8%	8%	67%	100%
7	Grand Total	33%	3%	14%	3%	5%	8%	67%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



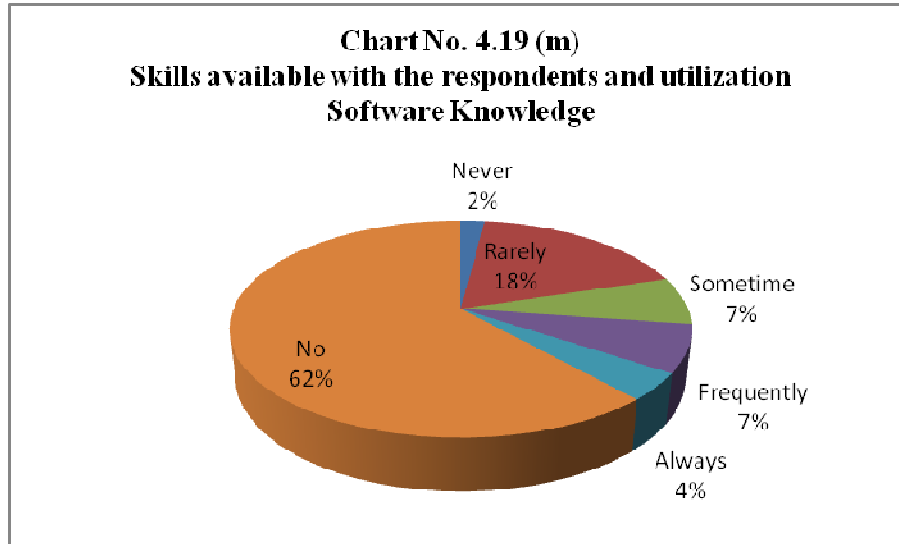
Apart from programming knowledge the present day workers are required to have software knowledge as well. The responses in this regard have been presented in *Table No. 4.19 (m)* and illustrated in *Pie Diagram 4.19(m)*. It will be seen that only 4 per cent of the respondents from this category always used the software knowledge while seven per cent used it frequently and as will be seen that 61 per cent of the respondents in this category had no software knowledge at all.

Table No. 4.19(m)
Designation wise distribution of skills available with the respondents and
utilization (Present Work Place)
Software knowledge

S. N.	Designation	Used in your Job							
		Yes (out of 349)	Frequency of Uses					No	Total
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Any Other	11%	0%	11%	0%	0%	0%	89%	100%
2	Engineer / Jr. Manager	38%	5%	14%	0%	5%	14%	62%	100%
3	Machinist	41%	3%	20%	9%	7%	3%	59%	100%
4	Middle Manager	45%	0%	9%	0%	9%	27%	55%	100%
5	Sr. Manager	57%	0%	0%	0%	57%	0%	43%	100%
6	Supervisor	17%	0%	8%	0%	8%	0%	83%	100%
7	Grand Total	39%	2%	18%	7%	7%	4%	61%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

Source: Field Investigation



Very generally speaking it may be observed that, in all the categories of respondents listed above a very substantial proportion of the respondents had the requisite knowledge and the skill while only a small proportion of the respondents were either using it always or frequently. This means that at the present workplace in all the categories of respondents a very large proportion of the workers had the requisite skills but only a small proportion of them were required to use it either always or frequently. This will indicate the fact that the present job workforce had a strong BENCH-STRENGTH which could always be utilized in times of emergency or in situations where the workers left the present assignment for some other companies. It may not be wrong to suggest that this aspect of a strong Bench Strength would be a deterrent for the workers to leave present jobs and as a result would have the impact of reducing the attrition rate.

The details presented in Tables 4.19 and in various categories of table 4.19 listed above are with respect to the workers operating in present workplace. On the basis of the quantification of responses with respect to various categories listed above; relevant observations have been offered. These mainly relate to the BENCH STRENGTH of workers available in present workplace. And the impact of such bench strength on the efforts required to be made to get a replacement as and when the workers choose to leave the job.

In **Table No. 4.20** categorized into various categories of workers details have been quantified for each one of the categories, such as, Table No. 4.20(a) Machine

operation (production); 4.20 (b) Machine operation (office); 4.20(c) clerical category; 4.20(d) managerial; 4.20(e) leadership qualities; 4.20(f) functional; 4.20(g) motivating other employees; 4.20(h) presentation skills; 4.20(i) problem solving ability; 4.20(j) error handling capacity; 4.20(k) soft skills; 4.20(l) programming knowledge; 4.20(m) software knowledge. These quantified details with respect to each one of these categories for workers in the previous jobs have been illustrated with the help of suitable pie diagrams.

Table No. 4.20
Designation wise distribution of skills available with the respondents and utilization (Previous Work Place)

S. N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses					**	**N	Total
			*1	*2	*3	*4	*5	N/A	o	
(a)	Machine Operation (Production)									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	68%	0%	0%	0%	0%	68%	26%	5%	100%
2	Engineer / Jr. Manager	62%	0%	0%	0%	14%	48%	14%	24%	100%
3	Machinist	69%	0%	0%	0%	30%	39%	29%	2%	100%
4	Middle Manager	45%	0%	0%	27%	9%	9%	27%	27%	100%
5	Sr. Manager	43%	0%	0%	0%	43%	0%	29%	29%	100%
6	Supervisor	67%	8%	8%	0%	8%	50%	25%	8%	100%
7	Grand Total	67%	0%	0%	1%	26%	40%	28%	5%	100%
(b)	Machine Operation (office)									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	11%	0%	11%	0%	0%	0%	26%	63%	100%
2	Engineer / Jr. Manager	52%	0%	0%	5%	29%	19%	14%	33%	100%
3	Machinist	23%	0%	5%	7%	7%	4%	29%	48%	100%
4	Middle Manager	45%	0%	9%	9%	27%	0%	27%	27%	100%
5	Sr. Manager	57%	0%	0%	0%	57%	0%	29%	14%	100%
6	Supervisor	25%	0%	0%	8%	8%	8%	25%	50%	100%
7	Grand Total	26%	0%	5%	6%	9%	5%	28%	47%	100%

S. N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses					** N/A	**N o	Total
			*1	*2	*3	*4	*5			
(c) Clerical category										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	58%	0%	0%	26%	32%	0%	26%	16%	100%
2	Engineer / Jr. Manager	52%	0%	0%	24%	14%	14%	14%	33%	100%
3	Machinist	14%	3%	3%	0%	5%	5%	29%	57%	100%
4	Middle Manager	55%	0%	9%	27%	9%	9%	27%	18%	100%
5	Sr. Manager	57%	0%	0%	14%	29%	14%	29%	14%	100%
6	Supervisor	50%	0%	8%	8%	25%	8%	25%	25%	100%
7	Grand Total	22%	2%	3%	4%	8%	5%	28%	50%	100%
(d) Managerial										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	5%	0%	0%	0%	5%	0%	26%	68%	100%
2	Engineer / Jr. Manager	29%	0%	0%	5%	10%	14%	14%	57%	100%
3	Machinist	10%	3%	0%	3%	5%	0%	29%	61%	100%
4	Middle Manager	64%	0%	9%	18%	27%	9%	27%	9%	100%
5	Sr. Manager	57%	0%	0%	0%	29%	29%	29%	14%	100%
6	Supervisor	33%	0%	0%	8%	17%	8%	25%	42%	100%
7	Grand Total	14%	2%	0%	3%	7%	2%	28%	58%	100%
(e) Leadership										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	5%	0%	0%	0%	5%	0%	26%	68%	100%
2	Engineer / Jr. Manager	38%	0%	0%	0%	10%	29%	14%	48%	100%
3	Machinist	21%	3%	0%	7%	6%	5%	29%	50%	100%
4	Middle Manager	73%	0%	18%	18%	9%	27%	27%	0%	100%
5	Sr. Manager	71%	0%	0%	14%	29%	29%	29%	0%	100%
6	Supervisor	33%	0%	0%	0%	17%	17%	25%	42%	100%
7	Grand Total	24%	2%	1%	7%	7%	7%	28%	48%	100%

S. N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses					** N/A	**N o	Total
			*1	*2	*3	*4	*5			
(f)	Functional									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	5%	0%	0%	0%	5%	0%	26%	68%	100%
2	Engineer / Jr. Manager	33%	0%	0%	0%	10%	24%	14%	52%	100%
3	Machinist	9%	0%	0%	5%	2%	3%	29%	62%	100%
4	Middle Manager	64%	9%	18%	9%	18%	9%	27%	9%	100%
5	Sr. Manager	71%	14%	0%	0%	43%	14%	29%	0%	100%
6	Supervisor	17%	0%	0%	0%	8%	8%	25%	58%	100%
7	Grand Total	14%	1%	1%	4%	4%	4%	28%	58%	100%
(g)	Motivating other employees									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	21%	0%	0%	11%	11%	0%	26%	53%	100%
2	Engineer / Jr. Manager	48%	5%	0%	0%	24%	19%	14%	38%	100%
3	Machinist	35%	5%	3%	7%	19%	2%	29%	36%	100%
4	Middle Manager	73%	9%	9%	27%	27%	0%	27%	0%	100%
5	Sr. Manager	71%	0%	0%	14%	43%	14%	29%	0%	100%
6	Supervisor	58%	0%	0%	8%	33%	17%	25%	17%	100%
7	Grand Total	38%	4%	2%	7%	20%	4%	28%	35%	100%
(h)	Presentation skill									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	37%	0%	0%	16%	21%	0%	26%	37%	100%
2	Engineer / Jr. Manager	29%	0%	5%	0%	5%	19%	14%	57%	100%
3	Machinist	18%	3%	2%	4%	7%	2%	29%	53%	100%
4	Middle Manager	55%	0%	18%	18%	18%	0%	27%	18%	100%
5	Sr. Manager	43%	0%	14%	14%	14%	0%	29%	29%	100%
6	Supervisor	42%	0%	8%	8%	25%	0%	25%	33%	100%
7	Grand Total	22%	2%	3%	5%	9%	3%	28%	50%	100%

S. N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses					** N/A	**N o	Total
			*1	*2	*3	*4	*5			
(i) Problem Solving ability										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	53%	0%	0%	32%	21%	0%	26%	21%	100%
2	Engineer / Jr. Manager	67%	0%	5%	24%	24%	14%	14%	19%	100%
3	Machinist	51%	0%	0%	24%	22%	5%	29%	20%	100%
4	Middle Manager	64%	9%	9%	18%	27%	0%	27%	9%	100%
5	Sr. Manager	71%	0%	14%	29%	29%	0%	29%	0%	100%
6	Supervisor	50%	0%	0%	25%	25%	0%	25%	25%	100%
7	Grand Total	52%	0%	1%	25%	22%	5%	28%	20%	100%
(j) Error handling capacity										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	63%	0%	0%	42%	21%	0%	26%	11%	100%
2	Engineer / Jr. Manager	33%	0%	0%	14%	5%	14%	14%	52%	100%
3	Machinist	44%	0%	0%	14%	21%	10%	29%	27%	100%
4	Middle Manager	73%	9%	9%	18%	27%	9%	27%	0%	100%
5	Sr. Manager	57%	0%	0%	14%	43%	0%	29%	14%	100%
6	Supervisor	50%	0%	8%	33%	8%	0%	25%	25%	100%
7	Grand Total	46%	0%	1%	16%	20%	9%	28%	26%	100%
(k) Soft Skills										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	37%	0%	0%	16%	21%	0%	26%	37%	100%
2	Engineer / Jr. Manager	33%	0%	0%	10%	10%	14%	14%	52%	100%
3	Machinist	42%	3%	2%	14%	18%	5%	29%	29%	100%
4	Middle Manager	55%	0%	18%	9%	18%	9%	27%	18%	100%
5	Sr. Manager	29%	0%	0%	14%	14%	0%	29%	43%	100%
6	Supervisor	33%	0%	0%	17%	17%	0%	25%	42%	100%
7	Grand Total	41%	2%	2%	14%	18%	5%	28%	31%	100%

S. N.	Designation	Used in your Job								
		Yes (out of 349)	Frequency of Uses					** N/A	**N o	Total
			*1	*2	*3	*4	*5			
(l)	Programming knowledge									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	0%	0%	0%	0%	0%	0%	26%	74%	100%
2	Engineer / Jr. Manager	19%	0%	14%	0%	0%	5%	14%	67%	100%
3	Machinist	10%	3%	0%	2%	0%	5%	29%	61%	100%
4	Middle Manager	0%	0%	0%	0%	9%	0%	27%	73%	100%
5	Sr. Manager	0%	0%	0%	0%	0%	0%	29%	71%	100%
6	Supervisor	8%	0%	0%	8%	0%	0%	25%	67%	100%
7	Grand Total	9%	2%	1%	2%	0%	4%	28%	63%	100%
(m)	Software knowledge									
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Any Other	0%	0%	0%	0%	0%	0%	26%	74%	100%
2	Engineer / Jr. Manager	24%	0%	0%	0%	14%	10%	14%	62%	100%
3	Machinist	12%	3%	2%	2%	0%	5%	29%	59%	100%
4	Middle Manager	9%	0%	0%	0%	0%	9%	27%	64%	100%
5	Sr. Manager	0%	0%	0%	0%	0%	0%	29%	71%	100%
6	Supervisor	8%	0%	0%	0%	8%	0%	25%	67%	100%
7	Grand Total	11%	2%	2%	2%	1%	5%	28%	61%	100%

*Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

** N/A means, these respondents are under the category of first time employees

***No means they do not possess the above mentioned skill

Source: Field Investigation

Even a cursory glance at this category wise presentations would convince anyone of; a vast difference between the workers at present workplace and those in their previous jobs. For instance, there appears to be (a) a prevalence of inadequate opportunities to utilize the skills of the workers either always or frequently; and (b) total lack of 'bench strength' in previous company. It would not be wrong, therefore, to suggest that because of the factor (a) there would naturally be frustration amongst workers who would be keen to quite the present assignment. And as a result of the prevalence of factor (b) namely, lack of bench strength in the previous companies, the management would find it exceedingly difficult to replace the workers who quite the

jobs and the management would be required to incur a lot of cost and spend a considerable volume of time to get the replacement. This would naturally disorganize the working conditions and leave to inefficiency in production resulting in higher cost. All these aspects witnessed in the context of previous companies of the workers would naturally be considerably affecting the mobility of the workers increasing the attrition rate.

The observations offered in regard to the quantified data in table 4.19 (A) to (M) and 4.20 can be further supplemented by bringing about the distribution of respondents in the industry according to the demand of skill and efforts made by the respondents to utilize these demands. It would be seen that a very substantial proportion of respondents (88.54 per cent) tried to avail of the opportunities available for their skills while the balance (11.46 per cent) did not availed of the opportunities. It would be seen further that the workers in the present workplace attempted to avail of the opportunities by appearing for the job interview only once or twice while they did not show the perseverance to put in more attempts. This job search behavior of the workers would also have a certain impact on the attrition phenomena and influence the attrition rate. These quantified details illustrated by the pie diagram have been presented in *Table No. 4.21* and *Pie Diagram 4.21*.

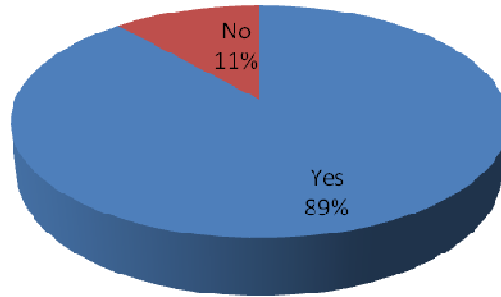
Table No. 4.21

Distribution of the respondents according to the Demand of skill and attempt to grab this demand by the respondents

S. N.	Trying to procure demand	Opinion about - is there any demand to your skill		
		Yes	No	Grand Total
I	II	III	IV	V
1	Yes	32.38%	3.15%	35.53%
1.1	ONCE - Attempted Job interview in a month	13.75%	0.86%	14.61%
1.2	TWICE - Attempted Job interview in a month	13.75%	2.29%	16.05%
1.3	THRICE - Attempted Job interview in a month	3.72%	0.00%	3.72%
1.4	FOUR TIME – Attempted Job Interview in a month	1.15%	0.00%	1.15%
2	No	56.16%	8.31%	64.47%
2.1	Attempts - Not Applicable	56.16%	8.31%	64.47%
	Grand Total	88.54%	11.46%	100.00%

Source: Field Investigation

Chart No. 21
Demand of skill and attempt to procure this demand
by the respondents



As we look around for the motivation for the workers in present workplace to quit the job and the frequency of such attempts to quit it, as brought out in table no. 4.21, it appears interesting to find out as to why the workers of present job place want to continue with the job and for what reasons. The quantified details in this regards have been brought out in *Table No. 4.22* and illustrated with *Pie Diagram 4.22*.

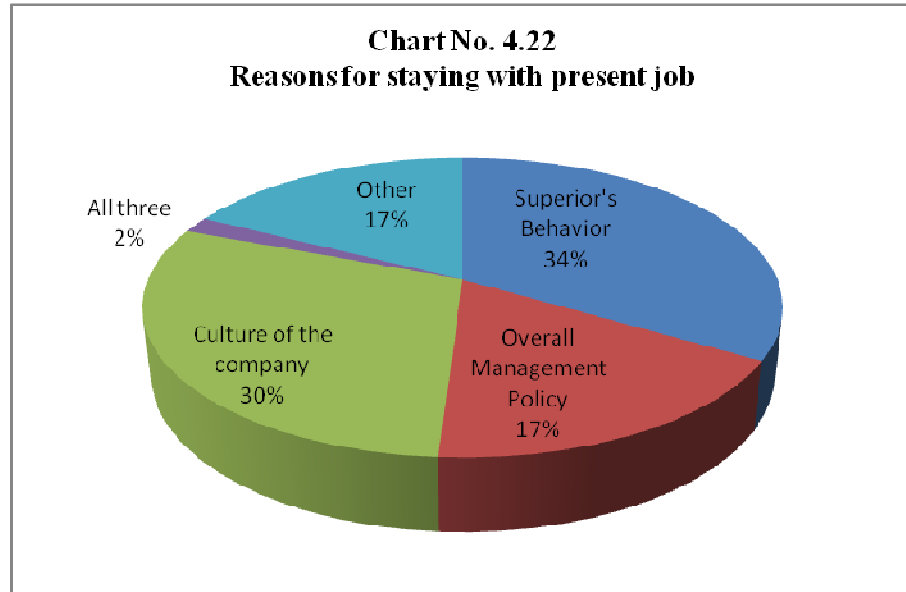
Table No. 4.22

Commitment of the employees for the present company and the reasons for this commitment

S.N.	Commitment of respondents to the present Job	Reasons for staying with Present Job					Grand Total
		Superior's Behavior	Overall Management Policy	Culture of the company	All three	Other	
I	II	III	IV	V	VI	VII	VIII
1	Less than one Year	2.01%	0.57%	1.15%	0.00%	2.29%	6.02%
2	One to Three Years	2.01%	7.45%	4.01%	0.00%	3.44%	16.91%
3	Three to Five years	6.30%	0.29%	3.44%	0.00%	0.57%	10.60%
4	Looking for lifetime	23.21%	9.17%	21.20%	1.72%	11.17%	66.48%
5	Grand Total	33.52%	17.48%	29.80%	1.72%	17.48%	100.00%

Source: Field Investigation

Chart No. 4.22
Reasons for staying with present job



It would be seen that, basically, three sets of factors are involved in accounting for the continuance of the workers with the company. The first set of factor relates to the behavior of superiors and this has accounted for a little over one third (33.52 per cent) of the retained workers. The culture of the present workplace has also played a very significant role in retaining the workers (29.80 per cent) while, the role of overall management policy has been appreciated by 17.48 per cent of workers as a reason for continuing with the job in the present workplace. Thus it will be seen that these three factors taken together make for a little over 80 per cent (80.8 per cent) of the reasons as to why the workers like to continue with the present assignment.

PART-III

As has been mentioned earlier, in this part the perceptions and views of the workers have been elicited. For this purpose this part has been divided into various sections, such as in *Section-(E)* the expectation of the workers and their views regarding the organization / management / decision makers in the company have been studied. In *Section-(F)* the job satisfaction and levels of organizational commitment have been emphasized. In *Section-(G)* details regarding the job embeddedness have been obtained but have been analyzed in chapter-7 while the details regarding the team work of workers at various levels and of various categories of present workplace have been considered in this section. In *Section-(H)*, the perceptions of employees in respect of the behavior of their supervisors have been detailed. In *Section-(I)* attention has been focused on the attitude of employees in respect of various aspects relating to the work culture. Each one of these parts and sections has been further subdivided into various subsections in consideration of the data obtained during the course of field investigation.

Section-(E) Employee Expectations and Needs

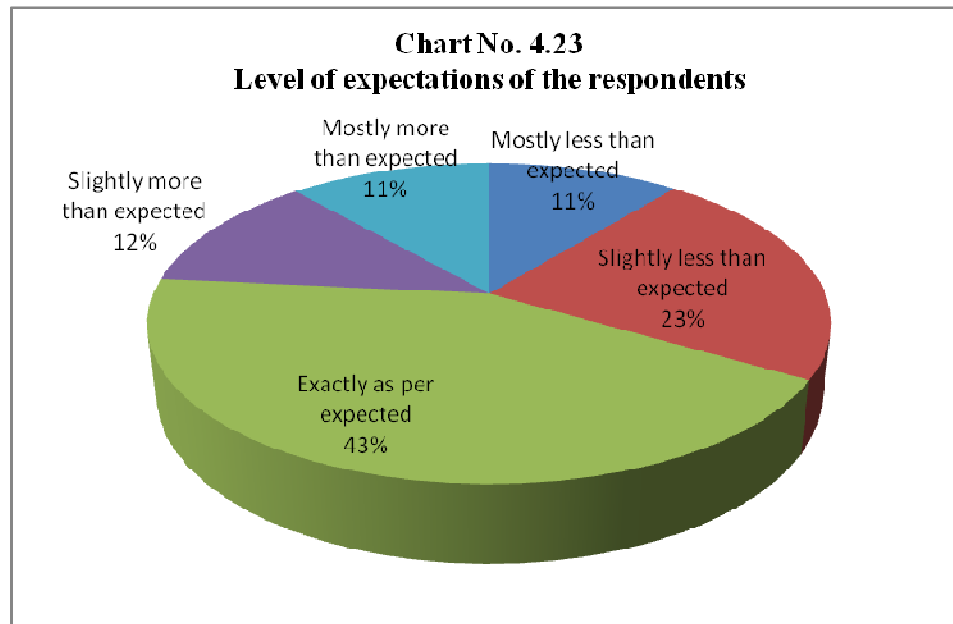
A significant factor which can influence the attrition phenomena and impact the attrition rate can be the level of expectations which would naturally raise sky high in any organization. But, if these expectations are required to be quantified then a set of parameters would have to be considered and the responses obtained could be placed on a five point scale.

The factors in respect of which the responses were sought have been identified as (a) adequate trainings; (b) a fair treatment of respect; (c) a clear communication as to what is expected; (d) tolerable and safe working conditions; (e) reasonable work load; (f) fair wages and other benefits; (g) opportunity to make suggestions for considerations; (h) fair evaluation and credit for work done; and (i) reasonable opportunity to use skill, knowledge and experience. These responses have been quantified and presented in *Table No. 4.23* illustrated by *Pie Diagram 4.23*.

Table No. 4.23
The level of expectations of the respondents

S.N.	Factors of expectations	Level of expectation					Grand Total
		Mostly less than expected	Slightly less than expected	Exactly as per expected	Slightly more than expected	Mostly more than expected	
I	II	III	IV	V	VI	VII	VIII
(a)	Receive adequate training	11.46%	27.79%	45.56%	9.74%	5.44%	100.00%
(b)	Be treated fairly and with respect	10.03%	20.34%	48.14%	14.90%	6.59%	100.00%
(c)	Be told what is expected of us as workers	2.58%	30.09%	47.56%	3.15%	16.62%	100.00%
(d)	Have tolerable & safe working conditions	5.73%	15.47%	51.00%	19.48%	8.31%	100.00%
(e)	Have a reasonable workload	9.46%	21.20%	36.39%	9.17%	23.78%	100.00%
(f)	Receive fair wages & benefit	25.21%	23.50%	37.82%	5.73%	7.74%	100.00%
(g)	Be given the opportunity to make suggestions & consider it	15.76%	21.78%	40.11%	14.90%	7.45%	100.00%
(h)	Have our work fairly evaluated & to be given credit for it	15.76%	31.81%	35.82%	11.75%	4.87%	100.00%
(i)	have a reasonable opportunity to use our knowledge, skills, training or experiences	1.72%	11.46%	45.27%	19.48%	22.06%	100.00%
	Total	10.86%	22.60%	43.07%	12.03%	11.43%	100.00%

Source: Field Investigation



In regard to the workers in present workplace the level of satisfaction has been made exactly as perceived in case of 43.07 per cent of the workers while it was slightly more than expected in case of 12.03 per cent of workers. In case of 11.43 per cent of the workers the level of expectation was more than expected. These three categories taken together accounted for 66.13 per cent of the workers. The satisfaction level in case of 21.60 per cent of the workers was slightly less than expected, thus these four categories taken together account for over 88 per cent of the respondents while the balance of around 10 per cent is made up of workers whose expectations was mostly less than the expectation levels. These percentages, naturally, have been different for each of categories listed above. However, the point to be noted and emphasized is that a very substantial proportion of workforce in present workplace finds that their expectation level are fully met and even more fully met.

This is a very significant factor which would bring about in a minimal level of occurrence in attrition phenomena and would considerably reduce the attrition rate.

Section-(F) Overall Job Satisfaction:

The details in regard to overall job satisfaction have been obtained during the course of field investigation and have been quantified and presented in **Table No. 4.24.**

The **Table No. 4.24** quantified picture of the comparative analysis of the satisfaction level of respondents in regard to the present assignment and their previous jobs, has been offered. This analysis is for a variety of categories of workers such as; (a) engineer/ Jr. manager; (b) machinist; (c) middle manager; (d) Sr. manager; (e) supervisor; (f) any other.

Table No. 4.24
Showing comparative analysis of the satisfaction level of respondents regarding present and previous Job

S. N.	Designation	Average level of job satisfaction		Deviation	Index
		Present Work Place	Previous work place		
I	II	III	IV	V	VI
(a)	Engineer / Jr. Manager	3.49	3.70	-0.21	5
(b)	Machinist	3.79	3.28	0.50	1
(c)	Middle Manager	3.68	3.82	-0.14	6
(d)	Sr. Manager	3.00	3.40	-0.40	4
(e)	Supervisor	3.65	3.17	0.47	2
(f)	Any Other	4.12	3.66	0.46	3
	Grand Total	3.76	3.35	0.41	

Source: Field Investigation

A very interesting picture appears to emerge on the quantified data it would be seen that the superior level staff of the category of engineer / Jr. Engineer, middle manager and Sr. manager does not appear to be satisfied with their present assignment in relation to the previous jobs. This inference appears to go counter to the observations made earlier. Although, it must be emphasized that the senior category of respondents at present workplace in accordance with the present quantification details of the average job satisfaction level do not appear to be as comfortable as they were in the previous jobs. On an overall basis, however, the level of satisfaction in present workplace appears to be indicating a higher level of satisfaction than the previous jobs. This is probably because of the fact that a very substantial number of respondents in present workplace belong to the category of machinist who appears to be supremely satisfied with their present assignment. The large per cent of this category of the workers seems to affect the grand total average of job satisfaction.

Section-(G) Team work

In the questionnaire Section-(G) encompasses details regarding team work and the level of embeddedness of the workers in the present workplace for the purposes of a better understanding of the issues the quantifying details of embeddedness have been undertaken in Chapter-7 relating to concluding observations. Therefore, in the present section several aspects of team work only have been quantified on the basis of information collected during the field investigation and have been presented in 6 tables.

The work culture and work environment will involve a team work; this will be relevant not only in the category of workers and various levels but a kind of interrelation between the various categories of workers.

In all the industrial establishments engaged in manufacturing activity the workers in variably constituted team comprising of several workers depending up on the production process which they are handling. And it is rightly believed that the team spirit and cohesion with which the workers operate would ultimately determine the efficiency level of the workers. It is naturally to be believed that such teams of the workers would vary as between various categories of workers in the same organization as also as between the different organizations. An attempt has been made to ascertain whether such team formations exist in present workplace and whether they existed in the previous companies from which the workers are drawn. Without going into the details of the relevant data obtained on the basis of field investigation in *Table No. 4.25*, it will be clearly seen that the workers formed themselves into the team had all categories of workers and that the percentage proportion of the workers in each categories of the workforce happens to be different in present workplace as also in the companies representing as previous workplace.

Table No. 4.25

Distribution of respondents according to the status of having team members at work place

S.N.	Designation	Do you have team members?					
		At Present Workplace			At Previous Workplace		
		No	Yes	Grand Total	No	Yes	Grand Total
I	II	III	IV	V	VI	VII	VIII
(a)	Engineer / Jr. Manager	2.78%	4.37%	7.14%	2.38%	4.76%	7.14%
(b)	Machinist	33.73%	44.84%	78.57%	23.02%	55.56%	78.57%
(c)	Middle Manager	0.79%	2.38%	3.17%	0.79%	2.38%	3.17%
(d)	Sr. Manager	0.00%	1.98%	1.98%	0.00%	1.98%	1.98%
(e)	Supervisor	1.59%	1.98%	3.57%	0.40%	3.17%	3.57%
(f)	Any Other	1.98%	3.57%	5.56%	1.19%	4.37%	5.56%
	Grand Total	40.87%	59.13%	100.00%	27.78%	72.22%	100.00%

Source: Field Investigation

It is quite natural therefore to expect a sense of helplessness among the workers who continue in the job as and when some of the workers constituting the teams chose to quit their assignment, for whatever reasons. On the basis of responses received and presented in *Table No. 4.26*, this aspect of helplessness perceived and experienced by the workers of present workplace at various categories has been quantified and presented. Without going into the details of each one of the categories, it would be clearly seen, that the degree of helplessness experienced by the respondents at present workplace. Such a mobility of workers as quantified in table no. 4.26 would naturally lead to an adverse impact on the team work and would presumably hampered the efficiency level of workers, thereby, escalating the cost of production.

Table No. 4.26

Opinion about feeling helpless when team member leave the job

S.N.	Designation	Feeling helpless			
		Yes	No	*N/A	Grand Total
I	II	III	IV	V	VI
(a)	Engineer / Jr. Manager	76.19%	23.81%	0.00%	100.00%
(b)	Machinist	64.16%	23.30%	12.54%	100.00%
(c)	Middle Manager	45.45%	36.36%	18.18%	100.00%

S.N.	Designation	Feeling helpless			
		Yes	No	*N/A	Grand Total
I	II	III	IV	V	VI
(d)	Sr. Manager	42.86%	57.14%	0.00%	100.00%
(e)	Supervisor	66.67%	25.00%	8.33%	100.00%
(f)	Any Other	89.47%	10.53%	0.00%	100.00%
	Grand Total	65.33%	23.78%	10.89%	100.00%

* Employees responded that they don't have team members

Source: Field Investigation

It has to be realized that it is not enough to project a mere feeling of helplessness as brought out in a previous paragraph, but it is necessary to appreciate the extent of damage that it will entail on the levels of productivity of the remaining workers of the team which experiences the outflow of workers. The responses in this regards have been obtained from the respondents and the quantified statement has been presented in *Table No. 4.27*.

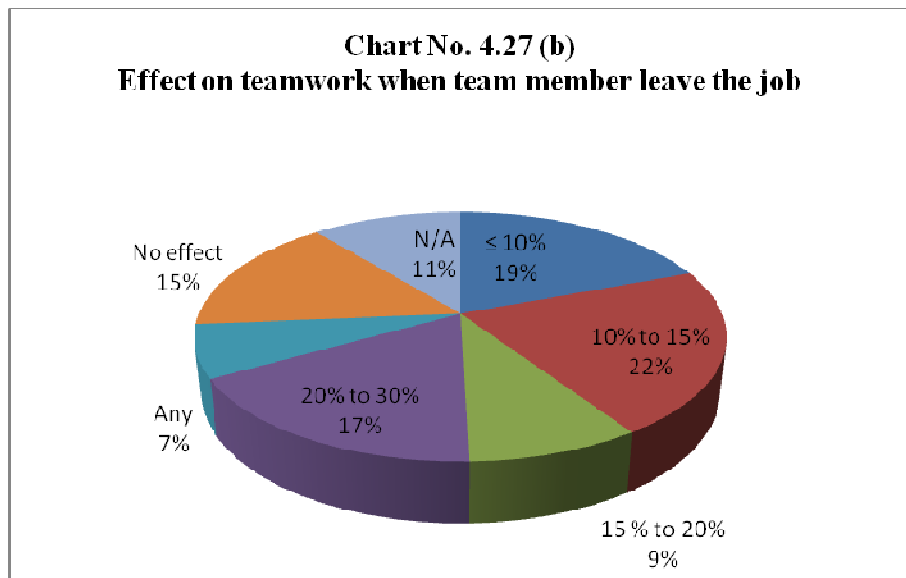
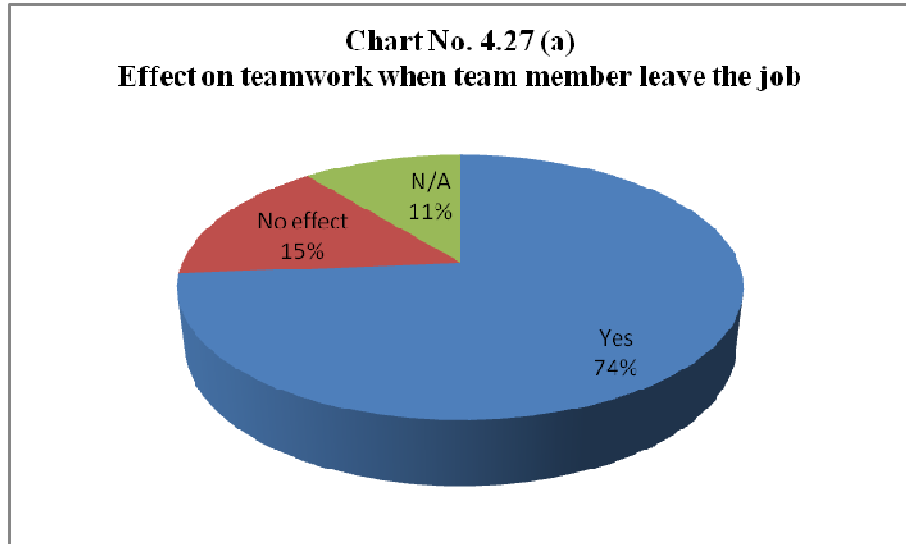
Table No. 4.27

Showing extent of adverse effect on teamwork when team member leave the job

S.N.	Designation	Do you feel any effect on Teamwork and extent in per cent								
		YES, to the below mentioned extent						No Effect	*N/A	Grand Total
		<10%	10% to 15%	15% to 20%	20% to 30%	Any	Total	Total		
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
(a)	Engineer / Jr. Manager	9.52	19.05	33.33	33.33	0.00	95.24	4.76	0.00	100.00
(b)	Machinist	19.71	19.71	7.17	18.28	8.60	73.48	13.98	12.54	100.00
(c)	Middle Manager	9.09	18.18	9.09	0.00	0.00	36.36	45.45	18.18	100.00
(d)	Sr. Manager	0.00	0.00	14.29	14.29	0.00	28.57	71.43	0.00	100.00
(e)	Supervisor	16.67	41.67	16.67	0.00	0.00	75.00	16.67	8.33	100.00
(f)	Any Other	36.84	47.37	0.00	5.26	0.00	89.47	10.53	0.00	100.00
	Grand Total	19.20	21.49	8.88	17.19	6.88	73.64	15.47	10.89	100.00

* Works independently hence doesn't belongs to any team

Source: Field Investigation



It will be seen that the respondents who were left back, did experience a loss of efficiency level of various orders ranging between 10 per cent and 30 per cent in all the categories of workforce. It may be seen also there has been a section of workforce which has been assigned a task to be performed at the individual level and hence the association of such a category of workforce with any specific team does not arise. And hence, the observations made of loss of efficiency due to the outflow of workers do not appear to be relevant in this category of workers. All these details have been appropriately illustrated by *Pie Diagrams in 4.27*.

It is clearly seen therefore that, adherence of the workforce to the company where they are operating would certainly reduce the magnitude of the attrition

phenomena and considerably bring down the attrition rate. The industrial establishments, however, will do their best to recruit new members of the workforce in places of workers who were left the job. But, these newly recruited workers would require quite some time to get adjusted with the work culture of the present workplace. A certain quantum of time would naturally be required for bringing about the tuning of the new recruited members with the old ones. This aspect has been sought to be quantified on the basis of responses received in *Table No. 4.28* and illustrated in the *Pie Diagram 4.28*.

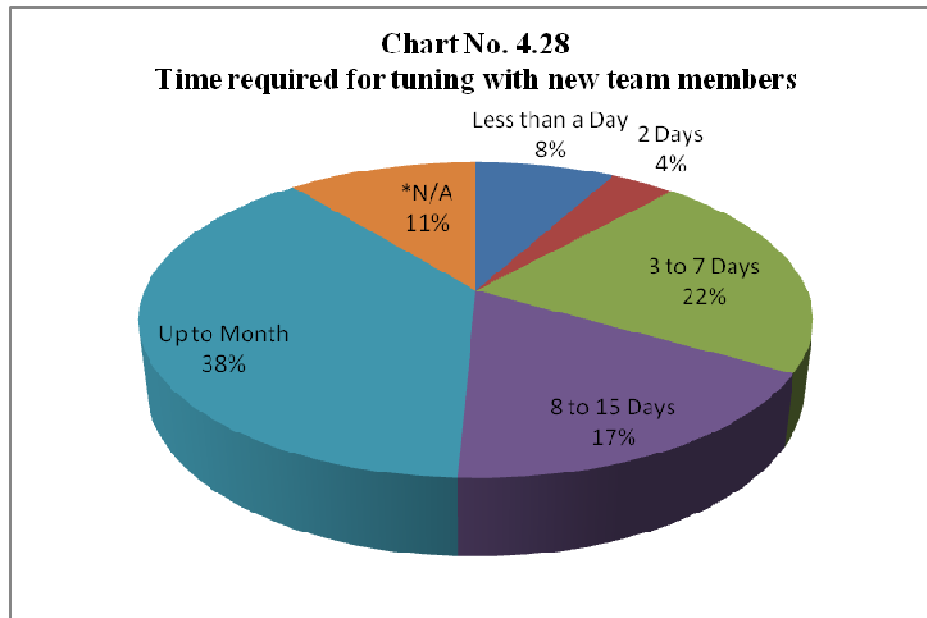
Table No. 4.28
Showing time required for tuning with new team members

S.N.	Designation	Less than a Day	2 Days	3 to 7 Days	8 to 15 Days	Up to Month	*N/A	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX
(a)	Engineer / Jr. Manager	14.29%	14.29%	19.05%	14.29%	38.10%	0.00%	100.00%
(b)	Machinist	6.81%	2.51%	24.37%	17.92%	35.84%	12.54%	100.00%
(c)	Middle Manager	9.09%	0.00%	0.00%	36.36%	36.36%	18.18%	100.00%
(d)	Sr. Manager	0.00%	0.00%	42.86%	0.00%	57.14%	0.00%	100.00%
(e)	Supervisor	25.00%	8.33%	0.00%	8.33%	50.00%	8.33%	100.00%
(f)	Any Other	10.53%	10.53%	0.00%	15.79%	63.16%	0.00%	100.00%
	Grand Total	8.02%	3.72%	21.49%	17.48%	38.40%	10.89%	100.00%

* Works independently hence doesn't belong to any team

Source: Field Investigation

It will be clearly seen that after all it is the human element in production which will require adjustment, which has to come forth both from new workers coming in and the existing old members of the workforce. This adjustment process, as punctuated against time dimensions has been quantified on the basis of responses obtained for all the categories of workers in table no. 4.28 and appropriately illustrated in *Pie Diagram no. 4.28*.



It would be clearly seen that in all the categories of workforce the new constitution of team of workers has been taking time ranging between one-day and even extending up to one month. Quite naturally, this time dimension required for adjustment and tuning has been different for the several categories of workers. It may be mentioned that the longer the time that is taken for bringing about the tuning, higher will be the inefficiency level for that duration. As will be seen this is the impact of the phenomenon of attrition and its effect on attrition rate which can be suitably handled by the management by chalking out appropriate policy of training and induction programs.

An attempt has been made to quantify the productivity losses arising out of the outflow of the workers from present workplace and inflow of their replacements. The details in this regards have been obtained from the respondents and quantified in the *Table No. 4.29* and appropriately illustrated in the *Pie Diagram 4.29*.

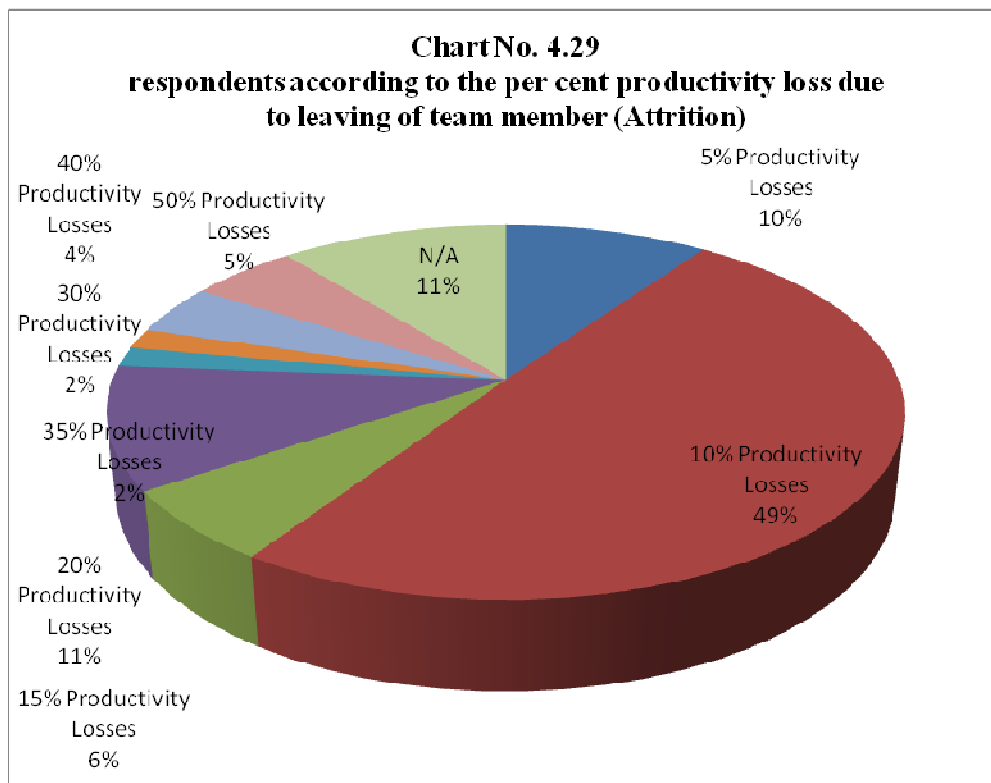
Table No. 4.29

Distribution of respondents according to the per cent productivity loss due to leaving of team member (Attrition)

S.N.	Designation	Productivity Losses									Grand Total
		5%	10%	15%	20%	30%	35%	40%	50%	*N/A	
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
(a)	Engineer / Jr. Manager	4.76	33.33	9.52	28.57	0.00	0.00	9.52	14.29	0.00	100.00

S.N.	Designation	Productivity Losses									Grand Total
		5%	10%	15%	20%	30%	35%	40%	50%	*N/A	
(b)	Machinist	8.96	49.10	6.45	9.68	2.15	2.15	4.66	4.30	12.54	100.00
(c)	Middle Manager	27.27	36.36	9.09	9.09	0.00	0.00	0.00	0.00	18.18	100.00
(d)	Sr. Manager	0.00	85.71	0.00	14.29	0.00	0.00	0.00	0.00	0.00	100.00
(e)	Supervisor	25.00	25.00	8.33	8.33	0.00	0.00	0.00	25.00	8.33	100.00
(f)	Any Other	10.53	84.21	0.00	5.26	0.00	0.00	0.00	0.00	0.00	100.00
	Grand Total	9.74	49.57	6.30	10.60	1.72	1.72	4.30	5.16	10.89	100.00

* Works independently hence doesn't belongs to any team
Source: Field Investigation



It will be seen that the productivity losses have been accruing in respect of all the categories of workforce and losses have ranged from 5 per cent to 50 per cent. In this situation also a category of workers which has been assigned independent responsibilities are not required to form any teams and such these observations do not hold valid in this category.

It has to appreciate that the attrition phenomena, quite apart from the fact that it would lead to efficiency losses as brought out and suggested earlier, would have

psychological connotations as well. This psychological impact on the workforce has been obtained from the respondents on a five point scale in respect of several parameters such as (a) feeling of nervousness and sadness; (b) feeling of loneliness; (c) feeling of helplessness; (d) feelings of insecure work conditions; (e) feelings of lack of motivation; (f) feelings of lack of guidance; (g) feeling of stressfulness; (h) feelings of lack of confidence; (i) feeling of happiness; (j) opportunity to rise in a cadre; and (k) cumulative effect on performance. The responses in respect of all the above parameters have been obtained and quantified and presented in **Table No. 4.30** on a five point scale.

Table No. 4.30

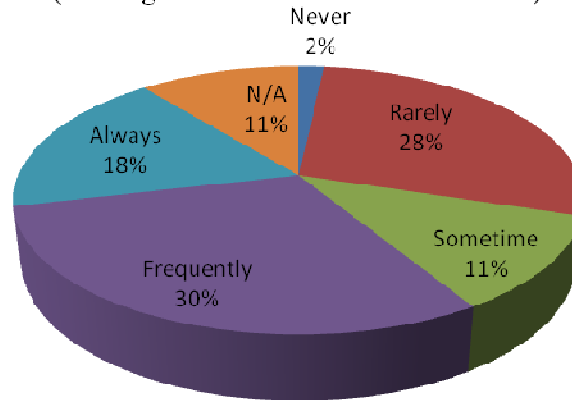
Psychological impact of attrition on team members

S.N.	Psychological factors	Magnitude of impact (Per cent of Respondents)					N/A	Grand Total
		Never	Rarely	Sometime	Frequently	Always		
I	II	III	IV	V	VI	VII	VIII	IX
(a)	Feelings of Nervousness and Sadness	1.72%	28.08%	11.46%	30.09%	17.77%	10.89%	100.00%
(b)	Feelings of Loneliness	17.48%	4.58%	28.65%	28.65%	9.74%	10.89%	100.00%
(c)	Feelings of Helplessness	19.77%	22.64%	21.78%	18.62%	6.30%	10.89%	100.00%
(d)	Feelings of insecure	32.09%	20.92%	9.46%	22.92%	3.72%	10.89%	100.00%
(e)	Feelings of lack of motivation	35.24%	26.93%	17.48%	3.72%	5.73%	10.89%	100.00%
(f)	Feelings of lack of guidance	18.34%	18.05%	21.49%	8.02%	23.21%	10.89%	100.00%
(g)	Feeling stressfulness	22.06%	21.20%	20.92%	9.17%	15.76%	10.89%	100.00%
(h)	Feelings of lack of confidence	25.21%	25.79%	28.37%	3.44%	6.30%	10.89%	100.00%
(i)	Feeling of happiness	58.45%	12.61%	8.31%	1.72%	8.02%	10.89%	100.00%
(j)	Opportunity to rise in cadre	17.19%	16.62%	28.37%	2.58%	24.36%	10.89%	100.00%
(k)	Cumulative effect on performance levels	23.21%	22.92%	22.35%	17.77%	2.87%	10.89%	100.00%

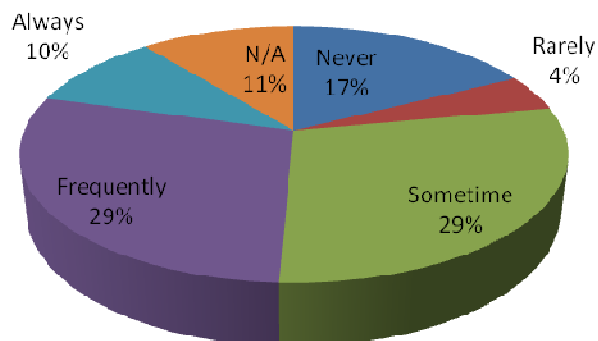
* Works independently hence doesn't belongs to any team

Source: Field Investigation

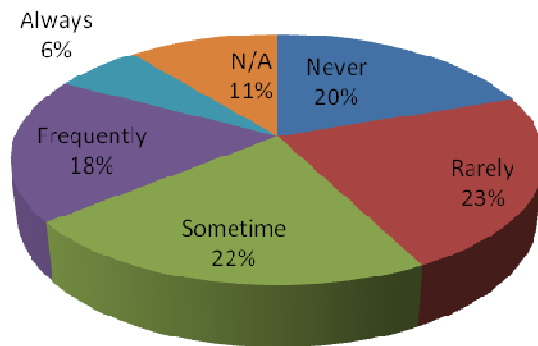
ChartNo. 30 (a)
Psychological impact of attrition on team members
(Feelings of Nervousness and Sadness)



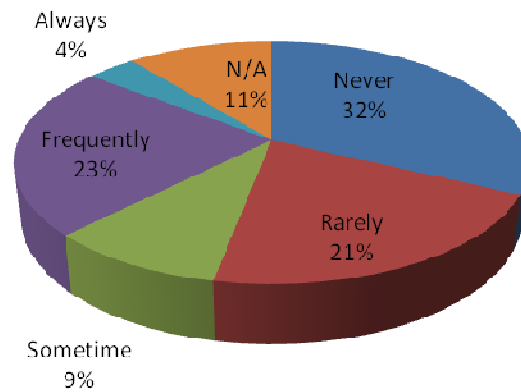
ChartNo. 30 (b)
Psychological impact of attrition on team members
(Feelings of Loneliness)



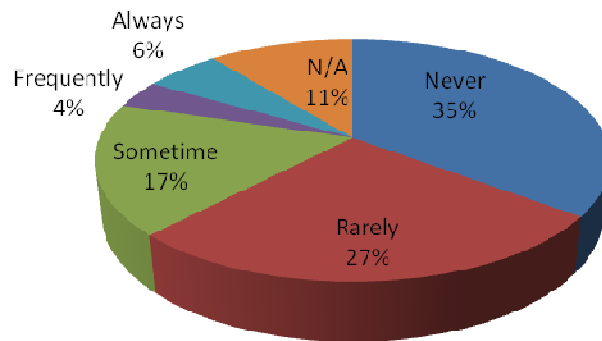
ChartNo. 30 (c)
Psychological impact of attrition on team members
(Feelings of Helplessness)



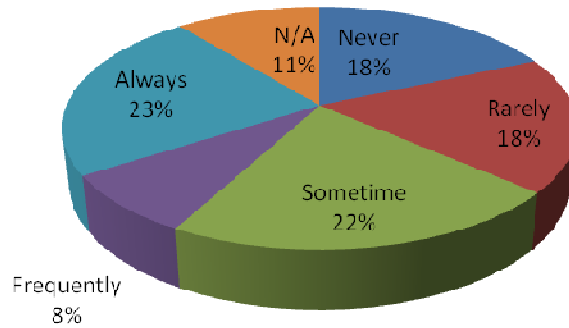
ChartNo. 30 (d)
Psychological impact of attrition on team members
(Feelings of insecure)



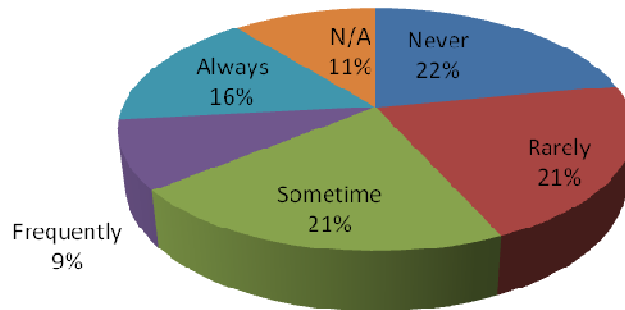
ChartNo. 30 (e)
Psychological impact of attrition on team members
(Feelings of lack of unmotivation)



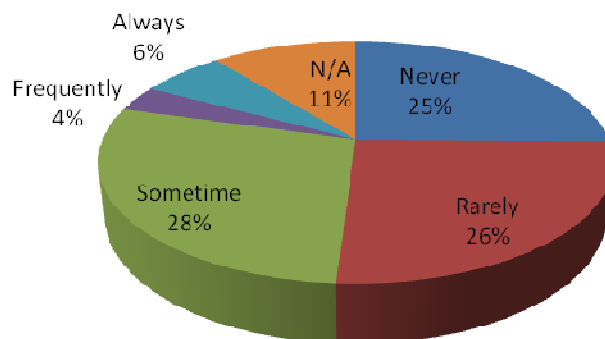
ChartNo. 30 (f)
Psychological impact of attrition on team members
(Feelings of lack of guidance)



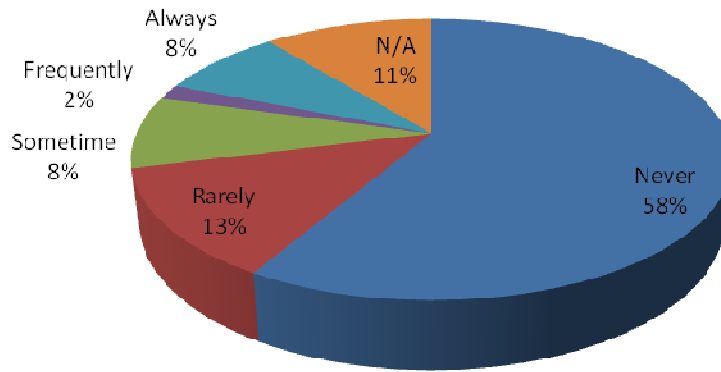
ChartNo. 30 (g)
Psychological impact of attrition on team members
(Feeling stressfulness)



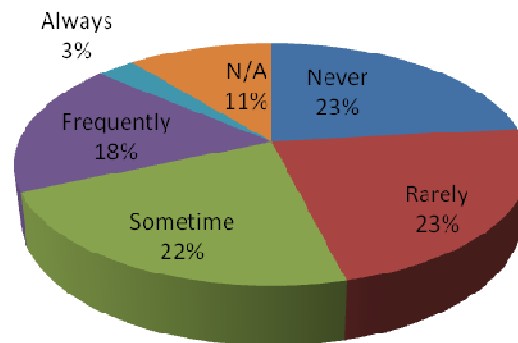
ChartNo. 30 (h)
Psychological impact of attrition on team members
(Feelings of lack of confidence)



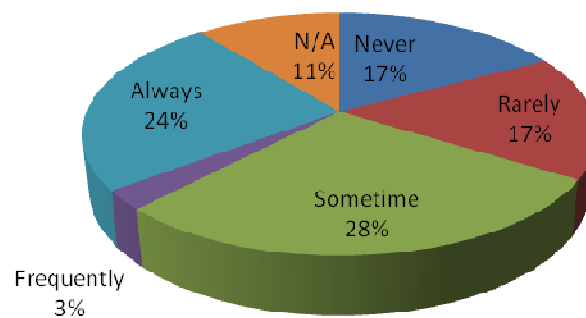
ChartNo. 30 (i)
Psychological impact of attrition on team members
(Feeling of happiness)



ChartNo. 30 (k)
Psychological impact of attrition on team members
(Cumulative effect on performance levels)



ChartNo. 30 (j)
Psychological impact of attrition on team members
(Opportunity to rise in cadre)



It is to be expected that the magnitude of the impact of each one of these parameters has been understandably different. This has been appropriately illustrated with the help of appropriate pie diagram for each one of the listed parameters to bring home the point.

Section-(H) Employee Relations with Superiors

In this section an attempt has been made to quantify several aspects embodying the relationship of workers with their superiors.

One of the very significant factors which can cause the attrition phenomena to occur may be considered to be the relationship of the supervisory staff in present workplace and compared it with that in the previous companies. This relationship has been sought to be quantified on a five point scale with the help of several parameters such as; (a) boss maintaining high standard of performance; (b) boss dealings in a fair manner with every one; (c) communication of true impressions by the workers to the boss; (d) serious mistakes freely reported to the boss and his help sought; (e) backing received from the boss by the subordinates; (f) supervisors positive role in building team work; and (g) boss opens to constructive criticism from subordinates. The total score in case of each one of the parameter have been averaged out and rated as 'x' in the present job while the same rating with respect of previous job has been 'y'. The average deviations: ('x'-'y') have been worked out and on that basis an index of deviations have been ranked in respect of present jobs and previous job. All these quantified details have been presented in *Table No. 4.31*.

Table No. 4.31

**Comparative analysis of supervisory relationship between both the workplaces
(Present and Previous)**

S.N.	Factors	Present Job		Previous Job		Deviation of Averages	
		Total Score	Average Score (x)	Total Score	Average Score (y)	(x-y)	Index of Deviation
I	II	III	IV	V	VI	VII	VIII
(a)	Boss maintains high standards of performance	936	3.7143	757	3.0040	0.7103	1
(b)	Boss deals fairly with everyone	832	3.3016	699	2.7738	0.5278	2

S.N.	Factors	Present Job		Previous Job		Deviation of Averages	
		Total Score	Average Score (x)	Total Score	Average Score (y)	(x-y)	Index of Deviation
I	II	III	IV	V	VI	VII	VIII
(c)	Honestly tell my boss is like what I really think	934	3.7063	813	3.2782	0.4281	3
(d)	When make serious mistake, I am not reluctant to go to my boss for help	1050	4.1667	953	3.7817	0.3849	4
(e)	My boss sands up for his subordinates	885	3.5119	820	3.2540	0.2579	5
(f)	Supervisor does good job of building teamwork in his group	972	3.8571	949	3.7659	0.0913	6
(g)	Boss accepts constructive criticism from his Subordinates	831	3.2976	830	3.2937	0.0040	7

Source: Field Investigation

It will be seen that the average scores 'x' on all parameters listed has been rated at a higher value in the present workplace jobs than in the previous workplace jobs. This would clearly indicate that the respondents have displayed a strong sense of superiority in respect of work culture of present workplace in comparison to the situation prevalent to the previous job. This would further indicate that the workers having got into the present workplace are not likely to move out of it and look around for fresh jobs. This would naturally have an impact on attrition phenomena and brings about a considerable reduction in the attrition rate.

Section-(I) Attitude of Employees

It must be pointed out that attitude is a very highly sophisticated psychological phenomena, the quantification of which is very difficult. Nevertheless, in the present study an attempt has been to quantify it on the basis of the information obtained during the field investigation. This information is in respect of the present job and the previous job of a worker. The related quantified information on this score has been presented in 4 tables.

In practically, all the situations, the attitude of workers always plays a significant role in the occurrence or otherwise of the attrition phenomena and also plays a strong role in the quantification of the attrition rate. An attempt has been made to bring about a comparative analysis of the attitude of the respondents in respect of their present jobs and compared it with that of previous workplaces. This attitude has been attempted to be quantified on a five point scale with the help of responses sought in regard to forth statements; (a) I am less productive than I am used to be; (b) my work group is very productive; (c) my working group puts all of their efforts into their job; and (d) my pay depends mostly up on how well I do my job.

The quantified responses have been presented in *Table No. 4.32* and illustrated suitably for each one of the statements in *Pie Diagrams 4.32 (a) to (d)* for responses in the present workplaces and those in the previous workplaces. It will be seen that, the quantified responses in respect of all the four statements for the present jobs appear to be more positive and clearly indicate that once the workers joined the present assignment, he would not be inclined to leave his assignment thereby reducing the attrition rate.

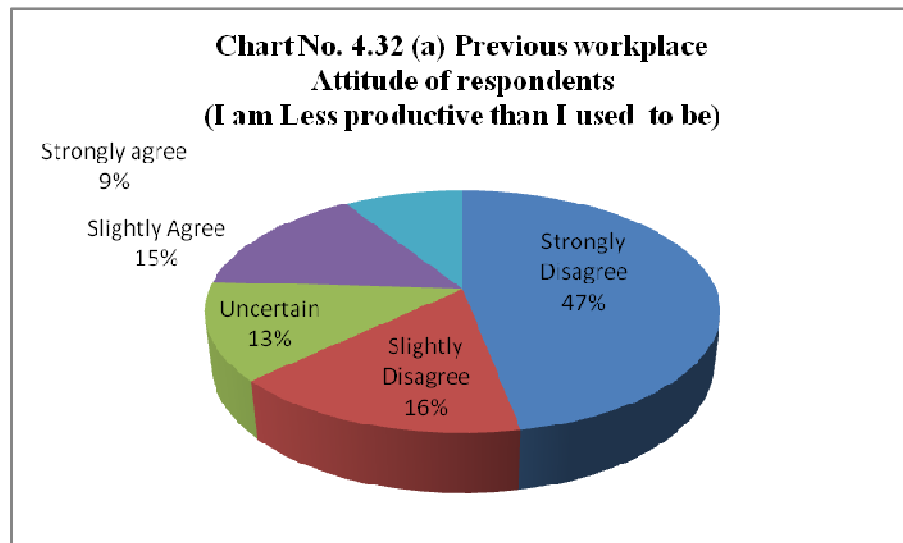
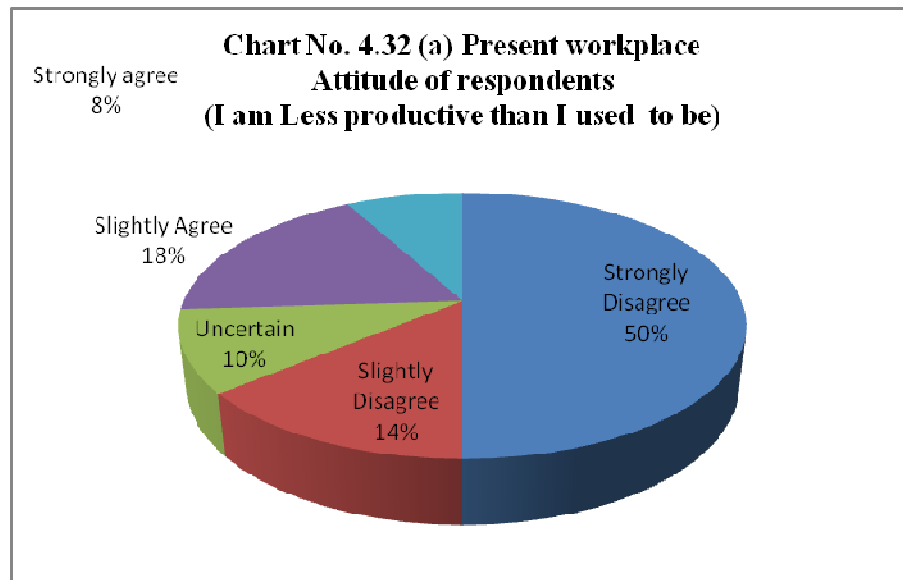
Table No. 4.32
Comparative analysis of attitude of respondents between both the workplaces
(Present and Previous)

S. N.	Statement s	Attitude of respondents (Per cent of respondents)											
		Present workplace						Previous workplace					
		*1	*2	*3	*4	*5	Total	*1	*2	*3	*4	*5	Total
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
(a)	I am Less productive than I used to be	50	14	10	18	8	100	47	16	13	15	9	100
(b)	My work group is very productive	3	6	11	24	55	100	13	13	20	12	42	100
(c)	My working group puts all of their efforts into their job	7	10	6	38	40	100	7	14	6	40	33	100

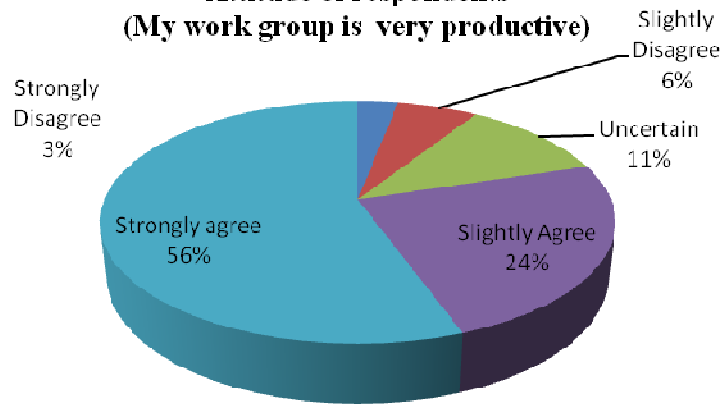
S. N.	Statement	Attitude of respondents (Per cent of respondents)											
		Present workplace						Previous workplace					
		*1	*2	*3	*4	*5	Total	*1	*2	*3	*4	*5	Total
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
(d)	My pay depends mostly upon how well I do my job	12	6	15	22	45	100	7	19	27	17	29	100

*1= Strongly Disagree, *2=Slightly Disagree, *3=Uncertain, *4=Slightly Agree, *5=Strongly Agree

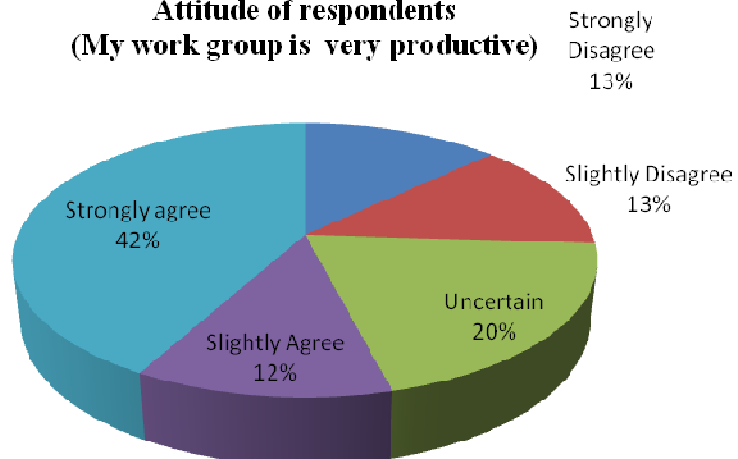
Source: Field Investigation



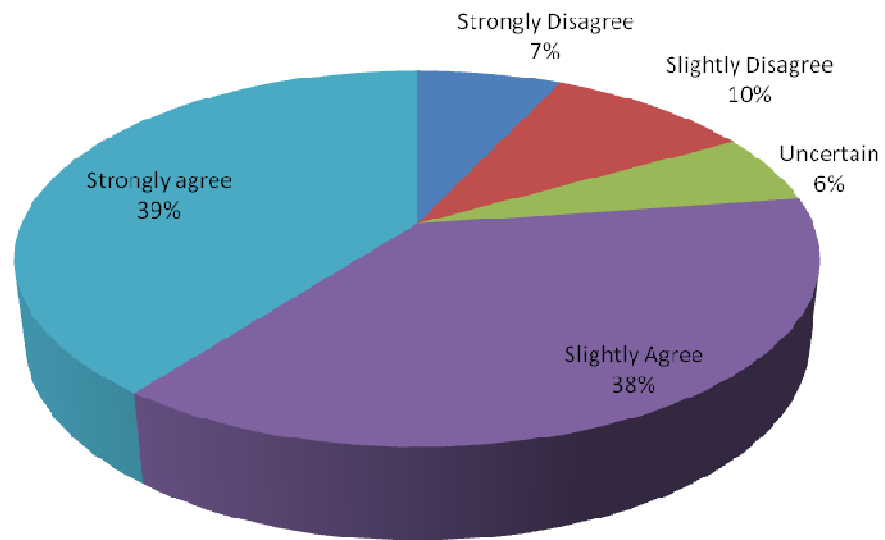
**Chart No. 4.32 (b) Present workplace
Attitude of respondents
(My work group is very productive)**



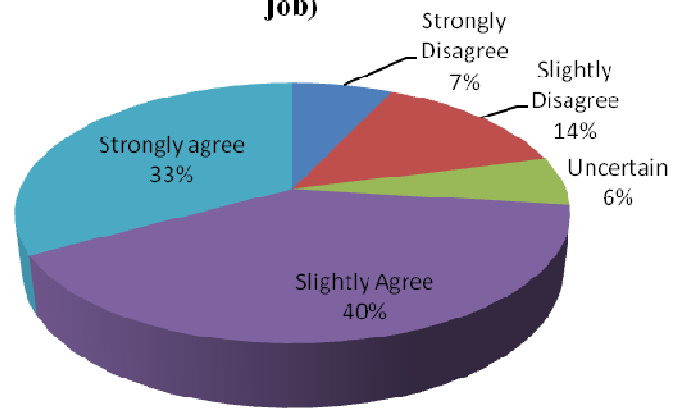
**Chart No. 4.32 (b) Previous workplace
Attitude of respondents
(My work group is very productive)**

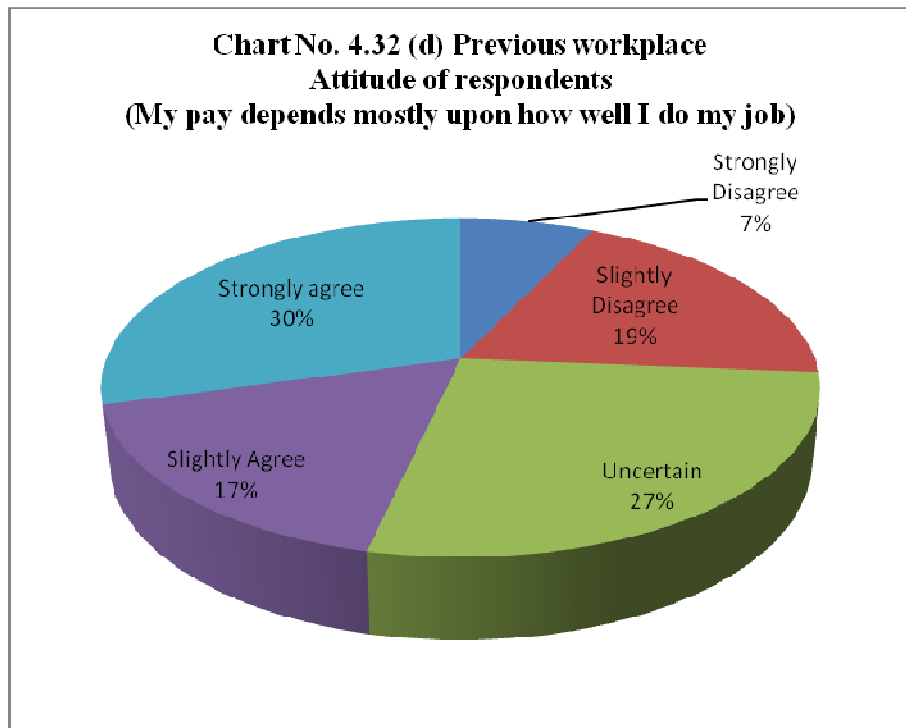
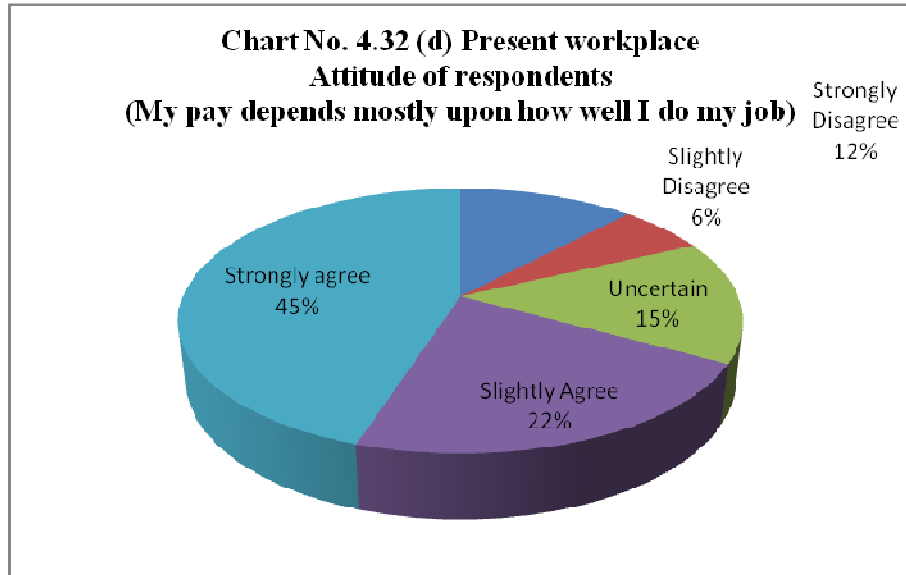


**Chart No. 4.32 (c) Present workplace
Attitude of respondents
(My working group puts all of their efforts into their job)**



**Chart No. 4.32 (c) Previous workplace
Attitude of respondents
(My working group puts all of their efforts into their job)**





It is quite possible to identify several factors which will bring about improvement in the productivity levels of the respondents. For the purposes of present study, these factors have been identified as; (a) better planning; (b) more cooperation from other areas of department; (c) more authority; (d) clear responsibilities; (e) other factors; (f) additional manpower; (g) improved supervisory relations; (h) changes in

work environment; (i) more freedom; (j) changes in supplies tools and equipments; and (k) better information. The total score in case of each one of the parameter have been averaged out and rated as 'x' in the present job while the same rating with respect of previous job has been 'y'. The average deviations: ('x'-'y') has been worked out and on that basis an index of deviations has been ranked in respect of present jobs and previous job. All these details have been presented in **Table No. 4.33**.

Table No. 4.33

Factors needs to improve respondent's productivity

S.N.	Factors	Present Job		Previous Job		Deviation (x-y)	Index
		Total	Average (x)	Total	Average (y)		
I	II	III	IV	V	VI	VII	VIII
(a)	Better planning	1051	4.1706	887	3.5198	0.6508	1
(b)	More cooperation from other areas or department	1075	4.2659	915	3.6310	0.6349	2
(c)	More authority	850	3.3730	703	2.7897	0.5833	3
(d)	Clearer responsibilities	1043	4.1389	898	3.5635	0.5754	4
(e)	Other factors	1108	4.3968	986	3.9127	0.4841	5
(f)	Additional manpower	1016	4.0317	894	3.5618	0.4700	6
(g)	Improved supervisory relations	1069	4.2421	957	3.7976	0.4444	7
(h)	Changes in work environment	937	3.7183	847	3.3611	0.3571	8
(i)	More freedom	1005	3.9881	954	3.7857	0.2024	9
(j)	Changes in supplies, tools, equipment	1106	4.3889	1056	4.1905	0.1984	10
(k)	Better information	837	3.3214	880	3.4921	-0.1706	11

Source: Field Investigation

It will be seen that, the quantified values of responses in regard to the present job have naturally varying in respect of each one of these parameters; and further that, they have been varying as between the present job and previous job. Without going into the detail quantification in regard to each one of the listed parameters, it will be clearly observed that, the positive thrust of the responses was clearly towards the present job from the position obtained in the previous job. Such a situation would definitely prevent the movement of workers from present workplace to other

institutions and would naturally considerably minimize the occurrence of the attrition phenomena and bring about a reduction in the attrition rate.

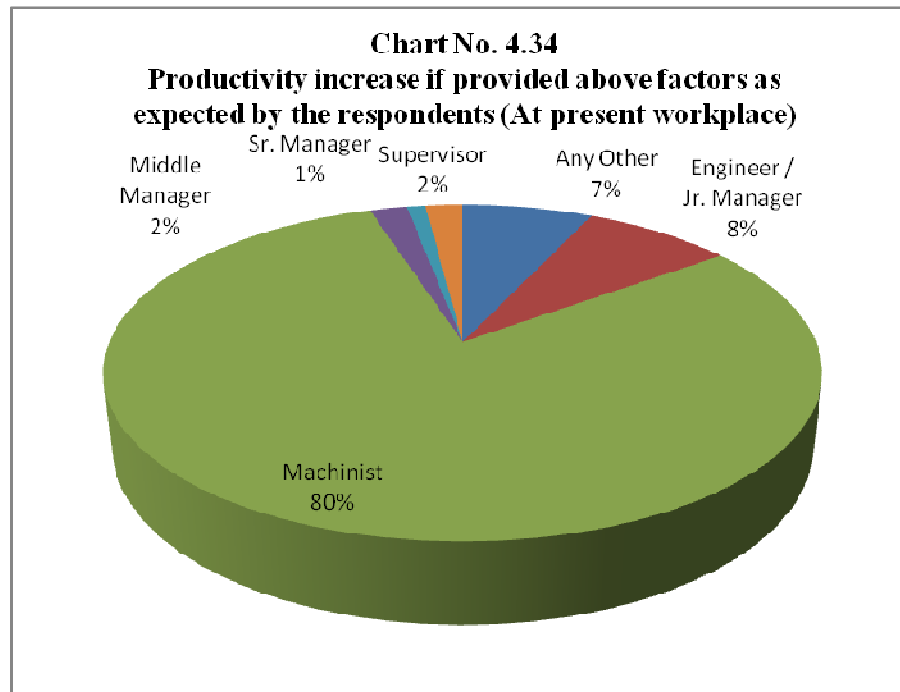
It has to be appreciated that the factors listed above accounting for the improvement or increase in the productivity levels would be different for a several categories of the workers. This aspect has got kept to be in mind and appreciated during the course of policy formation. An attempt has been made to ascertain the likely increases in the productivity levels if the above mentioned identified factors likely to improve productivity are furnished by the management. And the responses obtained in this regard for each one of the category of the workers have been presented in *Table No. 4.34*.

Table No. 4.34
Probable productivity increase if provided above factors as expected by the respondents (At present workplace)

S.N.	Per cent increase in productivity	Designation (Per cent of respondents)						Grand Total
		Any Other	Engineer / Jr. Manager	Machinist	Middle Manager	Sr. Manager	Super-visor	
I	II	III	IV	V	VI	VII	VIII	IX
1	Up to 10	0%	0%	8%	0%	0%	0%	8%
2	10 to 25	1%	0%	2%	1%	1%	0%	5%
3	25 to 50	5%	5%	39%	1%	0%	1%	51%
4	50 to 80	0%	1%	2%	0%	0%	0%	3%
5	More than 80	1%	2%	29%	0%	0%	1%	33%
6	Grand Total	7%	8%	80%	2%	1%	2%	100%

Source: Field Investigation

It will be seen the increases in the productivity levels as indicated by the respondents for various categories of workers has been understandably different. This has been also effectively illustrated by the *Pie Diagram 4.34*.



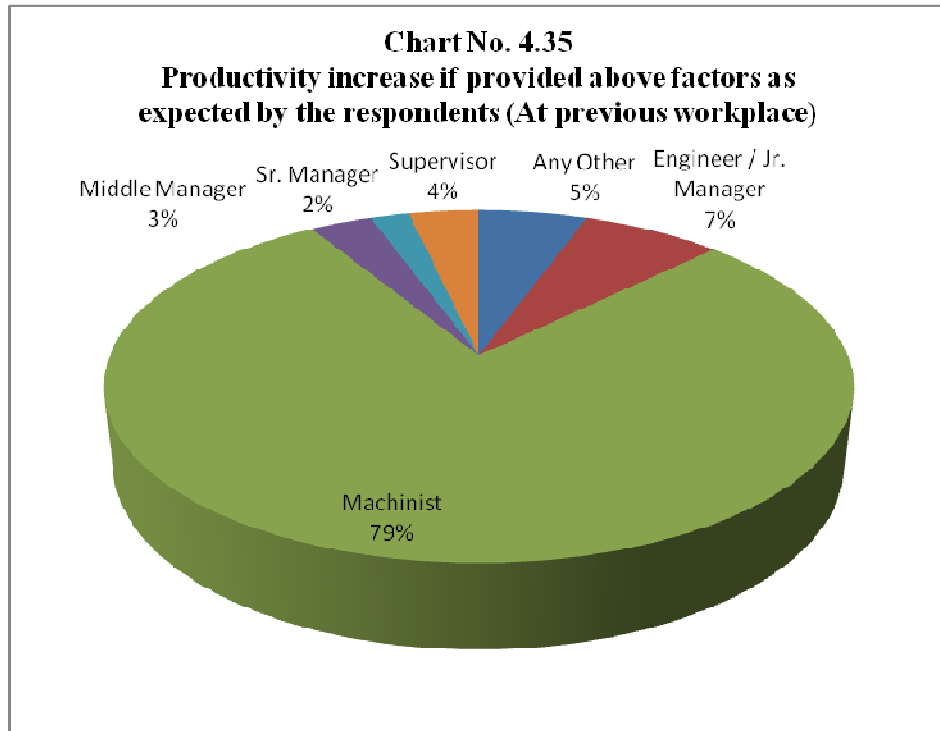
It is interesting to make a comparative study of the responses of the workers (present workplace) in regard to the probable increase in the productivity levels if the identified factors were furnished in their respected previous job environment. The quantified responses in this regards have been presented in *Table No. 4.35* and appropriately illustrated in *Pie Diagram 4.35*.

Table No. 4.35
Probable productivity increase if provided above factors as expected by the respondents (At previous workplace)

S.N.	Per cent increase in productivity	Designation (Per cent of respondents)						Grand Total
		Any Other	Engineer / Jr. Manager	Machinist	Middle Manager	Sr. Manager	Supervisor	
I	II	III	IV	V	VI	VII	VIII	IX
1	Up to 10	4.76%	1.59%	33.73%	0.40%	0.79%	0.40%	41.67%
2	10 to 25	0.00%	2.38%	5.56%	0.40%	0.00%	0.40%	8.73%
3	25 to 50	0.79%	3.17%	39.29%	1.59%	0.00%	2.78%	47.62%
4	50 to 80	0.00%	0.00%	0.00%	0.79%	1.19%	0.00%	1.98%
5	More than 80	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6	Grand Total	5.56%	7.14%	78.57%	3.17%	1.98%	3.57%	100%

Source: Field Investigation

The inferences which one can probably draw on the basis of quantified responses for previous jobs are not very different from those drawn. It would appear therefore that the observations made on the basis of responses of present workplace appear to be more or less valid even in case of the previous jobs of the workers. It may not be out of place to suggest that quantification of productivity levels is very difficult to obtain and it is even more difficult to quantify the probable increases in productivity levels if the factors contributing to productivity are furnished to the organizations wither present of previous of the workers.



However, all the inferences could be merely of indicative nature and should be considered merely as such.

As has been brought out earlier the number of respondents in present workplace was 349. This number included 28 per cent, that is, 97 workers who joined the present workplace as a fresher without working in any other company previously. Remaining 252 respondents had joined present workplace after working in various companies earlier for varied lengths of time. During the course of earlier presentation and analysis, in table 4.17 and pie diagram 4.17, reasons for joining present workplace have been identified and quantified, similarly, in table 4.18 the reasons for

leaving the previous companies have been highlighted, quantified and illustrated in pie diagram 4.18. It will be seen that in these two tables, namely, 4.17 and 4.18 fourteen factors were identified and an attempt was made to quantify their role either in the decision of the workers for joining present workplace or for leaving the previous companies. The quantification in the earlier analysis refers to the percentage level of contribution only.

However, it was thought desirable to identify two variables, namely, the satisfaction level of respondents and their commitment to the organization and quantify their contribution specifically for reasons to continue with present assignment.

To this end, 250 responses were considered mainly of the workers who joined present assignment after having served previous companies and with respect to this section of the respondent's average level of commitment and satisfaction have been worked out in terms of mean and the standard deviation obtained in the process. These quantified details have been presented in table no. 4.36. It will be seen that the value of the mean level of satisfaction worked out to 3.7588 while the mean commitment level stood at 7.3532. The standard deviation in respect of satisfaction level was of the order of .6907 while the standard deviation for commitment level worked out to 3.4046. It may be emphasized that these values have been worked out on the basis of responses of only 252 workers as explained earlier.

Obviously, this is the first step for working out the Pearson correlation in respect of averages for level of job satisfaction and organizational commitment amongst 252 workers. It may be pointed out that Pearson's correlation has been worked out with the help of the formula given in the SPSS package for the purpose.

It will be seen that, the Pearson's correlation value has been worked out to 0.322 in both the cases of average level of job satisfaction and organizational commitment.

As a matter of fact, as this value approaches one a higher degree of significance of correlation can be indicated but if it approaches zero the correlation level is indicated to be of lower level. In the present case the value of correlation placed at .322 for both the parameters is definitely significant, since, it is positive and

approaching one, however, it must be pointed out that this value does not appear to be very strongly significant as it appears to be quite below the half way mark of 0.5. It must be mentioned at the same time, that only two of the fourteen parameters have been picked up for this statistical analysis and in consideration of this fact the value of .322 should be treated as quite significant. It was not possible to quantify the values of other parameters as the responses were not consistent enough to be quantified in a way suggested by SPSS package.

It must be pointed out that the significant level of correlation in respect of average level of job satisfaction and organizational commitment would certainly have substantial impact on the occurrence of attrition phenomenon and strongly influence the rate of attrition. As a matter of fact, these two parameters would go a long way in increasing the level of embeddedness thereby minimize the occurrence of attrition phenomena and reducing the attrition rate. This aspect of embeddedness and its impact on the occurrence of the attrition phenomena has been elaborated in the chapter on concluding observations.

PART-IV

Hypotheses Testing

This part considers the testing of two hypotheses on the basis of the data obtained during the course of field investigation. In Section-(A), hypothesis H-1 has been tested while in section-(B) hypothesis H-2 has been tested. The policy implications with respect to each one of these hypothesis have been indicated.

Section-(A): Testing of Hypothesis-H1

In this section, the hypothesis H-1, namely, *'Excessive workload and heavy stress coupled with lack of relaxation would lead to a higher level of attrition in the manufacturing sector'* has been considered.

The relevant data in respect of this hypothesis has been obtained from Question No. 3.9 and 3.10 listed in the questionnaire. It will be seen that 14 parameters have been listed and the respondent workers were requested to offer their priority codes ranging from 1 to 10. It is quite obvious that the attrition phenomena involving leaving a job would be a complex function of the 14 listed variables. However, it is also obvious that two parameters namely, (i) role of bearable work pressure (workload) and (ii) lack of relaxation; and to the impact of stress could be the most significant from the point of view of structuring appropriate policy mix for purposes of lowering the attrition rate.

Both the parameters have been quantified in the context of present workplace describing the association with reason to join present job as well as keeping in mind previous assignment to study reason for leaving past assignments. The respondents have been asked to quantify the extent of reasons associated in joining the present assignment and the reasons behind leaving the previous job. In this way, total 14 parameters have been identified and quantified in questions 3.9 and 3.10. The detailed discussion in this regards has already been presented in the Table No. 4.17 and 4.18 of the present chapter.

Thus, for the purpose of testing present hypothesis, the respondents have been asked to give rating between 1 and 10 to show the important role of parameters in leaving and or joining the assignments to each of the parameters, where '1' represents

least important role and '10' has been treated as most important role of variables under consideration.

One of the major steps in testing any hypothesis relates to the formation of the technical hypothesis. This means formulation of null hypothesis and alternate hypothesis. **Table No. 4.36** presents several aspects of formulation of technical hypothesis and also defines the *technical hypothesis* for each one.

Table No. – 4.36

Defining Technical hypotheses- H1

S. N.	Parameters / Variables	Present Workplace	Previous Workplace	H ₀	H _a
I	II	III	IV	V	VI
1	Role of Stress	Significant in decision of joining	Significant in decision of leaving	There is no any leading role of this variable in decision to leave or join the assignments	There is a significant role of this variable in decision to leave or join the assignments
2	Bearable work pressure (work load) and lack of relaxation	Significant in decision of joining	Significant in decision of leaving	There is no any leading role of this variable in decision to leave or join the assignments	There is a significant role of this variable in decision to leave or join the assignments

These technical hypotheses have been tested using ' χ^2 ' test with the help of SPSS package. The detail test statistics and appropriate analysis has been presented in below sections.

It would appear necessary to offer *statistical description* of the variables used for purposes of testing hypothesis H-1

Selected statistical measures have been used to illustrate and describe behavior of the variables under consideration. Out of 349 respondents only 252 responses have been considered suitable for further processing of comparative assessment of present workplace and previous workplaces. This is because 97 respondents have been started their career at present workplace, and naturally these respondents (97 respondents) were required to be eliminated from further discussions. Thus, ultimately 252

responses have been considered as they have previous experience other than working only in present workplace.

In *Table No. 3.37* efforts have been made to describe variables with the help of selected statistical measures, namely, (a) mean; (b) median; and (c) std. deviation.

To the extent of variable *Stress* at present workplace arithmetic mean observed as 5.9643 with median working out at 7. This would mean that, rating for this variable is slightly above the standard average of rating scale (that is 5.5). It also may be suggested that the entire observations can be divided into two halves at the point of scale observed at 7. The inferences can be drawn out of these observations such as majority of the respondents agree with the situation that there is a considerable impact of this variable stress while deciding to join the new assignment. Comparatively to the extent of previous work place stress has been ranked at 4.51 averaging with the median observed at 3. This description leads to the interpretation such as stress is the less important variable considered while decision of leaving the work place.

Speaking only on the basis of the observed values if the parameters, it may be inferred, that the variable stress is a quite significant in decision of joining any new assignment but it has been considered at lower level while taking decision of quitting the assignment.

In the same way, respondents have been ranked with respect to variable *work pressure and lack of relaxation* at lower level as its mean observed at 3.70 to the extent of present workplace with median at 3. While, to the extent of previous workplace; mean of this variable has been observed at 5.1389 with the median value observed exactly at 5.00. After scrutinizing the above descriptive values, it can be inferred that the decision of joining new assignment cannot be decided significantly on the basis of variable work pressure and lack of relaxation, although this variable appears to be significant while leaving the assignment.

Summing up, it may be pointed out that, parameter stress has an impact on the decision of joining new assignment but it does not appear to be significant while leaving the present assignment. Parameter work pressure and lack of relaxation has

negligible consideration while deciding new assignment but it has comparatively more significance in decision of leaving the assignment.

Table No. 4.37
Descriptive Statistics

S.N.	Descriptive Measures	Present Workplace		Previous Workplace	
		Stress	Work Pressure and lack of relaxation	Stress	Work Pressure and lack of relaxation
I	II	III	IV	V	VI
(a)	N	252	252	252	252
(b)	Mean	5.9643	3.7063	4.5159	5.1389
(c)	Median	7.0000	3.0000	3.0000	5.0000
(d)	Std. Deviation	3.25091	3.03123	3.66905	3.24813

Source: Field investigation

Further testing of this hypothesis has been performed with the help of chi-square test. For this purpose the required statistical data in respect of the present workplace and the previous workplace have been furnished in Table No. 4.38 and 4.39 (A) to (D). The analysis would be as follows:

Table No. 4.38
Chi-Square Test Statistics

S.N.	Statistics	Present work place		Previous Work Place	
		Stress	Work Pressure and lack of relaxation	Stress	Work Pressure and lack of relaxation
I	II	III	V	IV	VI
1	Chi-Square(a, b)	114.000	171.500	301.095	136.810
2	df	8	8	9	9
3	Asymp. Sig.	.000	.000	.000	.000
4	Corresponding Table Values (c)	15.5	15.5	16.9	16.9

a:- 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.0.

b:- 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 25.2.

Source- designed from field investigation

Without going into the further details of frequency calculations, it has been proposed to discuss the results of test statistics only. Thus, on scrutinizing the results mentioned in the Table No. 4.38; in case of parameter stress, the chi-square test value observed at 114.000 and corresponding table value for the given degrees of freedom (that is 8) has been placed at 15.5 for alpha considered as 0.05. It has been clearly

observed that the test value is significantly larger than the table value. This fact has been revealed for all other parameters irrespective of the workplaces.

It has to be mentioned further, the fact that the observation of large test statistics than table value would reveal that there is a significant difference between observed frequencies and expected frequencies. On these statistical grounds it can be noted here that the residual observed in Table No. 4.39 (A) to 4.39(D) is also significant.

Thus, finally considering all the above discussions it would be proposed here that, the hypotheses null for both of the parameters have been rejected. Hence, an alternate hypothesis mentioned in the Table No. 4.36 have been accepted.

Table No. 4.39 (A)
Frequency of Parameter Stress (Present Work-place)

S.N.	Rating of parameter in decision of joining	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	32	28.0	4.0
2	2.00	18	28.0	-10.0
3	3.00	20	28.0	-8.0
4	4.00	42	28.0	14.0
5	5.00	2	28.0	-26.0
6	6.00	3	28.0	-25.0
7	7.00	27	28.0	-1.0
8	8.00	45	28.0	17.0
9	10.00	63	28.0	35.0
	Total	252		

1= Less significant and 10= Most Significant

Source: Field investigation

Table No. 4.39 (B)
Frequency of Parameter Stress (Previous Work-place)

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	89	25.2	63.8
2	2.00	30	25.2	4.8
3	3.00	9	25.2	-16.2
4	4.00	13	25.2	-12.2
5	5.00	34	25.2	8.8

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
6	6.00	2	25.2	-23.2
7	7.00	1	25.2	-24.2
8	8.00	5	25.2	-20.2
9	9.00	9	25.2	-16.2
10	10.00	60	25.2	34.8
	Total	252		

1= Less significant and 10= Most Significant

Source: Field investigation

Table No. 4.39 (C)

**Frequency of Parameter Work Pressure and Lack of Relaxation
(Present Work-place)**

S.N.	Rating of parameter in decision of joining	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	87	28.0	59.0
2	2.00	37	28.0	9.0
3	3.00	33	28.0	5.0
4	4.00	19	28.0	-9.0
5	5.00	10	28.0	-18.0
6	6.00	4	28.0	-24.0
7	7.00	27	28.0	-1.0
8	9.00	15	28.0	-13.0
9	10.00	20	28.0	-8.0
	Total	252		

1= Less significant and 10= Most Significant

Source: Field investigation

Table No. 4.39 (D)

**Frequency of Parameter Work Pressure and Lack of Relaxation
(Previous Work-place)**

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	51	25.2	25.8
2	2.00	14	25.2	-11.2
3	3.00	34	25.2	8.8
4	4.00	7	25.2	-18.2
5	5.00	51	25.2	25.8
6	6.00	15	25.2	-10.2
7	7.00	11	25.2	-14.2
8	8.00	9	25.2	-16.2

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
9	9.00	8	25.2	-17.2
10	10.00	52	25.2	26.8
	Total	252		

Source: Field investigation

Section-(B): Testing of Hypothesis-H2

In this section an attempt has been made to test the second hypothesis, H-2, namely, *'The management with appropriate policy mix can go a long way in reducing the level of attrition in the manufacturing sector'*. For this purpose the data were specifically collected with the help of canvassed questionnaire during the course of investigation. The question number 3.11.1 listed in the questionnaire was responded to, and on the basis of responses obtained the analysis has been proceeded with after testing and interpreting the observations. It must be emphasize that this hypothesis testing would offer results which would directly be inputs in the policy mix of the corporate house, hence, this hypothesis H-2 has been given the predominance along with the hypothesis H-1.

The responses obtained have been quantified on the basis of five point likert scale. As has been pointed out earlier, the significant aspect of five point likert scale may be pointed as its standard mean observed to be 3. Thus, the observed mean of the primary data can be tested on the basis of significant difference between observed mean and standard mean. This aspect has been logically applied in formulation of *Technical Hypothesis* as mentioned in the *Table No. 4.40*.

Table No. – 4.40

Defining of Technical Hypotheses-H2

S. N.	Variable No.	Question of Hypothesis	H ₀	H _a
I	II	III	IV	V
1	V1 to V21	On the 5 point scale standard average is 3 which shows neither agree nor disagree. Now, can it be said that the observed mean is significantly differed from the standard average of 3?	there is no significant difference	There is significant difference

The test statistics have been mentioned in Table No. 4.41 and Table No. 4.42. The appropriate interpretations in respect of the technical hypothesis have been subsequently presented.

Table No. – 4.41
One-Sample Statistics

S.N.	Variable under consideration	N	Mean	Std. Deviation	Std. Error Mean
I	II	III	IV	V	VI
1	Opinion regarding management with proper policy mix will avoid unusual leaving of employees in manufacturing sector	349	4.3295	.64127	.03433

Source: Field investigation

Table No. – 4.42
One-Sample ‘t’ Test for Hypothesis-H2

S. N.	Variable under consideration	Test Value = 3					
		t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
1	Opinion regarding management with proper policy mix will avoid unusual leaving of employees in manufacturing sector	38.732	348	.000	1.3295	1.2620	1.3970

Source: Field investigation

On scrutinizing the results of calculations mentioned above in **Table No. 4.41** and **Table No. 4.42** the inferences are as follows-

The significance value obtained displays a tendency to be less than 0.05. As is normally expected in such cases, the column label Sig. (2-tailed) has been displaying a probability from the ‘t’ distribution with degrees of freedom working out to 348. Thus, the value listed is the probability of obtaining an absolute value greater than or equal to the observed ‘t’ statistics. In case of present hypothesis, the Significance value obtained works out to 0.00 and is considerably lower than 0.05. This clearly shows that the alternate hypothesis is validated and the null hypothesis is rejected.

CHAPTER-5

PROCESSING, TABULATION AND ANALYSIS OF THE DATA

SERVICES SECTOR (REPRESENTED BY THE INFORMATION TECHNOLOGY ACTIVITY)

In the present chapter tabulation, processing and analysis of the data obtained from field investigation regarding the service sector have been presented. As a matter of fact this chapter is a replica of chapter-iv where similar exercises have been conducted for the manufacturing sector.

Considering the format of the questionnaire which was designed for collecting the field information, the present chapter has been divided into four parts and subdivided into various sections and sub-sections. *Part-I* deals with (a) demographic information of workers and also highlights (b) their professional information. In *Part-II*, an attempt has been made to furnish details regarding the role of workers (section-C) while section-D brings out details about the skills and competence levels of the workers. In *Part-III* the perceptions and views of the workers have been elicited. In section-(E) the expectation of the workers and their views regarding the organization / management / decision makers in the present workplace have been studied. In section-(F) the job satisfaction and levels of organizational commitment have been emphasized. In section-(G) details regarding the job embeddedness have been obtained but have been analyzed in chapter-7 while the details regarding the team work of workers at various levels and of various categories have been considered in this section. In section-(H) the perception of employees in respect of superiors have been detailed. In section-(I), attention has been focused on the attitude of employees in respect of various aspects relating to the work culture.

Each one of these parts and sections has been subdivided further into various subsections in consideration of the data obtained during the course of field investigation.

As will be seen from the chapter on research methodology several hypotheses were structured and formulated for conducting the present study. In *Part-IV* of the

present chapter, an attempt has been made to stress the hypothesis and indicate the level to which they have been either validated or invalidated.

In the present workplace 650 structured questionnaires were canvassed; out of which only 275 were responded with a certain degree of authenticity while, the remaining 375 had to be set aside and could not be included in the process of tabulation and analysis for the present chapter. A very surprising aspect may be highlighted without any comment and that is the percentage of rejection of the canvassed questionnaires, which appears to be a little under three-fifth (57.69 per cent, to be exact). Therefore, the processing, tabulation and analysis of the data in regards to the services sector (represented by IT activity with 27 companies) relates to 275 respondents.

PART-I

Section-(A): Demographic / General Information:

In this section, the information obtained from the field investigation has been compiled, processed and tabulated in 4 tables and the analysis in this regard has been based on the basis of the comprehension of each one of the parameters relevant to concerned table.

The present workplace under consideration has a truly open door policy as far as the working force is concerned and it has been observed that the list of the companies from where the respondents have joined would be worth looking into. This list is furnished in *Table No. 5.1* and includes as many as 27 very reputed IT sector companies in and around Pune region.

Table No. 5.1
List of companies

S.N.	Name of the Company	S.N.	Name of the Company
I	II	I	II
1	WNS GLOBAL SERVICES LTD, PUNE	15	Infosys, Pune
2	Accenture, Pune	16	LIC bank, Pune
3	ACI, Pune	17	Mphasis, Pune
4	Amdocs, Pune	18	NTT DATA, Pune
5	Matake, Pune	19	Persistent, Pune
6	Cybage, Pune	20	RSIL, Pune
7	Barelags, Pune	21	Saturn, Pune
8	Cap Gemini India, Pune	22	spice digital ltd, Pune
9	Cognizant, Pune	23	TCS, Pune
10	Digical Pvt. Ltd, Pune	24	Tech Mahindra, Pune
11	fast track software, Pune	25	WNS, Pune
12	HCL, Pune	26	Your Next leap Pvt. Ltd., Pune
13	Hexawarl, Pune	27	Zensan Tech, Pune
14	HSIL, Pune		

Source: Field investigation

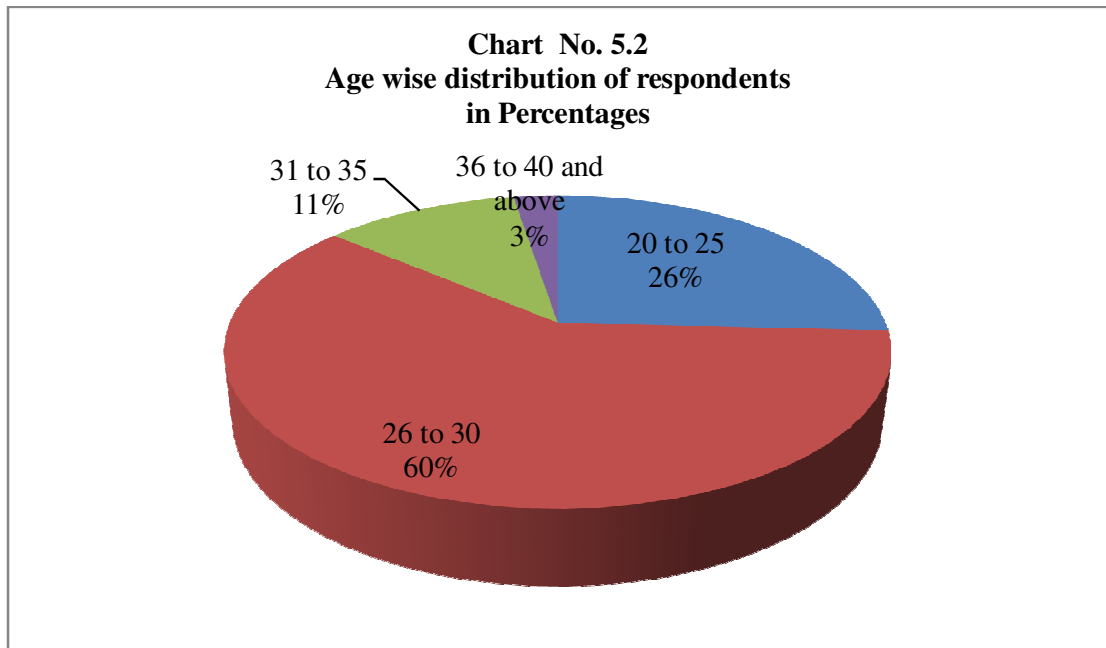
The demographic information of the respondents have been presented in *Table No. 5.2* and illustrated in *Pie Diagram No. 5.2*.

Table No. 5.2

AGE and GENDER wise Distribution of the Respondents

S.N.	Age	Female	Male	Total
I	II	III	IV	V
1	20 to 25	33	20	71
2	26 to 30	48	114	166
3	31 to 35	25	28	35
4	36 to 40 and above	0	7	7
5	Total	106	169	275

Source: Field investigation



It will be seen that, out of 275 respondents 106 happen to be female while remaining 169 were males. The age wise distribution of the respondents displays very interesting characteristics. About 58.90 per cent of the respondents belong to the category of age group 26 to 30 while 19.27 per cent of the respondents belong to the age group 20 to 25. These two categories taken together are accounting for almost 80 per cent (78.17 per cent, to be exact) of the respondents. It may be mentioned straight away that such a large proportion of respondents in the age group of 20 and 30 years will probably cause a higher degree of mobility amongst them thereby accelerating the attrition phenomena and stepping up the attrition rate.

Table No. 5.3 brings out the details regarding distribution of the workers according to their technical or otherwise qualification. It would be seen that

approximately more than 50 per cent of the workers were educated up to the graduation level while little over two fifth (40.73 per cent, to be exact) of the respondents observed to be educated up to post graduation level. Taking together these both categories constitute over 90 per cent of the proportion of the respondents. Only 4 per cent of the respondents observed were educated at under graduation level and a proportionate of negligible workforce of the present workplace were found to be diploma holder.

Table No. 5.3

Distribution of respondents according to the QUALIFICATION

S.N.	Qualification of the respondents	In numbers	In Percentages
I	II	III	IV
1	Under Graduate	11	4.00%
2	Graduate	150	54.55%
3	Post Graduate	112	40.73%
4	Diploma	2	0.73%
5	Grand Total	275	100.00%

Source: Field Investigation

Thus, it will be seen from the data presented in table 5.3 that, the well educated workforce between younger age group have been associated in present workplace and has been enhancing dynamism of the workforce therein.

In Table 5.4 respondent workforce has been distributed considering the specialization pattern. It would be seen, therefore, that a little less than one third (32.36 per cent to be exact) of the respondents have specialized in engineering while approximately same proportion (34.91 per cent to be exact) of the respondents have been observed to be engineers. Taking together both of these specializations constitute more than 65 per cent (67.27 per cent to be exact) of the respondents. Interestingly, needs to point out that only one tenth (11.28 per cent) of the respondents possess specialization nonrelated either to the computer or to engineering.

In the IT sector companies, it has been observed that the personnel with specialization in computer or engineering have a substantial majority. Personnel with other qualifications are also recruited in the IT sector companies for purposes of performing administrative, secretarial or managerial functions.

Table No. 5.4**Distribution of respondents according to the SPECIALIZATION**

S.N.	Specialization of the respondents	In numbers	In Percentages
I	II	III	IV
1	Technical	39	14.18%
2	Technical and Engineering	1	0.36%
3	Technical and Computer	4	1.45%
4	Engineering	96	34.91%
5	Engineering and Commerce	1	0.36%
6	Engineering and Arts	3	1.09%
7	Engineering and Science	2	0.73%
8	Engineering and Computer	2	0.73%
9	Commerce	16	5.82%
10	Commerce and Computer	2	0.73%
11	Arts	7	2.55%
12	Science	5	1.82%
13	Computer	89	32.36%
14	Other	8	2.91%
15	Grand Total	275	100.00%

Source: Field Investigation

Section-(B): Professional Information:

This section relates to the professional information obtained during the course of investigation and has been presented and analyzed with the help of 5 tables.

Possessing technical qualification is not only one criterion for being selected in the IT companies; relevant professional work experience also constitutes the additional feature for pursuing career in the IT sector. In the present workplace, approximately 27 per cent of the respondents observed have been having up to 2 years of professional experience. About 42 per cent of the respondents appear to have 2 to 5 years of working experience. The working experience of 5 to 10 years constitutes 30 per cent of the respondents. Surprisingly, only near about 1 per cent of the respondents' possess' experience of more than 10 years.

At the very outset, it may be pointed out that almost equal proportion of the workers are observed to be scattered between working experience of 0 to 2 years and 5 to 10 years (*Table No. 5.5* and corresponding *Pie Diagram 5.5*). This appears to highlight judicious combination of the workforce in terms of length of an experience

to allow an inflow of the fresh talent and technology updates with the most recent workforce. This strategy of recruiting qualified personnel but with least exposure to the industry may add up to efforts of reducing attrition rate in the present workplace.

Table No. 5.5
Professional Experience of the Respondents

S.N.	Experience in Years	Percentage of Respondents
I	II	III
1	up to 2 years	27
2	2 to 5 years	42
3	5 to 10 years	30
4	More than 10 years	1
5	Grand Total	100

Source: Field investigation

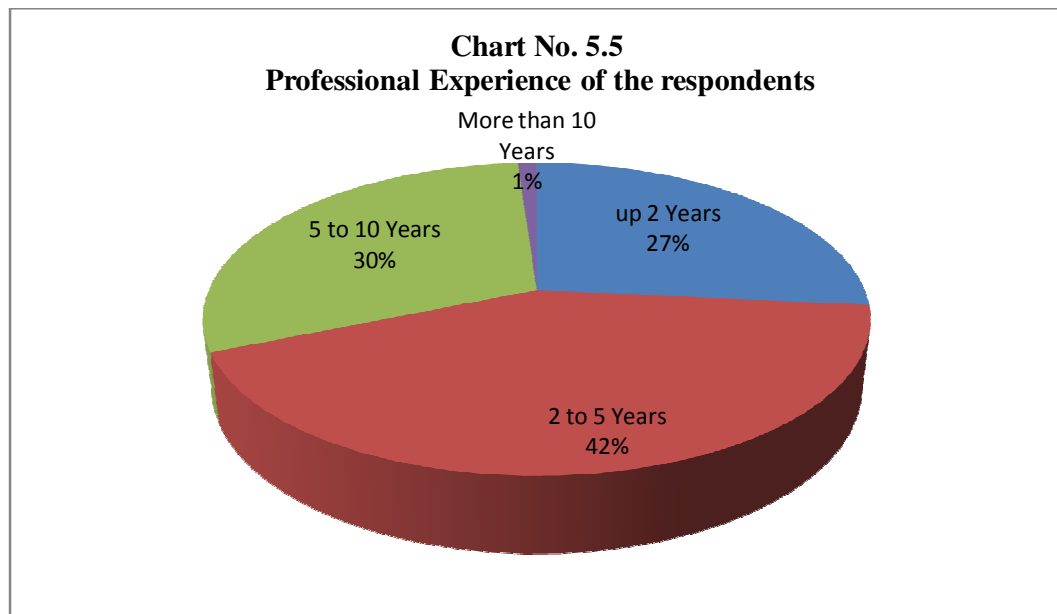


Table No. 5.6 and corresponding *Pie Diagram No. 5.6* indicate the details about the background of workers more specifically in respect of organizations in which they were working before joining the present assignment. It would appear that little less than one third of the respondents working with the present workplace have started their career in this assignment while little over two third (68 per cent, to be exact) of the respondents worked for 2 to 5 companies during their overall career

span. A negligible proportion of the respondents (i.e. only 2 per cent) pursued their career with more than 5 organizations and thereafter joined the present workplace.

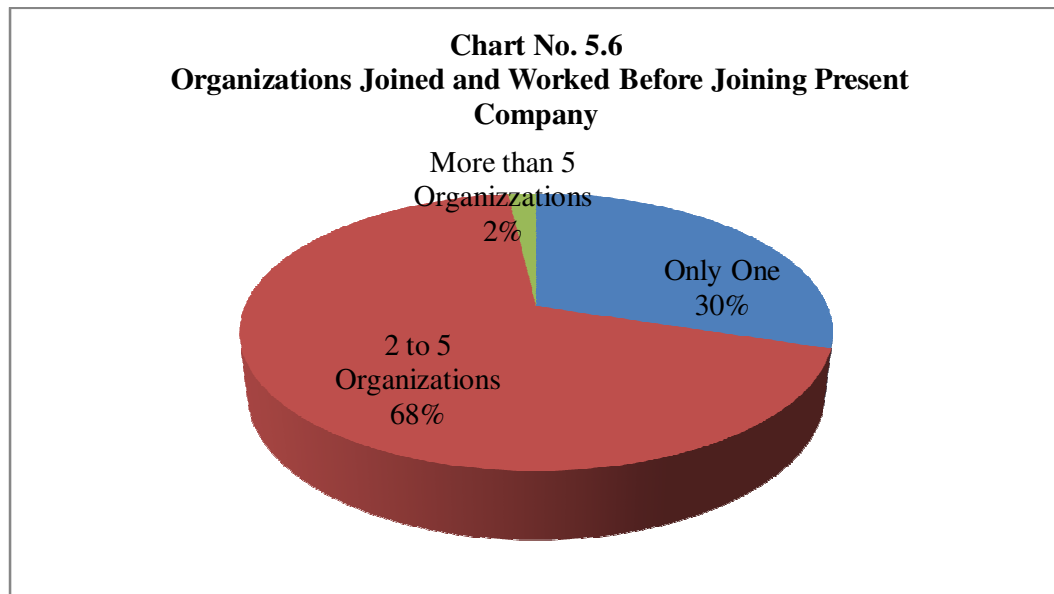
Thus, it will be seen from above analysis that, the present workplace has suitable blend of policy to employ personnel having work experience with other companies as well as the fresher who are associating with the industry for the first time.

Table No. 5.6

Organizations Joined and Worked Before Joining Present Workplace

S.N.	Number of organizations worked with previously	Percentage of Respondents
I	II	III
1	Only One	30
2	Two to Five	68
3	More than Five Organizations	2
4	Grand Total	100

Source: Field investigation



Naturally, highest recognition of the high level of performance could be better appreciated by promoting an employee to the higher position. This management decision primarily aligned with the performance evaluation of the potential employees to be promoted in the establishment. The phenomena of attrition is quite sensible at this policy making decision in a way that it hampers the long term loyalty of

employee if made erroneously. *Table No. 5.7* and corresponding *Pie Diagram No. 5.7* bring out detailed presentation regarding performances of the respondents and promotions received by them. An effort has been made to quantify average performance of the respondents on five points scale using parameters such as; (a) much below the company standard; (b) slightly below the company standard; (c) Exactly as per the company standard; (d) much above the company standard; and (e) Slightly below the company standard. It will be seen from the data collected that even in the IT companies there does not seem to be any standard policy for effecting promotions based on the performance levels. It is natural that the persons getting promotions should perform according to company standards. Such a proportion of respondents works out to 109 and accounts for 60.36 per cent of the workers in this category. It may be pointed out that workers performing even better than the company standard have been denied promotions and the proportion of this category works out to 15 per cent. Therefore, it is obvious that this category of workers have been denied promotions in spite of better performance would certainly be very happy and may be inclined to leave the present job and add to the attrition rate.

Thus, without going into the further details, it may be pointed out in this regards that the present workplace observed to be very clear on their promotion policy. It would also be commented that, decision of promotion may not be offered merely considering the performance of the employees but length of service and experience of employees could also be considered.

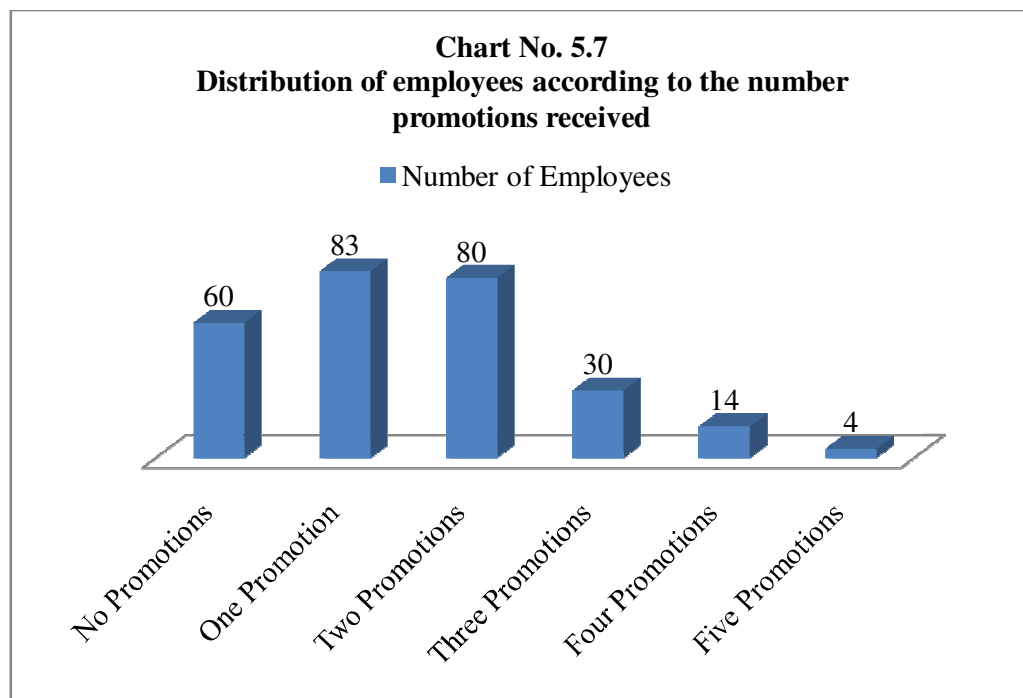
Table No. 5.7

Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED

S. N.	Average Performance of the Respondents	Total Promotions Received by the Respondents							
		No Promotions	One	Two	Three	Four	Five	Seven	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX	X
1	More below the company standard	0	0	0	3	0	0	0	3
2	Slightly below the company standard	12	4	9	1	1	2	0	29
3	Exactly as per the company	39	52	57	10	8	0	0	166

S. N.	Average Performance of the Respondents	Total Promotions Received by the Respondents							
		No Promotions	One	Two	Three	Four	Five	Seven	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX	X
	standard								
4	More above the company standard	7	16	14	15	5	2	4	63
5	Slightly above the company standard	2	11	0	1	0	0	0	14
6	Grand Total	60	83	80	30	14	4	4	275

Source: Field investigation



Apart from recognizing employees in terms of offering promotion against performance, it has to be appreciated also that, getting conferred the promotions constitutes a way looking at the preposition, but along with the promotion the level of increment offered in the pay package certainly constitute a more significant and positive steps towards retaining of employees and reducing the rate of attrition. This aspect was looked into during the course of this study and responses were sort as to whether the workers who got promotions were satisfied or not satisfied because of the increment levels in the salary structures.

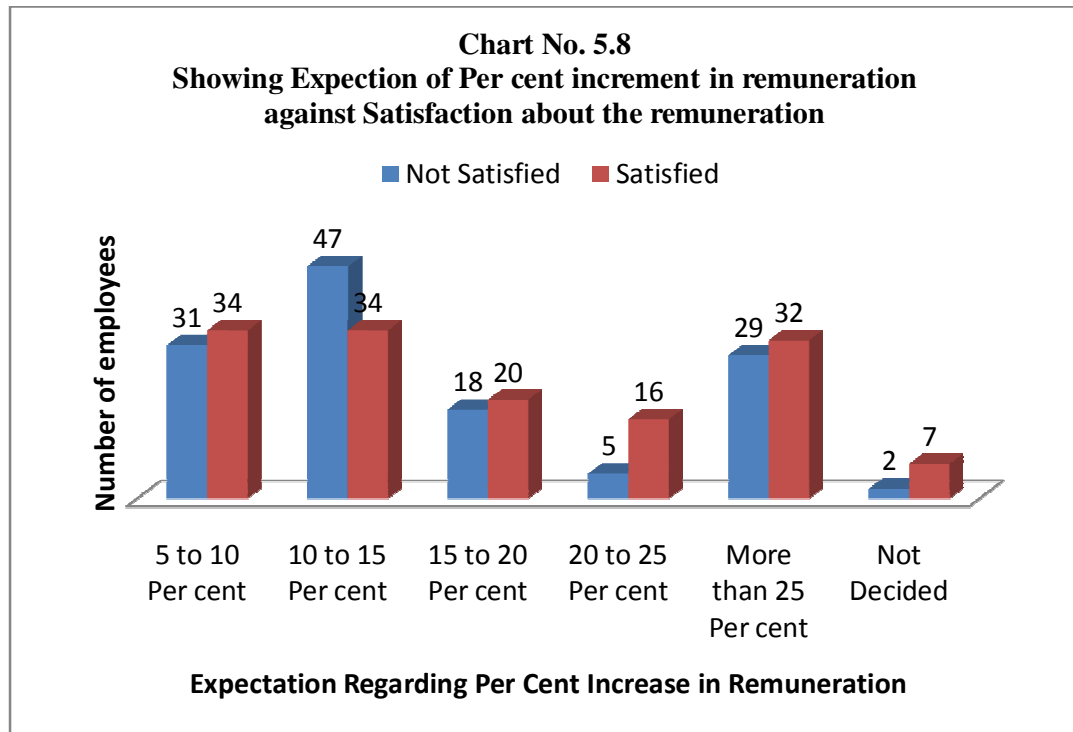
It will be seen from the *Table No. 5.8* and from subsequent *Bar Diagram No. 5.8* that almost half of the respondents are satisfied in the present workplace. Interestingly, needs to point out here that major proportions of the respondents (more than 95 per cent) expect some kind of increment in salary pay packages irrespective of the level of satisfaction.

Thus, it will be seen from the analysis that expectation regarding increase in salary structure does not necessarily depend on whether employees are satisfied or not. The policy makers of this particular company may offer their attention on those employees who are not satisfied and expect some kind of hike in their pay packages, certainly, because non consideration of these employees on the policy side may cause higher rate of attrition which necessarily hampered the growth of company.

Table No. 5.8
Distribution of respondents according to the Expectation of per cent increment in remuneration against satisfaction about the remuneration

S. N.	Expectation regarding per cent increment in remuneration	Number of employees (Percentage in brackets)		
		Satisfied	Not Satisfied	Total
I	II	III	IV	V
1	05 to 10	34	31	65
2	10 to 15	34	47	81
3	15 to 20	20	18	38
4	20 to 25	16	05	21
5	More than 25 Per cent	32	29	61
6	Not decided	07	02	9
7	Grand Total	143	132	275

Source: Field investigation



It has been seen that the dissatisfaction from the increments offered in the pay packages could be strong reason for quitting the present job and move over to a better company offering the remuneration as per expectations. Almost all the workers who were not satisfied in the pay packets increments appear to be confident of getting the new job with the expected remuneration, although, the time dimension for such a situation appears to be different. About 40 per cent of the workforce appeared sure of getting the job with expected remuneration within one month's time while the remaining 60 of the dissatisfied workers, though it possible to get such jobs within span of 2 to 3 months. This aspect has been presented in **Table No. 5.9** and illustrated in **Pie Diagram No. 5.9**. The aspect of both the expectation about increment, and chances to get new job has got to be considered seriously by the management of the present workplace while policy making, as such, this fact could be reasonably affect the high rate of quitting job and could contribute to increased attrition rate of the company.

Table No. 5.9

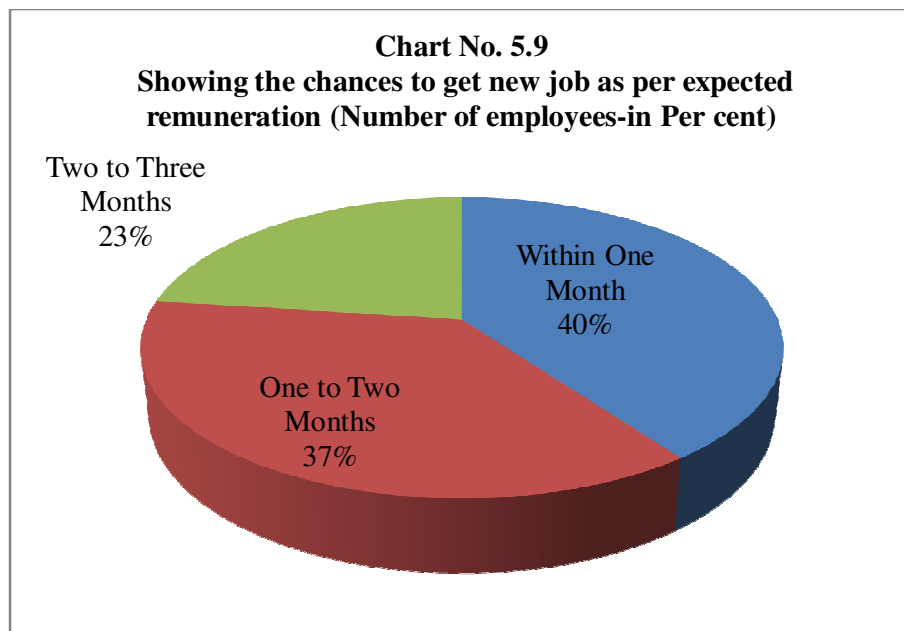
Distribution of respondents according to the Probability of Getting New Job as per Expected Remuneration

S.N.	Probability of getting new job (in months)	Number of employees (In Percentage)
I	II	III
1	Within One Month	40
2	Within One to Two Months	37
3	Two to Three Months	23
4	Grand Total	100

Source: Field investigation

Chart No. 5.9

Showing the chances to get new job as per expected remuneration (Number of employees-in Per cent)



PART-II

The present part has been divided into two sections. *Section-(C)* processed and analyzes the information obtained during the course of investigation with the help of 10 tables in which details regarding several parameters have been presented and studied. *Section-(D)* of the present part relates to skills of the workers and the parameters closely associated with them. The information in this regard obtained from the field investigation has been presented in 12 tables and relevant observations in respect of the data studies have been brought out therein.

Section-(C) Role played by respondents:

The analysis presented in the above paragraphs constitutes a meaningful introduction to the understanding and appreciation of various aspects relating to the attrition phenomena in respect of workers in IT sector. Against this background, in PART-II, an attempt has been made to analyze parameters which are associated with the job related variables with a view to examining the role of these variables in promoting or preventing of attrition phenomena.

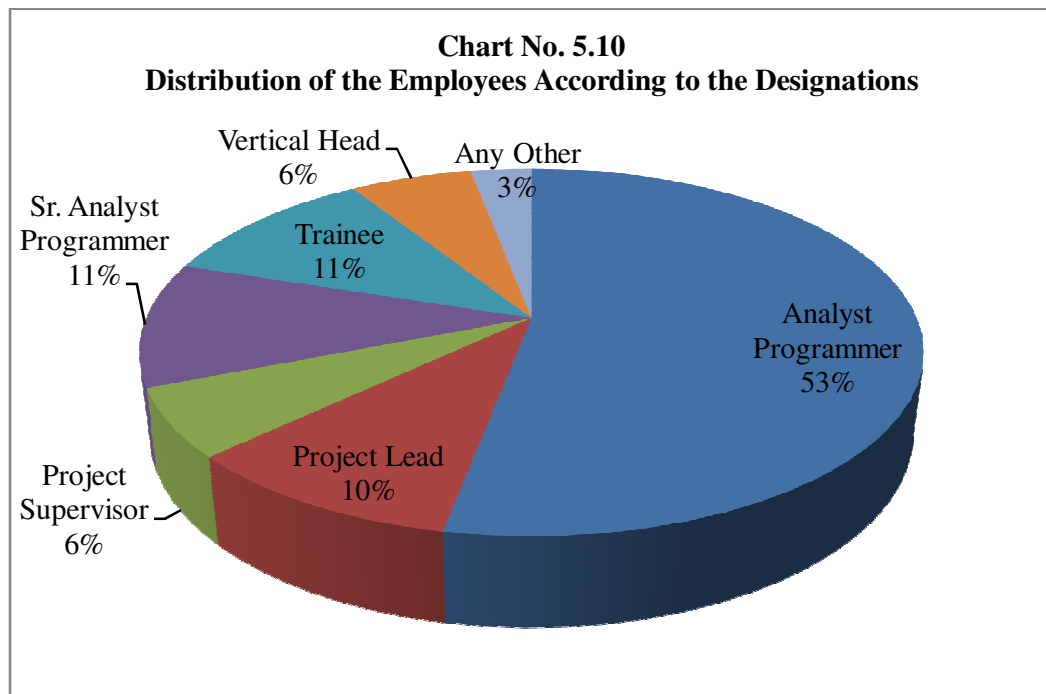
To begin with, in the *Table no. 5.10* and *Pie Diagram No. 5.10*, distribution of the respondents has been presented. In a present workplace for present study sample constitutes 53 per cent of workers in the cadre of Analyst Programmer followed by Sr. Analyst Programmer (11 per cent). The same proportionate of respondents observed in the cadre of Trainee (11 per cent) as compared with Sr. Analyst Programmer. The cadre of Project Lead accounts for 10 per cent of the respondents while project supervisor's cadre stands for 6 per cent as same as vertical head. The respondents which would be allocated in these categories have been grouped under category of Any Other. The exercise made under sampling procedure is understandably given the true representative of the workforce in the present workplace. The attrition phenomena will naturally relate to all these categories of the workforce and would understandably different as between these different categories.

Table No. 5.10

Distribution of employees according to the Designations

S.N.	Designations	No. of employees	Percentages
I	II	III	IV
1	Analyst programmer	146	53%
2	Other	9	3%
3	Project Lead	28	10%
4	Project Supervisor	16	6%
5	Sr. Analyst Programmer	30	11%
6	Trainee	29	11%
7	Vertical Head	17	6%
8	Grand Total	275	100%

Source: Field Investigation



The same kind of efforts have been made as done in Chapter-4 to get the views of the respondents on five point scale in respect of their comparative assessment of the present job against the previous job in various companies they have come from. For purposes of the appreciation of these aspects 30 per cent of the respondents were not considered because they belong to the present workplace right from the start of their career. As such for purposes of this aspect from the study relevant numbers of respondents works out to only 193. It may be pointed out that the respondents' comparative assessment of the present job vice a vise a previous job has

been presented in *Table No. 5.11* on the basis of seven parameters, namely, a) actual use of complex and or high level skills; b) requirement of cooperative endeavor while working with other workers; c) simple and repetitive nature of the job; d) the feedback received from the seniors and or supervisors; e) the possibility of utilizing personal initiative and judgment in carrying out the assignment; f) freedom to complete the execution of the job assigned; and g) the level of satisfaction attained by the respondents in the course of execution and completion of the job.

Table No. 5.11

Comparison for job description related to Present Job and Previous Job

S.N.	Characteristics	Present Job (Previous Job) – In Percentages					
		Strongly Agree	Slightly Agree	Uncertain	Slightly Disagree	Strongly Disagree	*N/A
I	II	III	IV	V	VI	VII	VIII
(a)	<i>Required to use number of complex or high level skills</i>						
	Observations	36 (23)	50 (28)	8 (14)	5 (6)	1 (0)	0 (30)
(b)	<i>Required lot of cooperative work with other workers</i>						
	Observations	37 (27)	51 (27)	8 (13)	4 (3)	0 (0)	0 (30)
(c)	<i>Job is simple and repetitive</i>						
	Observations	16 (1)	32 (29)	23 (13)	20 (15)	8 (11)	0 (30)
(d)	<i>Seniors and supervisors never give any feedback</i>						
	Observations	11 (7)	37 (13)	22 (32)	20 (12)	10 (5)	0 (30)
(e)	<i>Any chance to use personal initiative or judgment in carrying out the work</i>						
	Observations	9 (1)	48 (33)	19 (21)	15 (10)	9 (5)	0 (30)
(f)	<i>Freedom to completely finish the piece of work that began our self</i>						
	Observations	23 (17)	43 (34)	16 (13)	9 (6)	9 (0)	0 (30)
(g)	<i>I am very pleased with my job</i>						
	Observations	24 (8)	42 (38)	24 (20)	4 (4)	7 (0)	0 (30)

* N/A- Not applicable, because under this category all employees are fresher and worked in only one organization.

Highlighted area: shows significant incremental change in opinions of the employees regarding characteristics of the present and previous employment

Source: Field investigation

With respect to the *parameter-(a)* namely, requirement to use several complex and higher level skills 36 per cent strongly agreed that they were required to use higher levels of skills in comparison to the previous job while a very much high proportion of about 50 per cent slightly agreed with the proposition and insignificant 8

per cent of the respondents were not certain about the level of skills they are required to adopt in comparison to the level in the previous job. This will clearly indicate the fact that one of the allurements for the respondents to continue with the present assignment could be that their job assignment offers them an opportunity to use high and complex level of skills (this opportunity was denied to them in their previous job assignments). This, by itself, could be considered as a strong reason of respondents to continue with the present assignment because an opportunity to utilize the skill is offered to them. Naturally, this would constitute a reasonably strong factor preventing the mobility of the respondents of the present workplace elsewhere in the IT sector hub of the Pune region.

The requirement of cooperation into coworkers (*parameter-(b)*) is a very significant variable determining the health of the work culture in any organization. In respect of this aspect also 37 per cent of the respondents strongly agreed to the existing of a cooperative work culture in the present workplace while the agreement level of 51 per cent was not so strong. Even so, these two categories taken together account for 88 per cent of the respondents observed to be favorable to the cooperative culture to worker that exist in present workplace under consideration which appears to be of a far higher and superior level in comparison to the one which existed in the previous assignments in companies the respondents have come from. This aspect could also be treated as strong binding force for the workers to be together and develop, over a period of time, a type of fellow-feeling among them. It goes without saying that such a binding force among the workers will definitely act as a distraction for them to leave the assignment and thereby reduce the attrition rate.

In the event of a job being of a purely repetitive nature (*parameter-(c)*) a certain feeling of boredom usually gets developed and the workforce is not very eager to continue to a very long time in a job which has merely repetitive and simple characteristic. 16 per cent of the respondents strongly agreed that the job was of very repetitive nature while about 32 per cent slightly agreed with the proposition to the job being of repetitive nature thus about three third of the respondents thought present job could be of a repetitive nature while the remaining two third thought otherwise. This aspect also would have a strong bearing on whether the workers are keen on quitting the present jobs or continue to stay with it.

In any organization apart from the cooperative spirit amongst the coworkers, response and feedbacks of the seniors and superiors (*parameter-(d)*) constitutes a very significant aspects determining the work culture of the organization for any good work which has been done by a team of workers a pat on the back by the seniors and supervisors is always very well come and the kind of appreciation that it carries with it leaves a very positive and healthy feelings among the workers. In case of the respondents 11 per cents strongly agreed with the proposition that no feedback or appreciation was ever received from the seniors while 37 per cent agreed with the proposition that no feedback ever received. This is a very strong factor which could considerably reduced a sense of belonging to the organization and might prompt the workers to leave it for other job there by increasing the rate of attrition. In case of present workplace this factor appears to be playing a negative role in reducing a rate of attrition and it may be work while for the decision makers to consider handling this aspect with the greater degree of sensitivity and care.

In the course of the execution of the assignment the workers, on many occasions, are required to use their personal initiative and judgment (*parameter-(e)*) in accomplishing the task assigned to them. Such a freedom to workers would bring about a sense of binding with the organizational culture and would naturally bring about the reduction in the attrition rate. In the context of this parameter only 9 per cent of the respondents strongly agreed that in the present workplace they were offered all the necessary space and scope to use personal initiative and judgment while executing the assigned task, while, 48 per cent of the respondents slightly agreed to this preposition. Thus, about 57 per cent of the respondents appear to be comfortable with the extent of freedom given to them in the execution of the job while the balance 43 per cent does not appear to be agreeing with this proposition. This aspect also needs to be looked into by the decision makers in the present workplace as it can have a determining effect on the rate of attrition.

In case of present workplace or for that matter any organization which has a positive way of looking at the work culture, the workers are given a very high level of freedom to complete and finish the job (*parameter-(f)*) from starts to finish. This actually means that the workers are at liberty to choose the style of functioning in the execution of the job once it is assigned to them. This aspect clearly is indicative of the

confidence level of the seniors and superiors in regard to the workers who can be relied up on to finish the job which they have started. In case of present workplace 23 per cent of the workers probably strongly believe that they enjoy such a freedom while 43 per cent agree with the proposition. The two categories taken together account for well over 60 per cent of the respondents to believe that they have freedom to complete the job they have been assigned. This is also the strong factor which could effects attrition rate.

All said and done, in the ultimate analysis, it is desirable to find out whether the respondents are pleased with the job (*parameter-(g)*) that they have been assigned and the one which they have required to execute. 24 per cent of the respondents strongly agreed that they were pleased with the job while 42 per cent neatly agreed with the proposition. Thus well over 65 per cent of the respondents in present workplace indicated agreement to the proposition that they were pleased with the job while those who did not agreed with the job constituted a very small proposition of around 35 per cent. This aspect would go a long way in reducing the mobility of the workers away from present workplace and thereby reduced the rate of attrition.

It needs to be mention that a comparative scenario of the present with the previous job of the respondents has been quantitatively presented in the above Table no. 5.11. It may be mentioned in a very general way that all the positive parameters appear to be in favor of the jobs in present workplace in relation to those jobs in the previous workplace. In regard to the negative parameters, the present jobs appear to have been placed by the respondents at a much lower level in comparison to their previous assignment. Thus it will be cleared in the present workplace assignments appear to be positively strongly assists in comparison to previous jobs, while the negative parameters, and quantitatively have been placed at a lower level in relation to the previous assignment. Both these aspects taken together would certainly go a long way in reducing that the attrition rate once the workers joined the present IT workplace.

An attempt has been made for comparing the average satisfaction level of the respondent workers in the present job and the previous job in whichever company in the IT Hub in the Pune Region. The average satisfaction level index of the respondent workers in the two jobs has been worked out on the basis of eleven parameters listed

in *Table No. 5.12*. And the factors considered are (a) amount of job security, pay and fringe benefits; (b) fair promotion policy and practices; (c) clarity on role and communication on this behalf; (d) overall quality, amount of challenge; and (e) ample opportunity available for career growth. In regards to these five parameters the deviation level has been on the positive side indicating there by that all these parameters attained favorable values for workers in the present assignment in relation to their quantified values in previous jobs. It may not be out of place to suggest that these parameters would play a definitive role in causing retention of these workers in the present IT workplace and bring about a reduction in the attrition rate.

Table No. 5.12
Showing deviated index comparison of average satisfaction level of respondents
for present job and previous job

S.N.	Index (Factors of job satisfaction)	*Deviation
I	II	III
(a)	Amount of job security pay & fringe benefits	0.227979
(b)	Promotion policy & practices are fair	0.217617
(c)	Your role clearly communicated to you	0.202073
(d)	Overall quality, amount of challenge	0.088083
(e)	Ample opportunity available for career growth	0.015544
(f)	Targets are clearly defined & communicated	-0.015544
(g)	Respect, fair treatment, support & guidance you are receiving from your superiors	-0.056995
(h)	Feeling of worthwhile accomplishment for doing this job	-0.124352
(i)	Personal growth & development	-0.139896
(j)	Colleagues & coworkers	-0.155440
(k)	Sufficient trainings are giving when required	-0.155440

* *Deviation between satisfaction level of present job and previous job.*
(Formula for deviation=arithmetic mean (level of satisfaction for previous job) - arithmetic mean (level of satisfaction for present job))

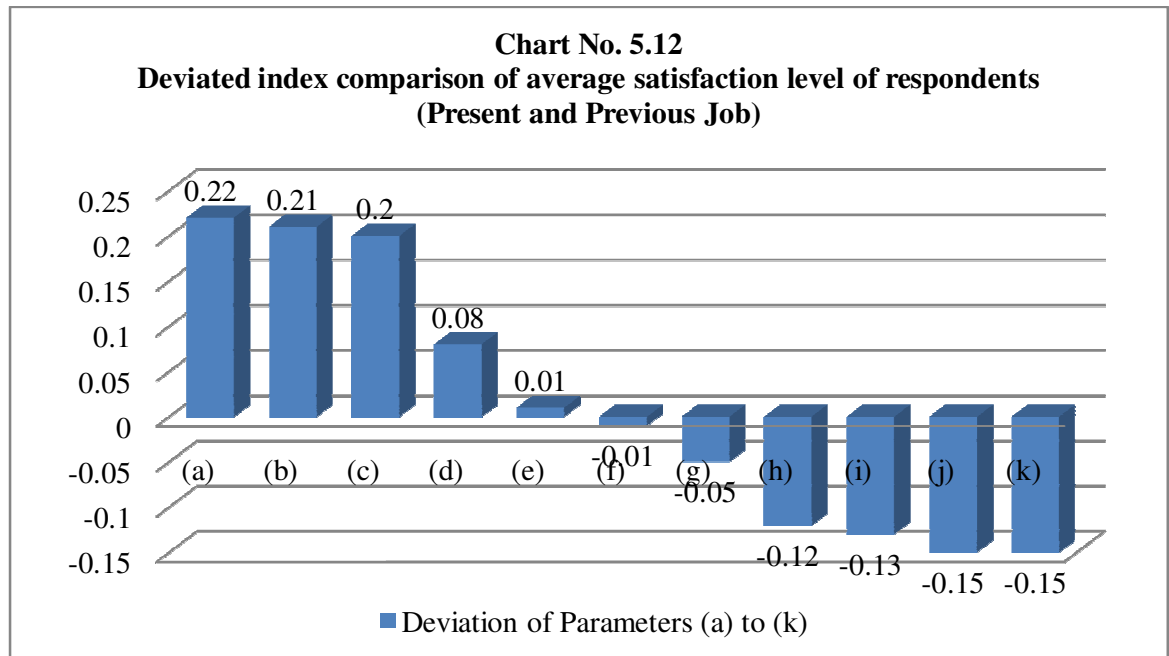
Source: Field Investigation

At the same time there are several other parameters like (f) targets are clearly defined and communicated; (g) respect, fair treatment, support and guidance received from superiors; (h) feeling of worthwhile accomplishment for doing this job; (i) personal growth and development; (j) colleagues and coworkers; and (k) arrangement of sufficient trainings whenever required.

The factors from (a) to (e), as will be seen from the bar **Chart No. 5.12**, indicate a higher and a more positive level of satisfaction level in the job in present workplace in comparison to the job in the previous company. While, the six factors listed from (f) to (k) go to indicate, according to a perception of workers, that the position obtained in the previous job appear to be better in the previous company than in the Present IT workplace.

It may be noted that, the deviation level of the satisfaction obtained in the present job in relation to previous job in other companies has been obtained with the help of the following formula-

“Deviation=arithmetic mean (level of satisfaction for previous job) - arithmetic mean (level of satisfaction for present job)”.



It needs to specifically mentioned that the deviation level obtained in respect of these eleven parameters is not additive therefore a composite index of satisfaction level has not been worked out. However, the negative scores given by the respondents in respect of six factors listed from (f) to (k) would certainly be a matter of concern policy makers in the present workplace, since the value of these parameters obtained above the zero level mark would go a long way in reducing the attrition rate to some extent.

In the present study respondent workers belongs to the company which operates into IT sector. This results into a common phenomenon of high expectation of the management from their employees and further supported by the higher pay packets. In a comparative manner pay packages from IT sector are high enough in comparison to the Automobile sector. To fulfill these expectations of management there might be a chance of increasing stress along with other profession related hazards among IT sector employees. To this regards, concerning present study, efforts have been made to find out relationship between high expectations and professional hazards. In such a case professional hazards have been identified as; as (a) headache; (b) twinges; (c) muscle trembling; (d) lack of appetite; and (e) sickness.

It may be seen from **Table No. 5.13** which brings out the views of the respondents in regard to above listed physical hardships and their comparative levels in the present workplace job and in the previous company. It would be seen that the frequency of occurrences of these physical handicaps in present workplace was of a much lower order than in the previous assignment. The effect of these was felt on two major variables namely, (i) increase in the errors due to the above listed problems; and (ii) the effect it would entail on the efficiency of the workers. All these responses relating to parameters from (a) to (e) and there cumulative impact on items (i) and (ii) would clearly indicate that the position obtained in the present workplace, as brought out on a five point scale, appears to be more positive and favorable for the workforce than was obtained in previous jobs in other companies. Considering the fact that, the present workplace would always offer a far more congenial work culture than the previous companies such a situation was to be expected and it would certainly reduce the attrition rate because of a positive impact on a psyche of a workers.

Table No. 5.13
Showing physical difficulties observed at work place and its effect on efficiency

(No. of employees in percentages)

S. N.	Physical Problems	Frequency of occurrence Present (in brackets – Previous)						* N/A	Total
		Never	Rarely	Sometime	Frequently	Always			
I	II	III	IV	V	VI	VII	VIII	IX	
(a)	Headache	22 (16)	25 (25)	36 (21)	16 (5)	1 (2)	0 (30)	100 (100)	
(b)	Twinges	20 (23)	31 (5)	41 (30)	7 (10)	1 (1)	0 (30)	100 (100)	
(c)	Muscle Trembling	25 (23)	35 (21)	32 (22)	7 (4)	1 (1)	0 (30)	100 (100)	
(d)	Lack of appetite	21 (11)	29 (21)	37 (30)	11 (7)	2 (1)	0 (30)	100 (100)	
(e)	Sickness	20 (13)	35 (15)	31 (35)	12 (4)	3 (3)	0 (30)	100 (100)	
(i)	Increase in errors due to above problems	27 (23)	28 (24)	34 (19)	9 (4)	1 (1)	0 (30)	100 (100)	
(ii)	Effect on efficiency	30 (32)	17 (5)	39 (25)	7 (4)	7 (4)	0 (30)	100 (100)	

* N/A- Not applicable, because under this category all employees are fresher and worked in only one organization.

Source: Field investigation

Quite apart from this, the impact of the factors leading to professional hazards listed above their impact on the generation of errors during the course of execution of job would be an interesting factor and the comparison of such an impact in present workplace in relation to the previous job will also constitute a healthy work culture. It will be seen that in present job the impact of the causative factors relating to professional hazards was of a much lower order than that of a previous job. Such an impact would definitely affect the efficiency of the workers. It would be seen that the efficiency of the present workplace was not affected to the extent of previous job.

It should be emphasized that, the attrition rate would be greatly influenced by the sense of belongingness of the workers to the company in which they are operating. It may also be pointed that the sense of belonging would be different as between the various categories of workers whether (a) Analyst Programmer; (b) Sr. Analyst Programmer; (c) Project Supervisor; (d) Project Lead; (e) Vertical Head; and (f) Trainee; and (g) the category of Any other.

It would appear from the data furnished in *Table No. 5.13(A)* that the sense of belonging of the respondents in present workplace is much higher than what it was in the previous company. This aspect is true of all the category of workers listed above. This is purely a psychological factor but even then it has considerable impact on whether the workers would like to continue in the present assignment or would like to change for a job in some other company.

Table No. 5.13 (A)
Showing belongingness of respondents to formal and informal group at
workplace

(In Percentages)

S. N.	Designations of Respondents	Present Company			Previous Company			
		Yes	No	Grand Total	Yes	No	N/A	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX
1	Analyst Programmer	60.96	39.04	100.00	17.12	58.22	24.66	100.00
2	other	100.00	0.00	100.00	11.11	33.33	55.56	100.00
3	Project Lead	64.29	35.71	100.00	17.86	75.00	7.14	100.00
4	Project Supervisor	81.25	18.75	100.00	6.25	50.00	43.75	100.00
5	Sr. Analyst Programmer	60.00	40.00	100.00	23.33	53.33	23.33	100.00
6	Trainee	44.83	55.17	100.00	17.24	20.69	62.07	100.00
7	vertical Head	76.47	23.53	100.00	35.29	23.53	41.18	100.00
8	Grand Total	62.91	37.09	100.00	18.18	52.00	29.82	100.00

Source: Field Investigation

As the workers operate in any industrial establishment, whether they like it or not, they get attracted and attached to some groups of their choices and liking. These groups normally get constituted formally and as such, have the approval and even the blessings of the management. The question however is whether such an attachment to formal groups of the workers having the recognition of the management produces any impact on the level of efficiency during the course of the job they are supposed to execute. Quite naturally the pattern and extent of such an impact would depend on the category which the worker belongs. The respondent workers were questioned on these counts and the scores obtained have been presented in *Table No. 5.14*. Without going into the details it appears possible to suggest that the fact of belonging to the formal groups or not belonging to it does not produce a considerable impact on the efficiency

level of the workers. This is the perception of the workers in present company at all levels and one wonders if there is any point in creation of such formal groups if the idea is to create cohesion among workers in the hope that it would improve the efficiency level.

Table No. 5.14

Showing EFFECTIVENESS of belongingness of respondents to FORMAL group at workplace on the efficiency of respondents

S. N.	Designation	Belongs to Formal Group (No. of employees-In Percentage)									
		Yes						Yes Total	** N/A	No Total	Grand Total
		*1	*2	*3	*4	*5	*N/A				
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
(a)	Analyst Programmer	0%	0%	27%	0%	7%	27%	61%	39%	0%	100%
(b)	Sr. Analyst Programmer	13%	17%	7%	7%	0%	17%	60%	40%	0%	100%
(c)	Project Supervisor	0%	6%	25%	13%	0%	38%	81%	19%	0%	100%
(d)	Project Lead	0%	7%	11%	0%	0%	46%	64%	36%	0%	100%
(e)	vertical Head	6%	53%	0%	0%	12%	6%	76%	24%	0%	100%
(f)	Trainee	7%	0%	17%	0%	21%	0%	45%	55%	0%	100%
(g)	Any Other	0%	0%	33%	22%	11%	33%	100%	0%	0%	100%
	Grand Total	3%	6%	20%	2%	7%	25%	63%	37%	0%	100%

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always, N/A=Not belongs to any group; **N/A= Fresher, working in one organization only

Source: Field Investigation

As pointed out in previous chapter, another significant factor in any industrial set up is the prevalence of the trade unions and the status of workers in respect of joining the trade unions and in the course of time, developing a sense of belonging and affiliation to the trade unions. It is generally observed that in several industrial establishments in India, the rule of one union per industry is not followed. But as a matter of fact, in relation to the present IT workplace under consideration, it has to be

mentioned here that, there is no any formal employees union is operative. This fact would be seen from **Table No. 5.15**, none of the employees belongs to the employee's trade union in the present workplace while only negligible work force numbered to 2.55 per cent have been attached to the employee's union in previous workplace. The reasons for not associating in workers union have been furnished in **Table No. 5.15(A)**. As would be observed from the table more than three fifth of the respondents (66.91 per cent to be exact) does not know about any trade union in the present workplace while 19.27 per cent of the respondents stated that they are not interested to either join to the trade union or to get to know about it. Only 12 per cent respondents stressed reason that the trade union is not registered and 1.82 per cent stated that the trade union was not accepted by management.

Table No. 5.15

Showing belongingness of respondents to Employees Union at workplace

S. N.	Designations	Belonging to Union						
		Present Work Place			Previous Work Place			
		Yes	No	Total	Yes	No	N/A	Total
I	II	III	IV	V	VI	VII	VIII	IX
1	Analyst Programmer	0%	53.09%	100.00%	0.00%	75.34%	24.66%	100.00%
2	other	0%	3.27%	100.00%	11.11%	33.33%	55.56%	100.00%
3	Project Lead	0%	10.18%	100.00%	7.14%	85.71%	7.14%	100.00%
4	Project Supervisor	0%	5.82%	100.00%	6.25%	50.00%	43.75%	100.00%
5	Sr. Analyst Programmer	0%	10.91%	100.00%	6.67%	70.00%	23.33%	100.00%
6	Trainee	0%	10.55%	100.00%	0.00%	37.93%	62.07%	100.00%
7	vertical Head	0%	6.18%	100.00%	5.88%	52.94%	41.18%	100.00%
8	Grand Total	0%	100.00%	100.00%	2.55%	67.64%	29.82%	100.00%

Source: Field Investigation

Table No. 5.15 (A)

Reasons for not belonging to union (Present Workplace)

S. N.	Designation	Present Work Place				Grand Total
		No Union	Not Registered	Not Interested	Not Accepted	
I	II	III	IV	V	VI	VII
1	Analyst Programmer	63.01%	11.64%	25.34%	0.00%	100.00%
2	other	77.78%	0.00%	22.22%	0.00%	100.00%

S. N.	Designation	Present Work Place				Grand Total
		No Union	Not Registered	Not Interested	Not Accepted	
3	Project Lead	75.00%	14.29%	10.71%	0.00%	100.00%
4	Project Supervisor	56.25%	6.25%	37.50%	0.00%	100.00%
5	Sr. Analyst Programmer	70.00%	26.67%	3.33%	0.00%	100.00%
6	Trainee	72.41%	3.45%	6.90%	17.24%	100.00%
7	vertical Head	76.47%	11.76%	11.76%	0.00%	100.00%
8	Grand Total	66.91%	12.00%	19.27%	1.82%	100.00%

** Belongs to the category who are not belongs to union

***Belongs to fresher employees plus who are not belong to union

Source: Field Investigation

In respect of previous companies where the respondents were working previously stated the same reasons for not joining the unions with slight variation with the reasons mentioned for present workplace. This aspect has been presented in **Table No. 5.15(B)**. Without going into the further details, it may be pointed out that the employees in IT sector are still unorganized. One need not go into the details of the quantified responses but it would be obvious that the lack of trade unions causing poor impact on the decision making of the management is not a very healthy state of affair and could lead to a higher rate of attrition.

Table No. 5.15 (B)

Reasons for not belonging to union (Previous Workplace)

S. N.	Designation	Present Work Place					Grand Total
		No Union	Not Registered	Not Interested	Not Accepted	*N/A	
I	II	III	IV	V	VI	VII	VIII
1	Analyst Programmer	52.74%	17.12%	5.48%	0.00%	24.66%	100.00%
2	other	44.44%	0.00%	0.00%	0.00%	55.56%	100.00%
3	Project Lead	75.00%	7.14%	10.71%	0.00%	7.14%	100.00%
4	Project Supervisor	43.75%	6.25%	6.25%	0.00%	43.75%	100.00%
5	Sr. Analyst Programmer	63.33%	10.00%	3.33%	0.00%	23.33%	100.00%
6	Trainee	37.93%	0.00%	0.00%	0.00%	62.07%	100.00%
7	vertical Head	52.94%	0.00%	0.00%	5.88%	41.18%	100.00%
8	Grand Total	53.82%	11.27%	4.73%	0.36%	29.82%	100.00%

*Belongs to fresher employees plus who are not belongs to union | Source: Field Investigation

The mobility of workers from one industrial organizational setup to another could be a result of a variety of factors causing such movements. Fourteen parameters

have been listed which would make for movement of the workers possible. These factors are (a) Improving experience; (b) Career growth; (c) Compensation; (d) Better designation; (e) Work Culture; (f) Role is clear; (g) Challenging job; (h) Good relation with supervisor; (i) Independence while performing job; (j) Bearable work stress; (k) Parental Mobility; (l) No role Stress; (m) Never desired to work in one organization; and (n) No learning in job. All these factors are a combination of variables which would pool the workers from the previous workplace to the fresh one. At the same time the much seen factors could be responsible for pushing the workers from the previous job to the newer assignments. It has to be emphasized, however, that the permutations and combinations of these factors would be different and their quantitative assessment also be different when they are operating either on the pull side and push side.

It needs to be mentioned that the type of industrial activity, whether manufacturing or providing services would also determine both the qualitative and quantitative assessments of the respondents in respect of whether they would like to continue with the present assignment or to change over to the fresh job. Whichever way the respondents react would affect the factor of mobility and quite naturally affect the mobility of the workers and influence the attrition rate.

Fourteen such factors influencing the decision of workers whether to continue in present job or to move to a new one have been identified. And the perceptions of the respondents were obtained on the basis of pre-structured questionnaire and quantified on a five point scale to assess the relative significance of each one of these fourteen variables which were responsible for causing or preventing attrition phenomena. These details have been presented in *Table No. 5.16* and *Pie Diagram 5.16*. It may be mentioned that most of these parameters are identical and have a tendency to operate with different levels of significance depending up on the nature of environment whether manufacturing or the service oriented.

Table No. 5.16

Showing the reasons for joining the present company (In order of preference)

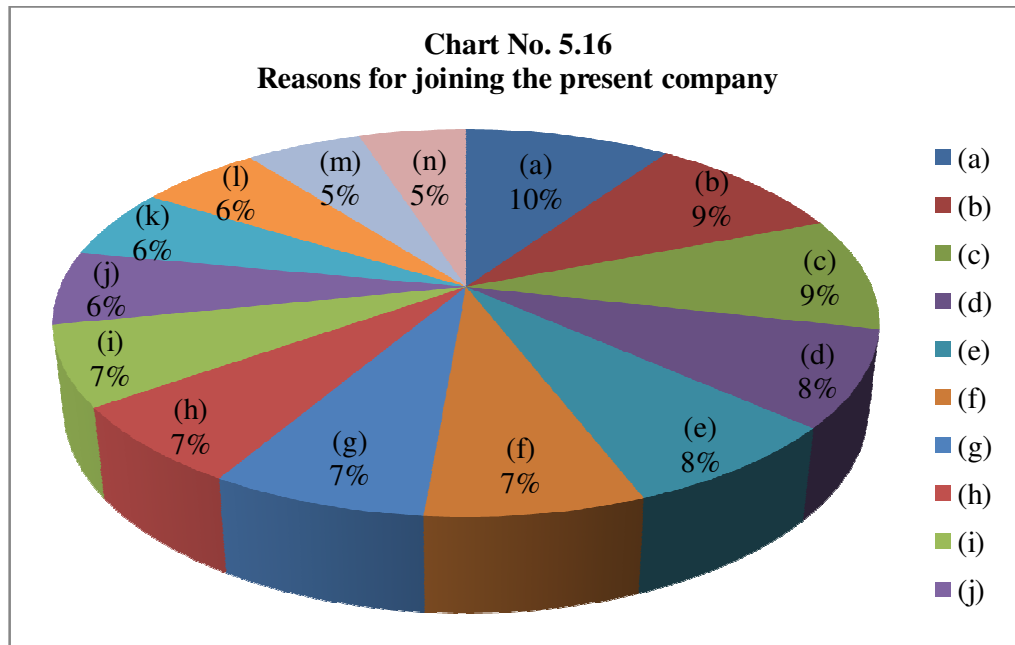
S. N.	Factors under consideration	Per cent of Respondents
I	II	III
(a)	Improving experience	8.36

S. N.	Factors under consideration	Per cent of Respondents
(b)	Career growth	8.09
(c)	Compensation	7.64
(d)	Better designation	7.56
(e)	Work culture	7.49
(f)	Role is clear	7.36
(g)	Challenging job	7.35
(h)	Good relation with supervisor	7.32
(i)	Independence while performing job	7.18
(j)	Bearable work stress	6.71
(k)	Parental mobility	6.46
(l)	No role stress	6.33
(m)	Never desire work one org.	6.32
(n)	No learning in job	5.83
	Grand Total	100.00

Source: Field Investigation

The reasons mentioned by the respondents for moving to present IT workplace in the order of preference have been improving experience (8.36 per cent); Career growth (8.09 per cent); Compensation (7.64 per cent); Better designation (7.56 per cent); Work Culture (7.49); Role is clear (7.36 per cent); Challenging job (7.35 per cent); Good relation with supervisor (7.32 per cent). The other factors making significant contribution included Independence while performing job (7.18 per cent; Bearable work stress (6.71 per cent); Parental Mobility (6.46 per cent); No role Stress (6.33 per cent); Never desired to work in one organization (6.32 per cent); and No learning in job (5.83 per cent)..

It must be mentioned that the quantification of the reaction of the respondents in this regard has to be treated only as indicative and a firm quantification level need not be assigned to each one of the parameters. The reason obviously being that most of these parameters have psycho-social bearing and they do not lend to easy quantification. Nevertheless, the quantified responses reasonably indicate the style of thinking of respondent workers and could be considered as fairly supportive reasons as to why the workers shifted from the previous jobs to the present workplace.



However, it is not sufficient to consider the proposition of mobility purely from the angle of movements towards present workplace, but it should be looked into from the angle as to why the respondents like to switch over from the earlier jobs and the quantified reasons for taking such a decision. These details have been presented in **Table No. 5.17** and illustrated in the **Pie-Diagram 5.17**.

In this context, the factors which were operative in the minds of workers for getting out from previous jobs were; (a) Compensation (9.62 per cent); (b) Better designation (9.46 per cent); (c) Better work profile (9.42 per cent); (d) Lack of career growth (8.05 per cent); (e) Higher studies (7.58 per cent); (f) No learning in job (7.23 per cent); (g) Role stress (7.16 per cent); (h) No challenge in job (6.69 per cent); (i) Unfavorable work culture (6.66 per cent); (j) Unfavorable working environment (6.13 per cent); (k) Parental mobility distance (5.84 per cent); (l) Not get along with the immediate superior (5.71 cent); (m) Unbearable work pressure (5.44 per cent); (n) Never desire to work within one org (5.02 cent).

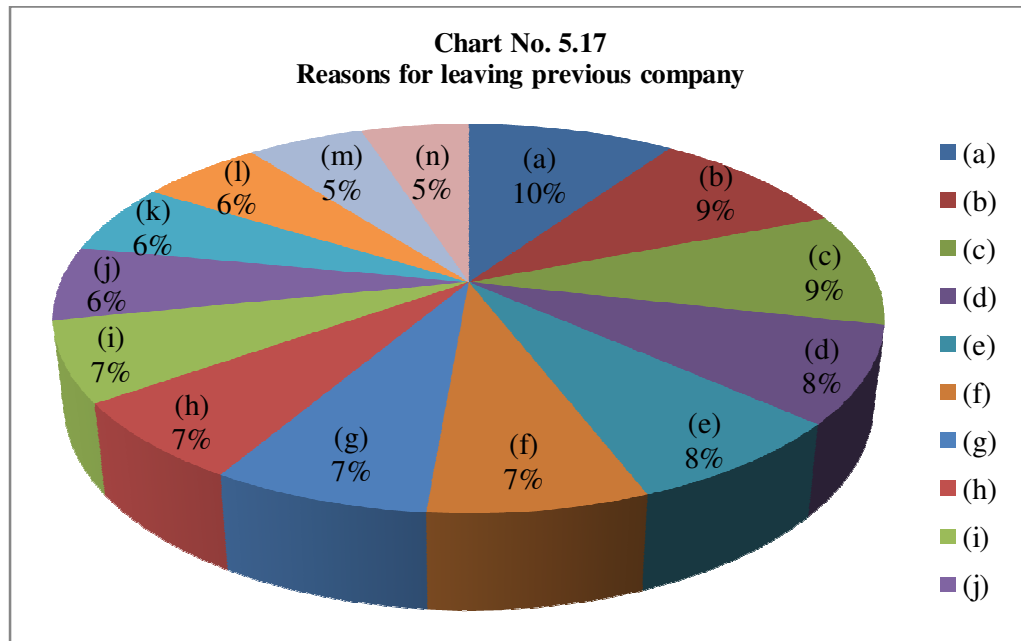
As earlier, it must be pointed out, that all these factors with their permutations and combinations have a very strong psycho social bias and easy quantification appears to be difficult. Nevertheless, the quantified values could be treated as of indicative nature only. Quite apart from these observations, in the following paragraphs an attempt has been made to bring about relationship between several

other parameters and an effort has also be made to quantify these relationship as they would affect the attrition phenomena and influence the rate of attrition.

Table No. 5.17
Showing the reasons for leaving the previous company (Arranged by higher priority)

S. N.	Factors under consideration	Per cent of Respondents
I	II	III
(a)	Compensation	9.62
(b)	Better designation	9.46
(c)	Better work profile	9.42
(d)	Lack of career growth	8.05
(e)	Higher studies	7.58
(f)	No learning in job	7.23
(g)	Role stress	7.16
(h)	No challenge in job	6.69
(i)	Unfavorable work culture	6.66
(j)	Unfavorable working environment	6.13
(k)	Parental mobility distance	5.84
(l)	Not get along with the immediate superior	5.71
(m)	Unbearable work pressure	5.44
(n)	Never desire to work within one org.	5.02
	Grand Total	100.00

Source: Field Investigation



To reduce the impact of attrition and bring about the lowering down of attrition rate, it goes without saying that the management has to design appropriate policy mix and evolve schemes and procedures to achieve this object. It is quite natural that such a policy mix will have to be different for different category of employees and the appropriateness of such a policy would be relevant to a category of employees being considered. During the course of the present study respondents are questioned in regard to the appropriateness of the policy of the present workplace and responses obtained were understandably different for the different categories of employees. These responses have been presented in *Table No. 5.18* and illustrated in the *Pie Diagram 5.18*.

Table No. 5.18
Designation wise distribution of opinions regarding ‘proper management with appropriate policy mix will avoid unusual leaving of highly performing employees’

S.N.	Designation	Opinion		
		Yes	No	Grand Total
I	II	III	IV	V
(a)	Analyst Programmer	100.00%	0.00%	100.00%
(b)	Other	88.89%	11.11%	100.00%
(c)	Project Lead	100.00%	0.00%	100.00%
(d)	Project Supervisor	100.00%	0.00%	100.00%

S.N.	Designation	Opinion		
		Yes	No	Grand Total
(e)	Sr. Analyst Programmer	86.67%	13.33%	100.00%
(f)	Trainee	93.10%	6.90%	100.00%
(g)	vertical Head	94.12%	5.88%	100.00%
(h)	Grand Total	97.09%	2.91%	100.00%

Source: Field Investigation

In case of the category of; (a) analyst programmer all the respondents (100 per cent) were of the opinion that the policy formulated in present workplace in this regards has been appropriate, while in the case of category (b) of Sr. Analyst Programmer a little over 85 per cent of the respondents held similar view. In the category of (c) Project lead the entire (100 per cent) group of respondents was having similar view and similar proportionate of the view obtained from category of (d) project supervisor. In the category of employees belonging to (e) vertical head the appropriateness of the policy was questioned and a little over 94 per cent of the respondents observed favorable while category of the respondents (f) trainee exactly 93.10 per cent observed to be said that appropriateness of the policy mix was desirable at present workplace. In a category (g) any other 88.89 per cent of the respondents observed in this category agreed to the suggestions that the policy of the present workplace was desirable. Thus it will be seen a very substantial proportion of the employees responding to the questionnaire and belonging to the various categories mentioned above were quite happy about the appropriateness about the policy mix structured by the present workplace which according their perception would prevent leaving of the assignment in the present workplace under consideration.

Section-(D) Skills and Other Parameters:

In the present section, information obtained during the field investigation in the context of the skills of workers and various other related parameters has been processed, tabulated and analyzed category wise of the workers basically with the help of 4 tables. However, since the information was related to various aspects of the main parameter, it was thought desirable to subdivide each one of the table into several others for purposes of better comprehension of the collected information.

When the workers are recruited in the workplace under consideration and are placed into various categories such as (a) machine operation (office), (b) clerical, (c) managerial, (d) leadership, (e) functional, (f) motivating other employees, (g) presentation skills, (h) problem solving ability, (i) error handling capacity, (j) soft-skills, (k) programming knowledge, (l) software knowledge. These workers are endowed with several skills and the question is as to whether they get opportunities to utilize those skills on a regular basis or once in a while. Therefore, the responses obtained were placed on a five point scale with a view to quantifying the frequency of use of the skills which the respondents possess and these responses were suitably quantified as indicated in the foot note of **Table No. 5.19 (A) to (L)** illustrated by appropriate *pie diagrams* for each one of the category of work force.

It may be cumbersome to offer comments with respect to each one of the categories specifically with respect to the functions performed by the respondents. Therefore, it was thought desirable to offer comments only in respect of the grand total for each of these categories and that too for the frequency of the uses described as always and numbered at five in table 5.19 (A) to (L).

Before going into the comments of the data presented in table no. 5.19 (A) to (L), it needs to be emphasized that, the quantified responses obtained from the respondent workers would constitute meaningful inputs for purposes of conducting human audit. So, in case of an occurrence of a vacancy in one category, the decision maker in IT companies can look around for suitable replacement from amongst the workforce operating in other categories. And only if such suitable replacement is not obtained, the decision maker can think in terms of obtaining such replacements from outside. Such a policy format would be very useful from the point of view of the

smooth functioning of the organization as the replacements would be made available from within the existing workforce. Thereby, reducing the time and cost involved and would go a long way in improving efficiency of the establishment.

Starting off with category *machine operation (production)*, it has to be mentioned here that IT sector is basically regarded as a service providing sector, hence, one cannot observe direct production process in the IT sector. Moreover, certain debates can be offered in this regards for defining production and services provided by the IT Companies. But considering the opinions of respondents of present workplace it has been observed that in IT sector skills related to machine operation has not been observed. Thus, there is no data observed in this regards.

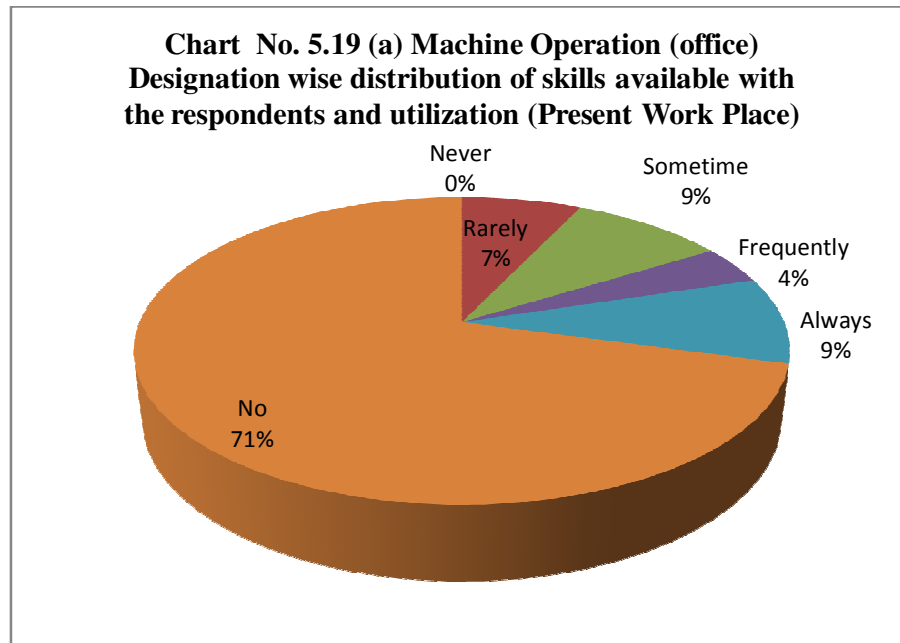
In respect of category *(a) machine operation-office*, the detailed responses have been presented in *Table No. 5.19(a)* and illustrated in *pie diagram 5.19(a)*, it would be seen that only 9 per cent utilized the skill always while only 4 per cent did so frequently and the balance 70 per cent did not possess this skill at all.

Table No. 5.19(a)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
Machine Operation (Production) Not used									
5.19 (a) Machine Operation (office)									
1	Analyst Programmer	29%	0%	10%	10%	0%	9%	71%	100%
2	other	22%	0%	0%	0%	11%	11%	78%	100%
3	Project Lead	25%	0%	4%	14%	7%	0%	75%	100%
4	Project Supervisor	56%	0%	19%	25%	0%	13%	44%	100%
5	Sr. Analyst Programmer	17%	0%	0%	7%	10%	0%	83%	100%
6	Trainee	21%	0%	0%	0%	17%	3%	79%	100%
7	vertical Head	71%	0%	6%	12%	0%	53%	29%	100%
8	Grand Total	30%	0%	7%	9%	4%	9%	70%	100%

Source: Field Investigation



In regard to the category *(b) clerical*, the detailed responses have been presented in *Table No. 5.19(b)* and illustrated in *pie diagram 5.19(b)*, it will be seen that, in IT company paper work is very negligible hence nobody observed doing clerical work 'always', while only 2 per cent of them used frequently. It would be seen that 83 per cent of the respondents from this category did not possess this skill at all.

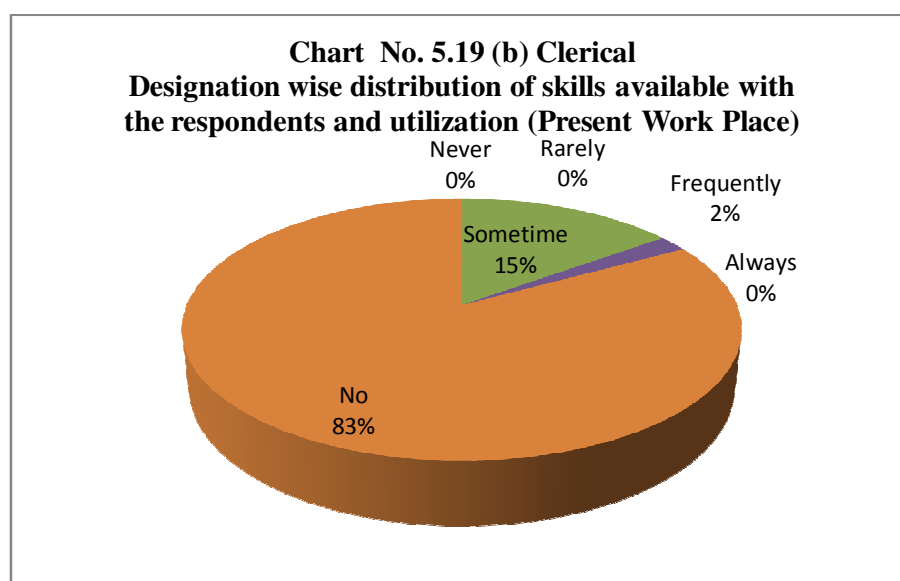
**Table No. 5.19(b)
Designation wise distribution of skills available with the respondents and
utilization (Present Work Place)**

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (b) Clerical									
1	Analyst Programmer	14%	0%	0%	14%	0%	0%	86%	100%
2	other	11%	0%	0%	11%	0%	0%	89%	100%
3	Project Lead	14%	0%	0%	14%	0%	0%	86%	100%
4	Project Supervisor	31%	0%	0%	31%	0%	0%	69%	100%
5	Sr. Analyst Programmer	0%	0%	0%	0%	0%	0%	100%	100%
6	Trainee	21%	0%	0%	0%	17%	3%	79%	100%

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
7	vertical Head	65%	0%	0%	59%	6%	0%	35%	100%
8	Grand Total	17%	0%	0%	15%	2%	0%	83%	100%

Source: Field Investigation



In regard to the responses in category *(c) managerial*, the details are presented in *Table No. 5.19(c)* and illustrated in *pie diagram 5.19(c)*, it would be seen that only 2 per cent of the respondents were required to use the skills always while 25 per cent of them use it frequently. It may be pointed out that 67 per cent of the respondents in this category did not possess the managerial skill at all.

Table No. 5.19(c)

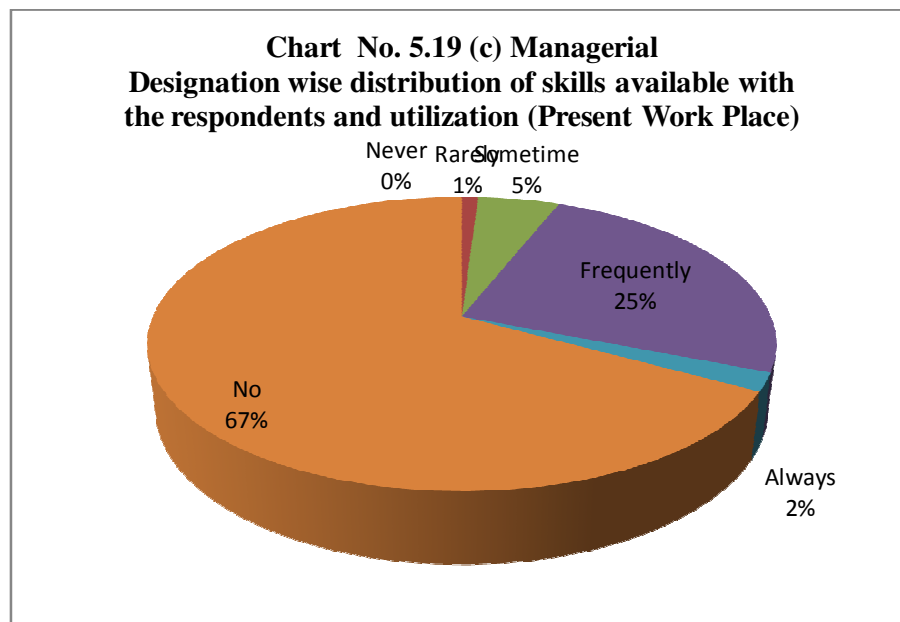
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (c) Managerial									
1	Analyst Programmer	26%	0%	0%	3%	23%	0%	74%	100%
2	other	11%	0%	0%	11%	0%	0%	89%	100%

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
3	Project Lead	64%	0%	7%	4%	43%	11%	36%	100%
4	Project Supervisor	56%	0%	13%	13%	25%	6%	44%	
5	Sr. Analyst Programmer	47%	0%	0%	17%	30%	0%	53%	100%
6	Trainee	3%	0%	0%	0%	0%	3%	97%	100%
7	vertical Head	59%	0%	0%	0%	59%	0%	41%	100%
8	Grand Total	33%	0%	1%	5%	25%	2%	67%	100%

Source: Field Investigation



In the *Table No. 5.19(d)*, *leadership* quality details have been indicated and illustrated in *Pie Diagram 5.19(d)*, it will be seen that only 7 per cent of this category used the leadership skills always while 25 per cent used it frequently. 52 per cent of the respondents in this category did not possess the leadership skills at all.

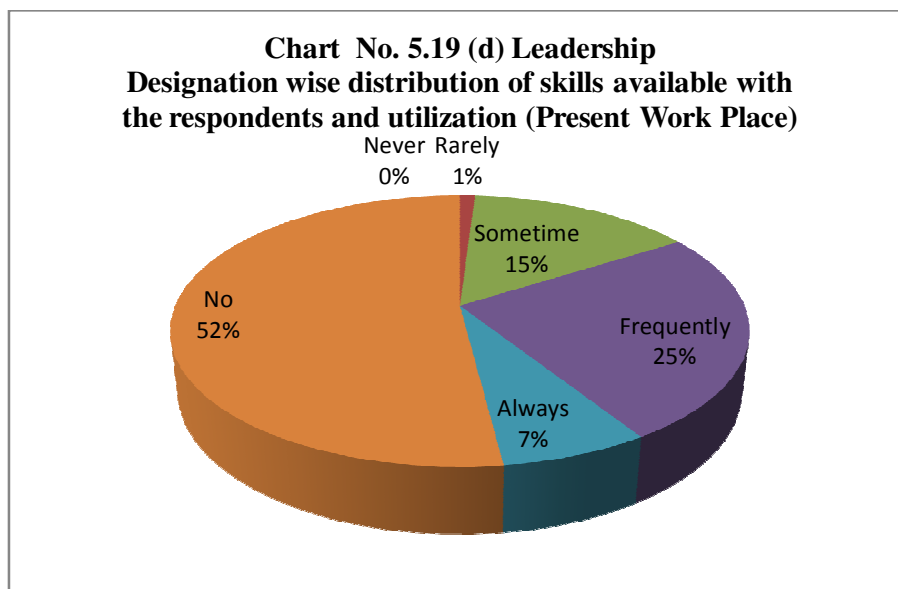
Table No. 5.19(d)

Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (d) Leadership									
1	Analyst Programmer	42%	0%	0%	16%	27%	0%	58%	100%
2	other	11%	0%	0%	11%	0%	0%	89%	100%
3	Project Lead	82%	0%	7%	11%	46%	18%	18%	100%
4	Project Supervisor	100%	0%	13%	50%	13%	25%	0%	100%
5	Sr. Analyst Programmer	60%	0%	0%	10%	50%	0%	40%	100%
6	Trainee	7%	0%	0%	0%	3%	3%	93%	
7	vertical Head	65%	0%	0%	12%	0%	53%	35%	100%
8	Grand Total	48%	0%	1%	15%	25%	7%	52%	100%

Source: Field Investigation



The category of *(e) functional* workers the details have been presented in *Table No. 5.19(e)* and illustrated in the *Pie Diagram 5.19(e)*. It will be seen that only 8 per cent of the respondents in this category possess and utilized always the

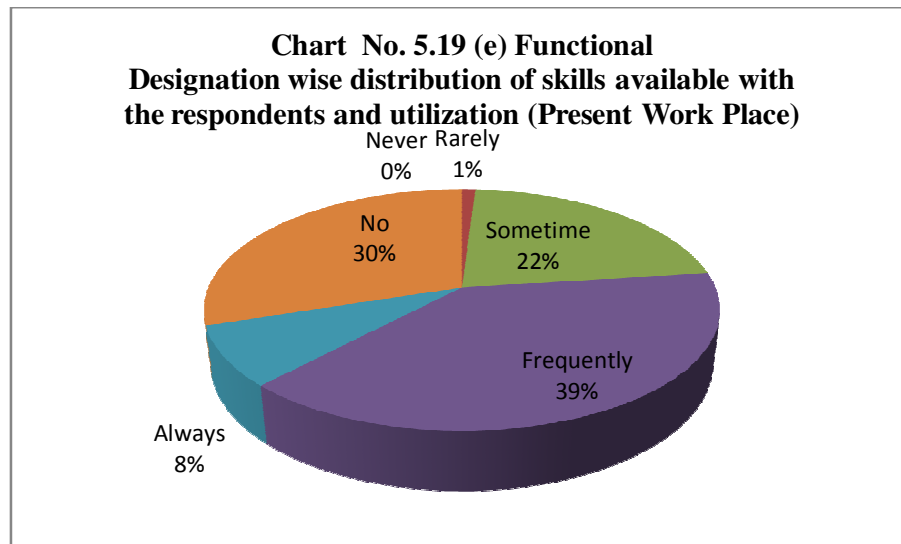
functional skills while 39 per cent utilized them frequently and 30 per cent did not possess such skills.

Table No. 5.19(e)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (e) Functional									
1	Analyst Programmer	71%	0%	0%	25%	43%	3%	29%	100%
2	other	33%	0%	11%	0%	22%	0%	67%	100%
3	Project Lead	71%	0%	0%	11%	43%	18%	29%	100%
4	Project Supervisor	88%	0%	6%	6%	63%	13%	13%	100%
5	Sr. Analyst Programmer	70%	0%	0%	3%	53%	13%	30%	100%
6	Trainee	55%	0%	0%	34%	0%	21%	45%	100%
7	vertical Head	82%	0%	0%	59%	24%	0%	18%	100%
8	Grand Total	70%	0%	1%	22%	39%	8%	30%	100%

Source: Field Investigation



During the course of work a certain category of workers is always pressed into use for *(f) motivating* the other employees for performing their assigned tasks. The

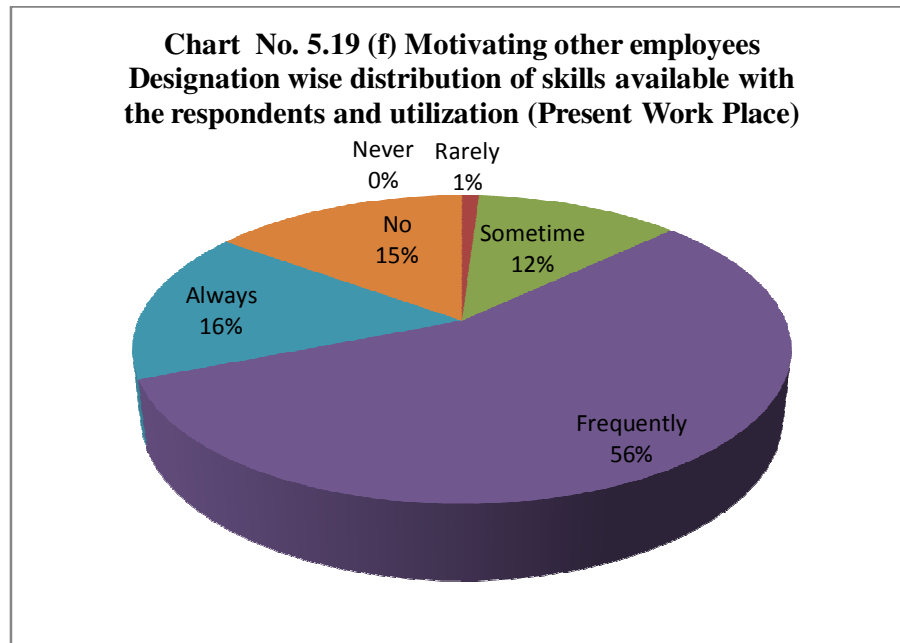
details in this regard have been presented in *Table No. 5.19(f)* and illustrated in *Pie Diagram 5.19(f)*. It will be seen that, only 16 per cent of the respondents from this category always were called up on to utilize these skills while 56 per cent were required to do so always. As many as 15 per cent in this category of respondents has been not possessed this skill at all.

Table No. 5.19(f)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (f) Motivating other employees									
1	Analyst Programmer	90%	0%	0%	10%	75%	5%	10%	100%
2	Other	67%	0%	0%	11%	11%	44%	33%	100%
3	Project Lead	75%	0%	0%	25%	39%	11%	25%	100%
4	Project Supervisor	100%	0%	6%	13%	56%	25%	0%	100%
5	Sr. Analyst Programmer	67%	0%	0%	10%	37%	20%	33%	100%
6	Trainee	83%	0%	0%	17%	34%	31%	17%	100%
7	vertical Head	88%	0%	6%	6%	24%	53%	12%	100%
8	Grand Total	85%	0%	1%	12%	56%	16%	15%	100%

Source: Field Investigation



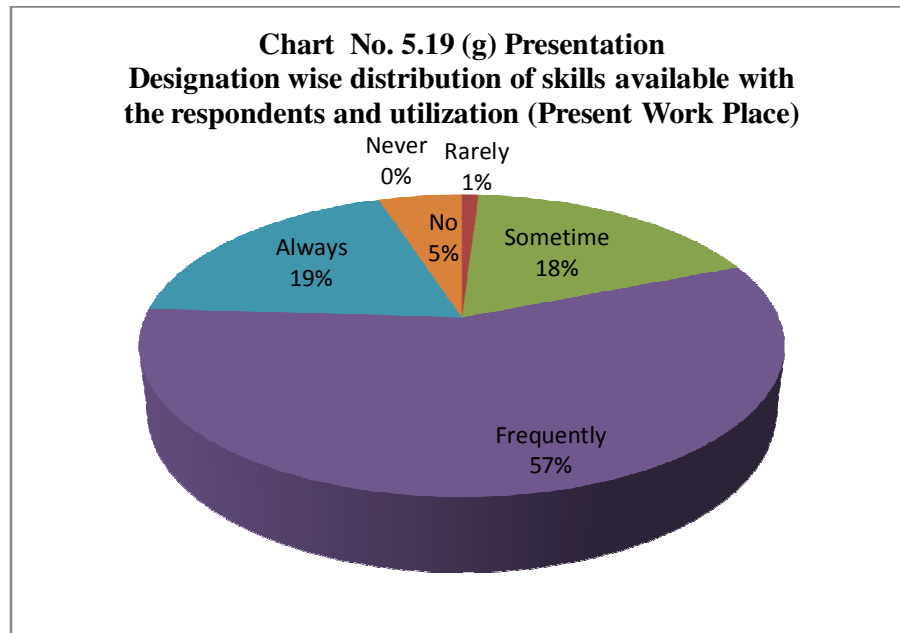
In respect of the *(g) presentation skills* the details have been presented in *Table No. 5.19(g)* and illustrated in *Pie Diagram 5.19(g)*. In this category 19 per cent of the respondents always used the skill while 57 per cent used it frequently. As a matter of fact 95 per cent of the respondents possess the skill.

**Table No. 5.19(g)
Designation wise distribution of skills available with the respondents and
utilization (Present Work Place)**

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (g) Presentation									
1	Analyst Programmer	94%	0%	0%	20%	64%	10%	6%	100%
2	other	89%	0%	0%	11%	44%	33%	11%	100%
3	Project Lead	93%	0%	0%	11%	50%	32%	7%	100%
4	Project Supervisor	94%	0%	0%	6%	38%	50%	6%	100%
5	Sr. Analyst Programmer	93%	0%	0%	23%	47%	23%	7%	100%
6	Trainee	100%	0%	7%	17%	55%	21%	0%	100%
7	vertical Head	100%	0%	0%	24%	59%	18%	0%	100%
8	Grand Total	95%	0%	1%	18%	57%	19%	5%	100%

Source: Field Investigation



In the work place several problems crop up from time to time and a particular category of workers with *(h) problem solving ability* is required to be developed. In respect of this category the details of responses have been presented in **Table No. 5.19(h)** and illustrated in the **Pie Diagram 5.19(h)**. It will be seen that 28 per cent of the respondents in this category were always required to use this skills while 64 per cent of them use this frequently. It may be pointed out that all the respondents from this company (100 per cent) actually possess the problem solving ability.

Table No. 5.19(h)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (h) Problem Solving									
1	Analyst Programmer	100%	0%	0%	7%	68%	25%	0%	100%
2	other	100%	0%	0%	0%	56%	44%	0%	100%
3	Project Lead	100%	0%	0%	14%	50%	36%	0%	100%
4	Project Supervisor	100%	0%	0%	6%	25%	69%	0%	100%
5	Sr. Analyst Programmer	100%	0%	0%	13%	53%	33%	0%	100%

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
6	Trainee	100%	0%	0%	3%	79%	17%	0%	100%
7	vertical Head	100%	0%	6%	0%	88%	6%	0%	100%
8	Grand Total	100%	0%	0%	7%	64%	28%	0%	100%

Source: Field Investigation

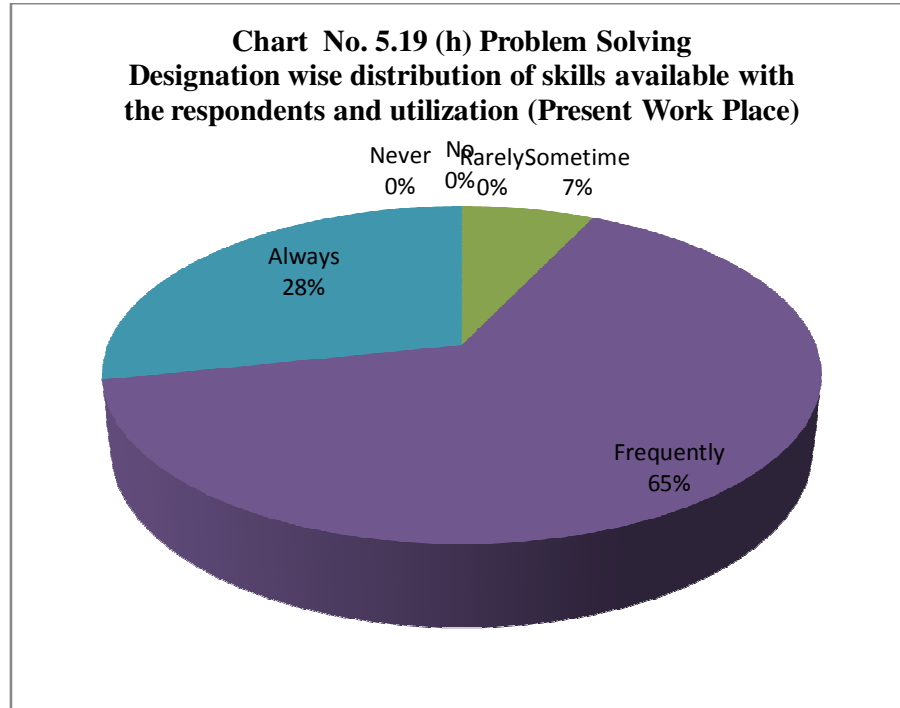


Table No. 5.19(i)

Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

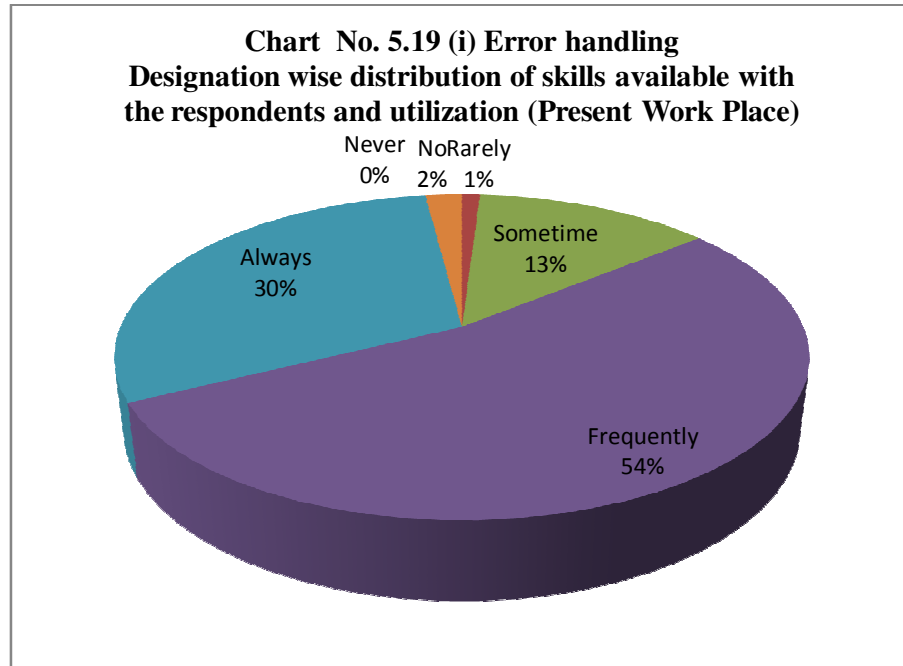
(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (i) Error handling									
1	Analyst Programmer	100%	0%	0%	13%	61%	26%	0%	100%
2	other	100%	0%	0%	0%	44%	56%	0%	100%
3	Project Lead	100%	0%	0%	7%	46%	46%	0%	100%
4	Project Supervisor	94%	0%	0%	6%	25%	63%	6%	100%
5	Sr. Analyst	100%	0%	7%	3%	57%	33%	0%	100%

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
	Programmer								
6	Trainee	83%	0%	3%	7%	52%	21%	17%	100%
7	vertical Head	100%	0%	0%	65%	29%	6%	0%	100%
8	Grand Total	98%	0%	1%	13%	53%	30%	2%	100%

Source: Field Investigation

In the work place during the course of day to day operations several errors occur and the workers required for purposes of *(i) handling these errors* have to be endowed with specific capacity. The details in this regards have been presented in *Table No. 5.19(i)* and illustrated in *Pie Diagram 5.19(i)*. It will be seen that 30 per cent of the workers responding in this category were frequently called up on to utilize the error handling capacity while 53 per cent used it always. It may be pointed out that almost 98 per cent of the respondents in this category possess this skill.



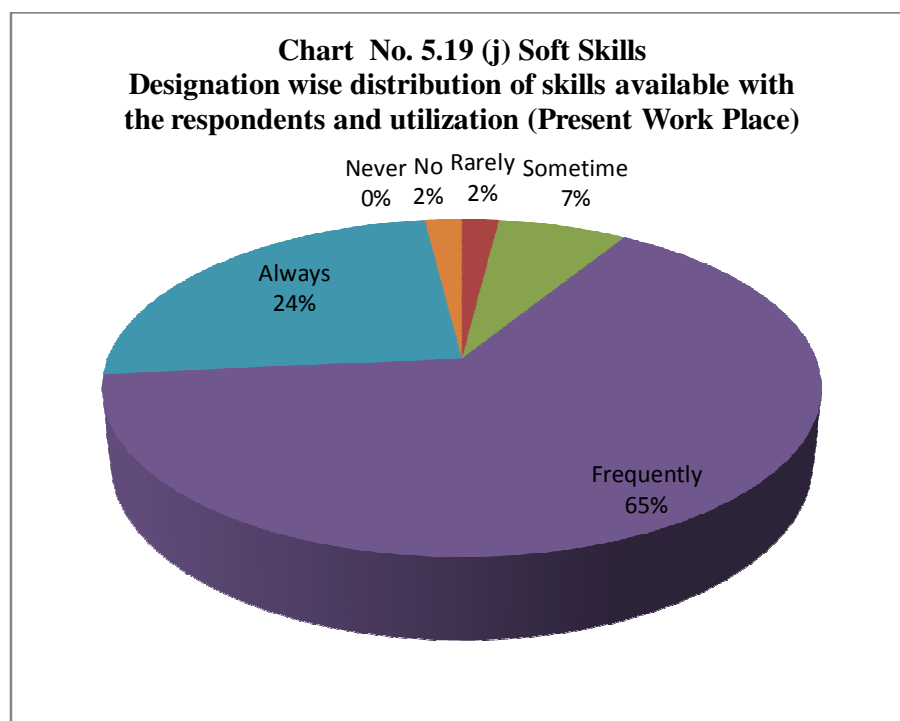
In the workplace *(j) soft-skills* are required in several situations and the responses in this respect have been presented in *Table No. 5.19(j)* and illustrated in *Pie Diagram 5.19(j)*. It will be seen that 25 per cent of the responses in this category always use the soft-skills while 66 per cent of the respondents used frequently. It may be noted that nearby 98 per cent of the respondents possess this skill.

Table No. 5.19(j)
Designation wise distribution of skills available with the respondents and
utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (j) Soft Skills									
1	Analyst Programmer	100%	0%	0%	7%	74%	19%	0%	100%
2	other	100%	0%	0%	0%	56%	44%	0%	100%
3	Project Lead	100%	0%	0%	4%	57%	39%	0%	100%
4	Project Supervisor	100%	0%	0%	13%	44%	44%	0%	100%
5	Sr. Analyst Programmer	100%	0%	3%	7%	70%	20%	3%	100%
6	Trainee	100%	0%	10%	0%	72%	17%	10%	100%
7	vertical Head	100%	0%	6%	29%	18%	47%	6%	100%
8	Grand Total	100%	0%	2%	7%	66%	25%	2%	100%

Source: Field Investigation



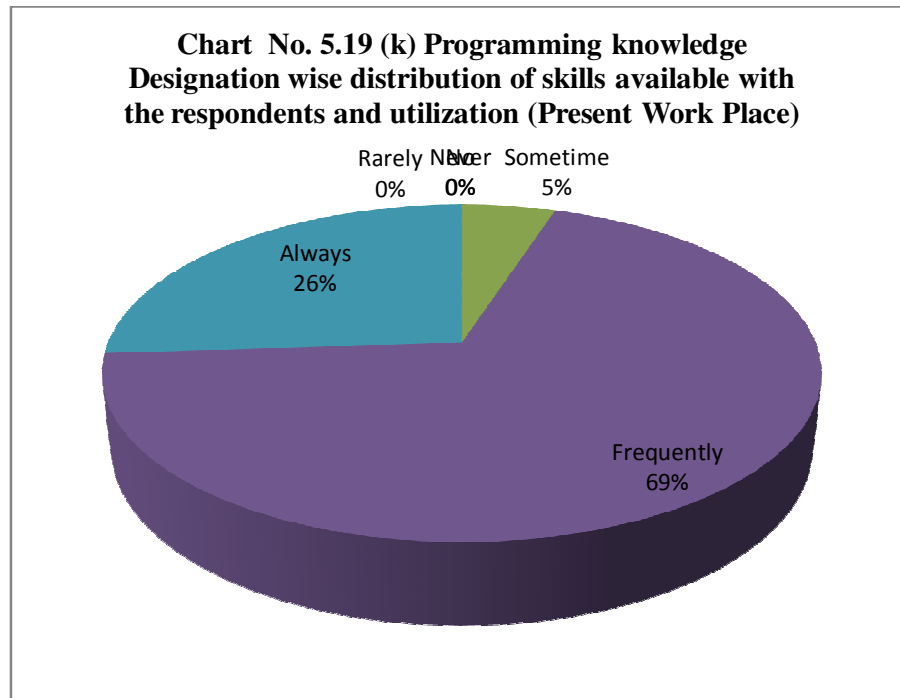
The IT sector is grownup with the advent of computers and their very meaningful contribution in the workplace the workers are bestowed with *(k) programming knowledge* and such workers form a category themselves which has the significant proportion in IT sector. The details of respondents with programming knowledge have been brought out in *Table No. 5.19(k)* and illustrated in *Pie Diagram 5.19(k)*. It will be seen that only 26 per cent of the workers belonging to this category always utilize programming knowledge while 69 per cent utilize it frequently. As a matter of fact 100 per cent of the respondents possess the programming knowledge.

Table No. 5.19(k)
Designation wise distribution of skills available with the respondents and utilization (Present Work Place)

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (k) Programming knowledge									
1	Analyst Programmer	100%	0%	0%	5%	69%	26%	0%	100%
2	other	100%	0%	0%	0%	89%	11%	0%	100%
3	Project Lead	100%	0%	0%	0%	68%	32%	0%	100%
4	Project Supervisor	100%	0%	0%	6%	38%	56%	0%	100%
5	Sr. Analyst Programmer	100%	0%	3%	3%	67%	27%	0%	100%
6	Trainee	100%	0%	0%	17%	79%	3%	0%	100%
7	vertical Head	100%	0%	0%	0%	71%	29%	0%	100%
8	Grand Total	100%	0%	0%	5%	69%	26%	0%	100%

Source: Field Investigation



Apart from programming knowledge the present day IT sector employees are required to have *(l) software knowledge* as well. The responses in this regard have been presented in *Table No. 5.19 (l)* and illustrated in *Pie Diagram 5.19(l)*. It will be seen that 37 per cent of the respondents from this category always used the software knowledge while 51 per cent used it frequently and as will be seen that there is no employee who does not have software knowledge at all.

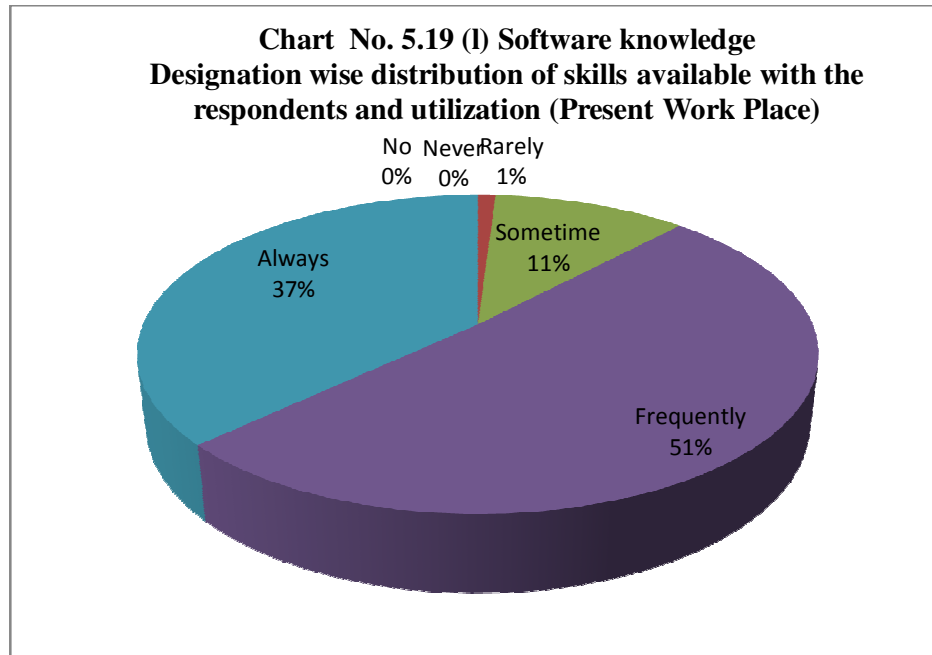
**Table No. 5.19(l)
Designation wise distribution of skills available with the respondents and
utilization (Present Work Place)**

(In Percentages)

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
5.19 (l) Software knowledge									
1	Analyst Programmer	100%	0%	0%	12%	62%	27%	0%	100%
2	other	100%	0%	0%	0%	22%	78%	0%	100%
3	Project Lead	100%	0%	0%	7%	29%	64%	0%	100%
4	Project Supervisor	100%	0%	0%	0%	25%	75%	0%	100%
5	Sr. Analyst	100%	0%	3%	0%	50%	47%	0%	100%

S.N.	Designation	Used in your Job							Total
		Yes (out of 275)	Frequency of Uses					No	
			*1	*2	*3	*4	*5		
I	II	III	IV	V	VI	VII	VIII	IX	X
	Programmer								
6	Trainee	100%	0%	0%	21%	52%	28%	0%	100%
7	vertical Head	100%	0%	6%	24%	41%	29%	0%	100%
8	Grand Total	100%	0%	1%	11%	51%	37%	0%	100%

Source: Field Investigation



Very generally speaking it may be observed that, in all the categories of respondents listed above a very substantial proportion of the respondents had the requisite knowledge and the skill related to programming knowledge, software knowledge, soft skills while only a small proportion of the respondents were either using remaining skill sets either always or frequently. This will indicate the fact that the IT sector workplace had a strong BENCH-STRENGTH which could always be utilized in times of emergency or in situations where the workers left the jobs for some other companies. It may not be wrong to suggest that this aspect of a strong Bench Strength would be a deterrent for the workers to leave the IT Company jobs and as a result would have the impact of reducing the attrition rate.

The aspect has been studied for previous workplace with the help of **Table No. 5.20**. In this table the details of various categories of workers regarding the skills

available have been quantified and presented, such as, Table No. 5.20(a) Machine operation (production); 5.20 (b) Machine operation (office); 5.20(c) clerical category; 5.20(d) managerial; 5.20(e) leadership qualities; 5.20(f) functional; 5.20(g) motivating other employees; 5.20(h) presentation skills; 5.20(i) problem solving ability; 5.20(j) error handling capacity; 5.20(k) soft skills; 5.20(l) programming knowledge; 5.20(m) software knowledge.

Table No. 5.20

Designation wise distribution of skills available with the respondents and utilization (Previous Work Place)

S.N.	Designation	Used in your Job (Figures in Percentages)								
		Yes (out of 275)	Frequency of Uses					**	**No	Total
			*1	*2	*3	*4	*5	N/A		
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
(a)	Machine Operation (Production) Not used									
(b)	Machine Operation (office)									
1	Analyst Programmer	16	0	0	10	0	5	25	60	100
2	other	11	0	0	0	11	0	56	33	100
3	Project Lead	18	0	0	11	7	0	7	75	100
4	Project Supervisor	19	0	0	13	6	0	44	38	100
5	Sr. Analyst Programmer	10	0	0	0	10	0	23	67	100
6	Trainee	3	0	0	0	0	3	62	34	100
7	vertical Head	0	0	0	0	0	0	41	59	100
8	Grand Total	13	0	0	7	3	3	30	57	100
(c)	Clerical									
1	Analyst Programmer	0	0	0	0	0	0	25	75	100
2	other	0	0	0	0	0	0	56	44	100
3	Project Lead	0	0	0	0	0	0%	7	93	100
4	Project Supervisor	0	0	0	0	0	0	44	56	100
5	Sr. Analyst Programmer	0	0	0	0	0	0	23	77	100
6	Trainee	0	0	0	0	0	0	62	38	100
7	vertical Head	0	0	0	0	0	0	41	59	100
8	Grand Total	0	0	0	0	0	0	30	70	100
(d)	Managerial									
1	Analyst Programmer	38	0	0	5	6	26	25	38	100
2	other	44	0	11	22	0	11	56	0	100
3	Project Lead	86	0	0	11	46	29	7	7	100
4	Project Supervisor	50	0	0	19	13	19	44	6	100
5	Sr. Analyst Programmer	60	0	0	3	37	20	23	17	100
6	Trainee	17	0	0	0	17	0	62	21	100

S.N.	Designation	Used in your Job (Figures in Percentages)								
		Yes (out of 275)	Frequency of Uses					**	**No	Total
			*1	*2	*3	*4	*5	N/A		
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
7	vertical Head	59	0	0	24	18	18	41	0	100
8	Grand Total	45	0	0	8	16	21	30	25	100
(e) Leadership										
1	Analyst Programmer	48	0	0	6	15	27	25	27	100
2	other	33	0	0	0	22	11	56	11	100
3	Project Lead	71	0	0	14	21	36	7	21	100
4	Project Supervisor	56	0	0	0	44	13	44	0	100
5	Sr. Analyst Programmer	70	0	0	10	27	33	23	7	100
6	Trainee	38	0	0	0	38	0	62	0	100
7	vertical Head	59	0	0	12	6	41	41	0	100
8	Grand Total	52	0	0	7	21	25	30	18	100
(f) Functional										
1	Analyst Programmer	62	0	0	17	40	5	25	14	100
2	Other	33	0	0	0	22	11	56	11	100
3	Project Lead	86	0	0	4	57	25	7	7	100
4	Project Supervisor	38	0	0	13	13	13	44	19	100
5	Sr. Analyst Programmer	70	0	0	7	50	13	23	7	100
6	Trainee	34	0	0	0	17	17	62	3	100
7	vertical Head	29	0	0	6	6	18	41	29	100
8	Grand Total	58	0	0	11	36	11	30	12	100
(g) Motivating other employees										
1	Analyst Programmer	62	0	0	14	32	16	25	14	100
2	Other	44	0	0	0	33	11	56	0	100
3	Project Lead	86	0	0	11	50	25	7	7	100
4	Project Supervisor	50	0	0	19	19	13	44	6	100
5	Sr. Analyst Programmer	67	0	0	0	47	20	23	10	100
6	Trainee	34	0	0	0	0	34	62	3	100
7	vertical Head	59	0	0	29	6	24	41	0	100
8	Grand Total	60	0	0	11	30	19	30	10	100

S.N.	Designation	Used in your Job (Figures in Percentages)								
		Yes (out of 275)	Frequency of Uses					**	**No	Total
			*1	*2	*3	*4	*5	N/A		
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
(h)	Presentation									
1	Analyst Programmer	67	0	0	7	60	0	25	8	100
2	other	44	0	0	11	33	0	56	0	100
3	Project Lead	89	0	0	14	46	29	7	4	100
4	Project Supervisor	56	0	0	6	44	6	44	0	100
5	Sr. Analyst Programmer	77	0	0	7	47	23	23	0	100
6	Trainee	38	0	0	3	17	17	62	0	100
7	vertical Head	59	0	0	0	41	18	41	0	100
8	Grand Total	65	0	0	7	50	9	30	5	100
(i)	Problem Solving									
1	Analyst Programmer	75	0	0	23	40	12	25	0	100
2	other	44	0	0	11	11	22	56	0	100
3	Project Lead	93	0	7	18	43	25	7	0	100
4	Project Supervisor	56	0	0	6	31	19	44	0	100
5	Sr. Analyst Programmer	77	0	3	17	37	20	23	0	100
6	Trainee	38	0	3	0	17	17	62	0	100
7	vertical Head	59	0	0	0	41	18	41	0	100
8	Grand Total	70	0	1	17	36	16	30	0	100
(j)	Error Handling									
1	Analyst Programmer	100	0	0	13	61	26	0	0	100
2	other	100	0	0	0	44	56	0	0	100
3	Project Lead	100	0	0	7	46	46	0	0	100
4	Project Supervisor	94	0	0	6	25	63	0	6	100
5	Sr. Analyst Programmer	100	0	7	3	57	33	0	0	100
6	Trainee	83	0	3	7	52	21	0	17	100
7	vertical Head	100	0	0	65	29	6	0	0	100
8	Grand Total	98	0	1	13	53	30	0	2	100

S.N.	Designation	Used in your Job (Figures in Percentages)								
		Yes (out of 275)	Frequency of Uses					**	**No	Total
			*1	*2	*3	*4	*5	N/A		
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
(k)	Soft Skills									
1	Analyst Programmer	55	0	0	12	22	21	25	20	100
2	other	44	0	0	22	11	11	56	0	100
3	Project Lead	93	0	0	14	46	32	7	0	100
4	Project Supervisor	56	0	0	6	31	19	44	0	100
5	Sr. Analyst Programmer	70	0	0	13	40	17	23	7	100
6	Trainee	34	0	0	17	17	0	62	3	100
7	vertical Head	59	0	0	29	18	12	41	0	100
8	Grand Total	59	0	0	14	26	19	30	12	100
(l)	Programming Knowledge									
1	Analyst Programmer	75	0	0	12	58	6	25	0	100
2	other	44	0	0	11	33	0	56	0	100
3	Project Lead	93	0	0	18	39	36	7	0	100
4	Project Supervisor	56	0	0	13	31	13	44	0	100
5	Sr. Analyst Programmer	77	0	0	10	57	10	23	0	100
6	Trainee	38	0	0	34	3	0	62	0	100
7	vertical Head	59	0	0	0	12	47	41	0	100
8	Grand Total	70	0	0	14	45	12	30	0	100
(m)	Software Knowledge									
1	Analyst Programmer	75	0	0	12	38	26	25	0	100
2	other	44	0	0	0	11	33	56	0	100
3	Project Lead	93	0	0	11	50	32	7	0	100
4	Project Supervisor	56	0	0	0	31	25	44	0	100
5	Sr. Analyst Programmer	77	0	0	10	40	27	23	0	100
6	Trainee	38	0	0	0	17	21	62	0	100
7	vertical Head	59	0	0	6	35	18	41	0	100
8	Grand Total	70	0	0	9	36	26	30	0	100

*-Note: 1=Never, 2=Rarely, 3=Sometime, 4=Frequently, 5=Always

** N/A means, these respondents are under the category of first time employees

***No means they do not possess the above mentioned skill | Source: Field Investigation

Even a cursory glance at these categories wise presentations would convince anyone of; a vast difference between the workers at present job and those in their previous jobs. For instance, there appears to be (a) a prevalence of inadequate opportunities to utilize the skills of the workers either always or frequently; and (b) total lack of 'bench strength' in previous workplace. It would not be wrong, therefore, to suggest that because of the factor (a) there would naturally be frustration amongst workers who would be keen to quite the present assignment. And as a result of the prevalence of factor (b) namely, lack of bench strength in the previous companies, the management would find it exceedingly difficult to replace the workers who quite the jobs and the management would be required to incur a lot of cost and spend a considerable volume of time to get the replacement. This would naturally disorganize the working conditions and leave to inefficiency in production resulting in higher cost. All these aspects witnessed in the context of previous companies of the workers would naturally be considerably affecting the mobility of the workers increasing the attrition rate.

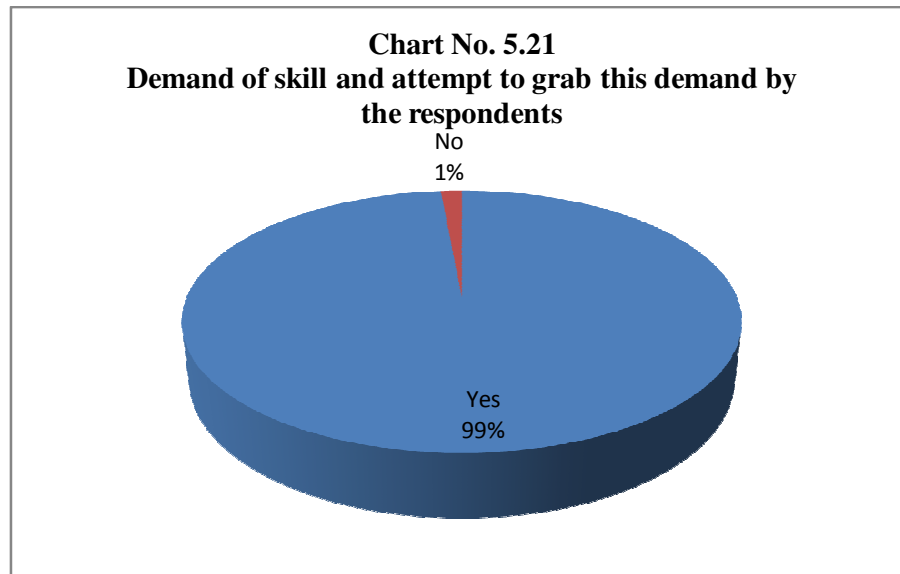
The observations offered in regard to the quantified data in table 5.19 and 5.20 can be further supplemented by bringing about the distribution of respondents in the industry according to the demand of skill and efforts made by the respondents to utilize these demands. It would be seen that a very substantial proportion of respondents (98.55 per cent) tried to avail of the opportunities available for their skills while the balance (1.45 per cent) did not availed of the opportunities. It would be seen further that the workers in present workplace attempted to avail of the opportunities by appearing for the job interview only once or twice while they did not show the perseverance to put in more attempts. This job search behavior of the workers would also have a certain impact on the attrition phenomena and influence the attrition rate. These quantified details illustrated by the pie diagram have been presented in **Table No. 5.21** and **Pie Diagram 5.21**.

Table No. 5.21

Distribution of respondents according to the Demand of skill and attempt to grab this demand by the respondents

S.N.	Trying to grab demand	Opinion about - is there any demand to your skill		
		Yes	No	Grand Total
I	II	III	IV	V
1	Yes	72.73%	1.45%	74.18%
1.1	ONCE - Attempted Job interview in a month	33.09%	0.00%	33.09%
1.2	TWICE - Attempted Job interview in a month	18.91%	0.36%	19.27%
1.3	THRICE - Attempted Job interview in a month	8.73%	1.09%	9.82%
1.4	FOUR TIME – Attempted Job Interview in a month	9.82%	0.00%	9.82%
1.5	More than FIVE TIME – Attempted Job Interview in a month	2.18%	0.00%	2.18%
2	No	25.82%	0.00%	25.82%
2.1	Attempts - Not Applicable	25.82%	0.00%	25.82%
	Grand Total	98.55%	1.45%	100.00%

Source: Field Investigation



As we look around for the motivation for the IT sector employees to quit the job and the frequency of such attempts to quit it, as brought out in table no. 5.21, it appears interesting to find out as to why the IT Company employees want to continue

with the job and for what reasons. The quantified details in this regards have been brought out in *Table No. 5.22* and illustrated with *Pie Diagram 5.22*.

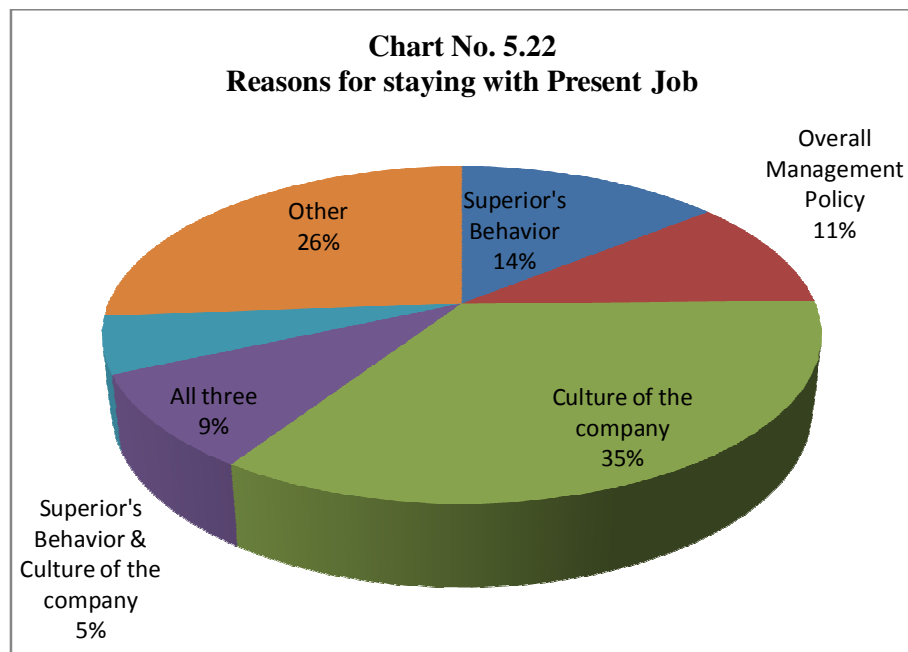
Table No. 5.22

Commitment of the employees for the present company and the reasons for this commitment

S. N.	Commitment of respondents to the present Job	Reasons for staying with Present Job (Figures in Percentages)						Grand Total
		a	b	c	D	E	f	
I	II	III	IV	V	VI	VII	VIII	IX
1	Less than one Year	0.73	1.45	3.27	0.36	2.91	4.73	13.45
2	One to Three Years	1.45	6.55	24.00	8.00	1.82	18.18	60.00
3	Three to Five years	8.73	1.82	4.36	0.00	0.73	3.27	18.91
4	Looking for lifetime	3.27	0.73	2.91	0.73	0.00	0.00	7.64
5	Grand Total	14.18	10.55	34.55	9.09	5.45	26.18	100.00

Note: A=Superior's Behavior, B= Overall Management Policy, C=Culture of the company, D= All three, E= A and C, F=Other

Source: Field Investigation



It would be seen that, basically, three sets of factors are involved in accounting for the continuance of the workers with the company. The first set of factor relates to

the behavior of superiors and this has accounted for a little over 14.18 per cent of the workers. The culture of the present workplace has also played a very significant role in retaining the workers (34.55 per cent) while, the role of overall management policy has been appreciated by 10.55 per cent of workers as a reason for continuing with the job in present workplace. Thus it will be seen that these three factors taken together make for a little over 55 per cent (55.28 per cent) of the reasons as to why the workers like to continue with the present workplace.

PART-III

As has been mentioned earlier, in this part the perceptions and views of the workers have been elicited. For this purpose this part has been divided into various sections, such as in *section-(E)* the expectation of the workers and their views regarding the organization / management / decision makers in the company have been studied. In *section-(F)* the job satisfaction and levels of organizational commitment have been emphasized. In *section-(G)* details regarding the job embeddedness have been obtained but have been analyzed in chapter-7 while the details regarding the team work of workers at various levels and of various categories of present workplace have been considered in this section. In *section-(H)* the perception of employees in respect of the behavior of their supervisors have been detailed. In *section-(I)* attention has been focused on the attitude of employees in respect of various aspects relating to the work culture. Each one of these parts and sections has been further subdivided into various subsections in consideration of the data obtained during the course of field investigation.

Section-(E) Employee Expectations and Needs

A significant factor which can influence the attrition phenomena and impact the attrition rate can be the level of expectations which would naturally raise sky high in any organization. But, if these expectations are required to be quantified then a set of parameters would have to be considered and the responses obtained could be placed on a five point scale.

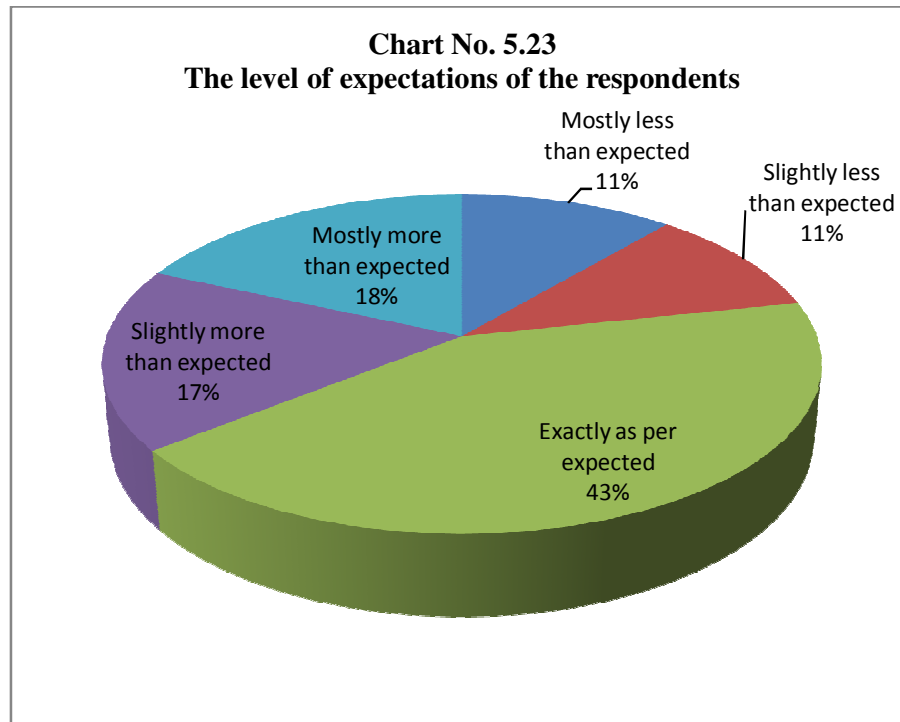
The factors in respect of which the responses were sought have been identified as (a) adequate trainings; (b) a fair treatment of respect; (c) a clear communication as to what is expected; (d) tolerable and safe working conditions; (e) reasonable work load; (f) fair wages and other benefits; (g) opportunity to make suggestions for considerations; (h) fair evaluation and credit for work done; and (i) reasonable opportunity to use skill, knowledge and experience. These responses have been quantified and presented in *Table No. 5.23* illustrated by *Pie Diagram 5.23*.

Table No. 5.23

The level of expectations of the respondents

S. N.	Factors of expectations	Level of expectation					Grand Total
		Mostly less than expected	Slightly less than expected	Exactly as per expected	Slightly more than expected	Mostly more than expected	
I	II	III	IV	V	VI	VII	VIII
(a)	Receive adequate training	8.00%	10.91%	30.55%	25.09%	25.45%	100.00%
(b)	Be treated fairly and with respect	14.18%	8.00%	44.73%	19.27%	13.82%	100.00%
(c)	Be told what is expected of us as workers	3.27%	18.18%	49.82%	14.18%	14.55%	100.00%
(d)	Have tolerable & safe working conditions	9.82%	4.00%	30.18%	17.45%	38.55%	100.00%
(e)	Have a reasonable workload	10.91%	8.00%	42.55%	18.91%	19.64%	100.00%
(f)	Receive fair wages & benefit	9.82%	13.45%	47.64%	20.36%	8.73%	100.00%
(g)	Be given the opportunity to make suggestions & consider it	12.73%	10.55%	52.00%	15.27%	9.45%	100.00%
(h)	Have our work fairly evaluated & to be given credit for it	20.73%	10.18%	46.91%	15.27%	6.91%	100.00%
(i)	Have a reasonable opportunity to use our knowledge, skills, training or experiences	11.64%	10.55%	39.27%	10.55%	28.00%	100.00%
	Total	11.23%	10.42%	42.63%	17.37%	18.34%	100.00%

Source: Field Investigation



In regard to the employees in present workplace the level of expectation has been made exactly as perceived in case of 42.63 per cent of the workers while it was slightly more than expected in case of 17.37 per cent of workers. In case of 18.34 per cent of the workers the level of expectation was more than expected. These three categories taken together accounted for 78.34 per cent of the workers. The satisfaction level in case of 10.42 per cent of the workers was slightly less than expected, thus these four categories taken together account for over 88 per cent of the respondents while the balance of around 10 per cent is made up of workers whose expectations was mostly less than the expectation levels. These percentages, naturally, have been different for each of categories listed above. However, the point to be noted and emphasized is that a very substantial proportion of workforce in present IT workplace finds that their expectation level are fully met and even more fully met.

This is a very significant factor which would bring about in a minimal level of occurrence in attrition phenomena and would very considerably reduce the attrition rate.

Section-(F) Overall Job Satisfaction

The details in regard to overall job satisfaction have been obtained during the course of field investigation and have been quantified and presented in *Table No. 5.24*.

In *Table No. 5.24* a quantified picture of the comparative analysis of the satisfaction level of respondents in regard to the present assignment and their previous jobs, has been offered. This analysis is for a variety of categories of workers such as; (a) analyst programmer; (b) Sr. analyst programmer; (c) project lead; (d) project supervisor; (e) vertical head; (f) trainee; and (g) any other.

Table No. 5.24
Showing comparative analysis of the satisfaction level of respondents regarding present and previous Job

S. N.	Designation	Average level of job satisfaction		Deviation	Index
		Present Work Place	Previous work place		
I	II	III	IV	V	VI
(a)	Analyst Programmer	3.96	3.46	0.50	1
(b)	Sr. Analyst Programmer	3.83	3.46	0.37	4
(c)	Project Lead	3.79	3.46	0.33	5
(d)	Project Supervisor	3.73	3.25	0.48	3
(e)	vertical Head	4.07	3.89	0.18	6
(f)	Trainee	3.73	3.24	0.49	2
(g)	other	3.80	3.76	0.04	7
	Grand Total	3.90	3.46	0.44	

Source: Field Investigation

A very interesting picture appears to emerge on the quantified data it would be seen that the superior level staff of the category of Sr. analyst programmer, project lead and vertical head does not appear to be satisfied with their present assignment in relation to the previous jobs. This inference appears to go countered to the observations made earlier. Although, it must be emphasized that the senior category of present workplace respondents in accordance with the present quantification details of the average job satisfaction level do not appear to be as comfortable as they were in

the previous jobs. On an overall basis, however, the level of satisfaction in present workplace appears to be indicating a higher level of satisfaction than the previous jobs. This is probably because of the fact that a very substantial number of respondents in present workplace to the category of analyst programmer who appears to be supremely satisfied with their present assignment. The large per cent of this category of the workers seems to affect the grand total average of job satisfaction.

Section-(G) Team Work

In the questionnaire Section-(G) encompasses details regarding team work and the level of embeddedness of the workers in the present workplace for the purposes of a better understanding of the issues the quantifying details of embeddedness have been undertaken in Chapter-7 relating to concluding observations. Therefore, in the present section several aspects of team work only have been quantified on the basis of information collected during the field investigation and have been presented in 6 tables.

The work culture and work environment will involve a team work; this will be relevant not only in the category of workers and various levels but a kind of inter-relation between the various categories of workers.

In all the establishments engaged in IT sector activity the employees invariably constituted team comprising of several workers depending up on the job assignment which they are handling. And it is rightly believed that the team spirit and cohesion with which the workers operate would ultimately determine the efficiency level of the workers. It is naturally to be believed that such teams of the workers would vary as between various categories of workers in the same organization as also as between the different organizations. An attempt has been made to ascertain whether such team formations exist in present workplace and whether they existed in the previous companies from which the workers are drawn. Without going into the details of the relevant data obtained on the basis of field investigation in *Table No. 5.25*, it will be clearly seen that the workers formed themselves into the team had all categories of workers and that the percentage proportion of the workers in each categories of the workforce happens to be different in present workplace as also in the companies from which the workers have been drawn.

Table No. 5.25

Distribution of respondents according to the status of having team members at work place

S.N.	Designation	Do you have team members?					
		At Present Workplace			At Previous Workplace		
		No	Yes	Grand Total	No	Yes	Grand Total
I	II	III	IV	V	VI	VII	VIII
1	Analyst Programmer	4.36%	48.73%	53.09%	10.36%	46.63%	56.99%
2	Other	0.36%	2.91%	3.27%	0.00%	2.07%	2.07%
3	Project Lead	2.91%	7.27%	10.18%	2.07%	11.40%	13.47%
4	Project Supervisor	1.09%	4.73%	5.82%	0.00%	4.66%	4.66%
5	Sr. Analyst Programmer	1.09%	9.82%	10.91%	3.11%	8.81%	11.92%
6	Trainee	0.00%	10.55%	10.55%	2.59%	3.11%	5.70%
7	vertical Head	0.00%	6.18%	6.18%	1.55%	3.63%	5.18%
8	Grand Total	9.82%	90.18%	100.00%	19.69%	80.31%	100.00%

Source: Field Investigation

It is quite natural therefore to expect a sense of helplessness among the workers who continue in the job as and when some of the workers constituting the teams chose to quit their assignment, for whatever reasons. On the basis of responses received and presented in *Table No. 5.26*, this aspect of helplessness perceived and experienced by the workers in present workplace at various categories has been quantified and presented. Without going into the details of each one of the categories, it would be clearly seen, that the degree of helplessness experienced by the respondents. Such a mobility of workers as quantified in *Table No. 5.26* would naturally lead to an adverse impact on the team work and would presumably hampered the efficiency level of workers, thereby, escalating the cost of production.

Table No. 5.26

Opinion about feeling helpless when team member leave the job

S.N.	Designation	Feeling helpless			
		Yes	No	*N/A	Grand Total
I	II	III	IV	V	VI
1	Analyst Programmer	43.15%	16.44%	40.41%	100.00%
2	Other	33.33%	22.22%	44.44%	100.00%
3	Project Lead	46.43%	28.57%	25.00%	100.00%

S.N.	Designation	Feeling helpless			
		Yes	No	*N/A	Grand Total
4	Project Supervisor	56.25%	31.25%	12.50%	100.00%
5	Sr. Analyst Programmer	66.67%	30.00%	3.33%	100.00%
6	Trainee	41.38%	24.14%	34.48%	100.00%
7	Vertical Head	64.71%	5.88%	29.41%	100.00%
8	Grand Total	47.64%	20.36%	32.00%	100.00%

* Employees responded that they don't have team members
Source: Field Investigation

It has to be realized that it is not enough to project a mere feeling of helplessness as brought out in a previous paragraph, but it is necessary to appreciate the extent of damage that it will entail on the levels of productivity of the remaining workers of the team which experiences the outflow of workers. The responses in this regards have been obtained from the respondents and the quantified statement has been presented in *Table No. 5.27*.

It will be seen that the respondents who were left back, did experience a loss of efficiency level of various orders ranging between 10 per cent and 30 per cent in all the categories of workforce. It may be seen also there has been a section of workforce which has been assigned a task to be performed at the individual level and hence the association of such a category of workforce with any specific team does not arise. And hence, the observations made of loss of efficiency due to the outflow of workers do not appear to be relevant in this category of workers. All these details have been appropriately illustrated by *Pie Diagram 5.27*.

Table No. 5.27

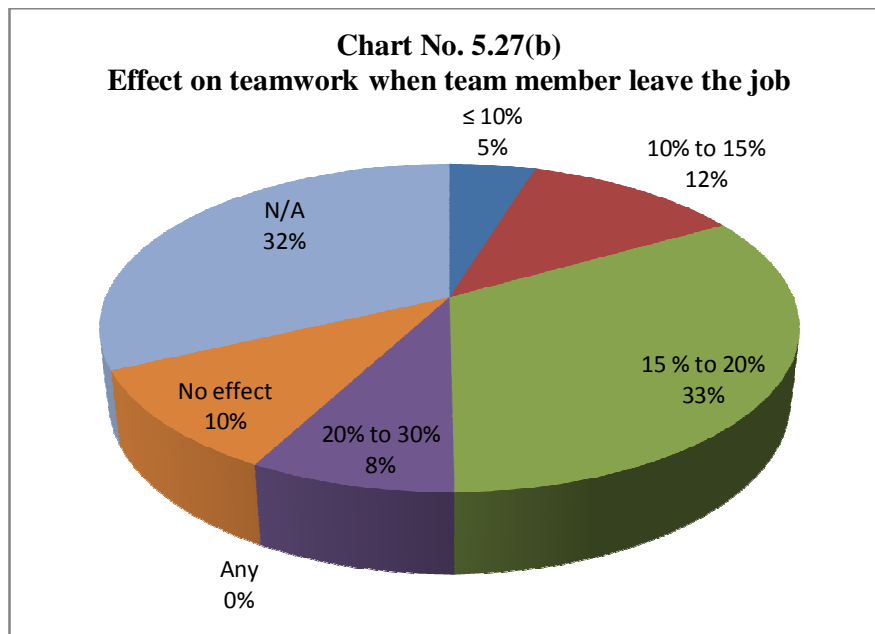
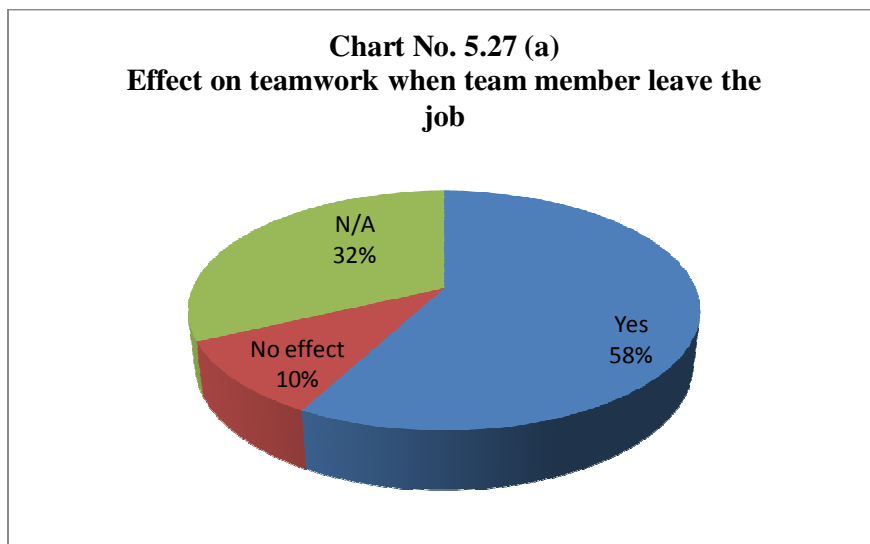
Showing extent of adverse effect on teamwork when team member leave the job

S. N.	Designation	Do you feel any effect on Teamwork and extent in per cent								
		YES, to the below mentioned extent						No Effect	*N/A	Grand Total
		<10%	10% to 15%	15% to 20%	20% to 30%	Any	Total			
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Analyst Programmer	6.16	15.75	32.19	5.48	0.00	59.59	0.00	40.41	100.00
2	other	0.00	0.00	55.56	0.00	0.00	55.56	0.00	44.44	100.00
3	Project Lead	3.57	7.14	21.43	21.43	0.00	53.57	21.43	25.00	100.00
4	Project Supervisor	12.50	12.50	25.00	6.25	0.00	56.25	31.25	12.50	100.00

S. N.	Designation	Do you feel any effect on Teamwork and extent in per cent								
		YES, to the below mentioned extent						No Effect	*N/A	Grand Total
		<10%	10% to 15%	15% to 20%	20% to 30%	Any	Total			
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
5	Sr. Analyst Programmer	3.33	20.00	46.67	10.00	0.00	80.00	16.67	3.33	100.00
6	Trainee	0.00	0.00	20.69	6.90	0.00	27.59	37.93	34.48	100.00
7	vertical Head	0.00	0.00	52.94	11.76	0.00	64.71	5.88	29.41	100.00
8	Grand Total	4.73	12.00	33.09	8.00	0.00	57.82	10.18	32.00	100.00

* Works independently hence doesn't belongs to any team

Source: Field Investigation



It is clearly seen therefore that, adherence of the workforce to the company where they are operating would certainly reduce the magnitude of the attrition phenomena and considerably bring down the attrition rate. The IT sector companies, however, will do their best to recruit new members of the workforce in places of workers who were left the job. But, these newly recruited workers would require quite some time to get adjusted with the work culture of the present workplace. A certain quantum of time would naturally be required for bringing about the tuning of the new recruited members with the old ones. This aspect has been sought to be quantified on the basis of responses received in *Table No. 5.28* and illustrated in the *Pie Diagram 5.28*.

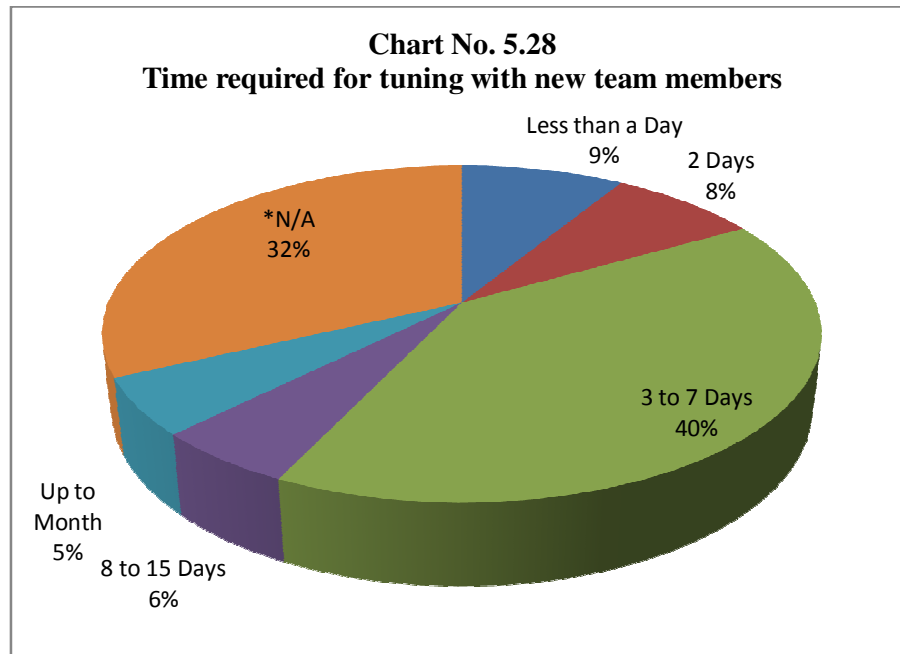
It will be clearly seen that after all it is the human element in service sector which will required adjustment, which has to come forth both from new workers coming in and the existing old members of the workforce. This adjustment process, as punctuated against time dimensions has been quantified on the basis of responses obtained for all the categories of workers in *Table No. 5.28* and appropriately illustrated in *Pie Diagram 5.28*.

Table No. 5.28
Showing time required for tuning with new team members

S. N.	Designation	Less than a Day	2 Days	3 to 7 Days	8 to 15 Days	Up to Month	*N/A	Grand Total
I	II	III	IV	V	VI	VII	VIII	IX
1	Analyst Programmer	5.48%	6.85%	37.67%	4.79%	4.79%	40.41%	100.00%
2	other	11.11%	0.00%	33.33%	0.00%	11.11%	44.44%	100.00%
3	Project Lead	3.57%	3.57%	57.14%	3.57%	7.14%	25.00%	100.00%
4	Project Supervisor	18.75%	6.25%	43.75%	12.50%	6.25%	12.50%	100.00%
5	Sr. Analyst Programmer	10.00%	13.33%	50.00%	10.00%	13.33%	3.33%	100.00%
6	Trainee	24.14%	3.45%	37.93%	0.00%	0.00%	34.48%	100.00%
7	vertical Head	5.88%	29.41%	23.53%	11.76%	0.00%	29.41%	100.00%
8	Grand Total	8.73%	8.00%	40.36%	5.45%	5.45%	32.00%	100.00%

* Works independently hence doesn't belongs to any team

Source: Field Investigation



It would be clearly seen that in all the categories of workforce the new constitution of team of workers has been taking time ranging between one-day and even extending up to one month. Quite naturally, this time dimension required for adjustment and tuning has been different for the several categories of workers. It may be mentioned that the longer the time that is taken for bringing about the tuning, higher will be the inefficiency level for that duration. As will be seen this is the impact of the phenomenon of attrition and its effect on attrition rate which can be suitably handled by the management by chalking out appropriate policy of training and induction programs.

An attempt has been made to quantify the productivity losses arising out of the outflow of the workers from present workplace and inflow of their replacements. The details in this regards have been obtained from the respondents and quantified in the *Table No. 5.29* and appropriately illustrated in the *Pie Diagram 5.29*.

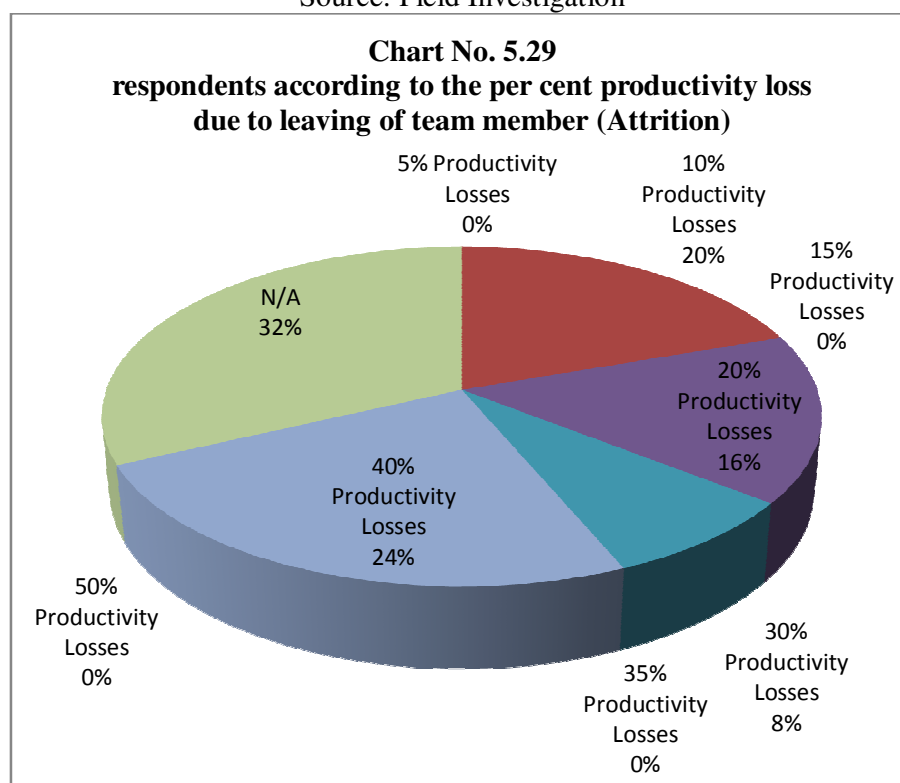
Table No. 5.29

Distribution of respondents according to the per cent productivity loss due to leaving of team member (Attrition)

S. N.	Designation	Productivity Losses									Grand Total
		5%	10%	15%	20%	30%	35%	40%	50%	*N/A	
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
1	Analyst Programmer	0.00	11.64	0.00	10.27	4.79	0.00	32.88	0.00	40.41	100.00
2	other	0.00	22.22	0.00	0.00	11.11	0.00	22.22	0.00	44.44	100.00
3	Project Lead	0.00	35.71	0.00	7.14	14.29	0.00	17.86	0.00	25.00	100.00
4	Project Supervisor	0.00	25.00	0.00	43.75	6.25	0.00	12.50	0.00	12.50	100.00
5	Sr. Analyst Programmer	0.00	26.67	0.00	30.00	13.33	0.00	26.67	0.00	3.33	100.00
6	Trainee	0.00	24.14	0.00	34.48	0.00	0.00	6.90	0.00	34.48	100.00
7	vertical Head	0.00	35.29	0.00	5.88	29.41	0.00	0.00	0.00	29.41	100.00
8	Grand Total	0.00	19.64	0.00	16.00	8.00	0.00	24.36	0.00	32.00	100.00

* Works independently hence doesn't belongs to any team

Source: Field Investigation



It will be seen that the productivity losses have been accruing in respect of all the categories of workforce and losses have ranged from 5 per cent to 50 per cent. In this situation also a category of workers which has been assigned independent responsibilities are not required to form any teams and such these observations do not hold valid in this category.

It has to appreciate that the attrition phenomena, quite apart from the fact that it would lead to efficiency losses as brought out and suggested earlier, would have psychological connotations as well. This psychological impact on the workforce has been obtained from the respondents on a five point scale in respect of several parameters such as (a) feeling of nervousness and sadness; (b) feeling of loneliness; (c) feeling of helplessness; (d) feelings of insecure work conditions; (e) feelings of lack of motivation; (f) feelings of lack of guidance; (g) feeling of stressfulness; (h) feelings of lack of confidence; (i) feeling of happiness; (j) opportunity to rise in a cadre; and (k) cumulative effect on performance.

The responses in respect of all the above parameters have been obtained and quantified and presented in **Table No. 5.30** on a five point scale.

Table No. 5.30
Psychological impact of attrition on team members

S. N.	Psychological factors	Magnitude of impact (Per cent of Respondents)						Grand Total
		Never	Rarely	Some-time	Frequently	Always	N/A	
I	II	III	IV	V	VI	VII	VIII	IX
(a)	Feelings of Nervousness and Sadness	11.27%	8.73%	36.36%	11.64%	0.00%	32.00%	100.00%
(b)	Feelings of loneliness	20.36%	0.00%	25.45%	12.00%	10.18%	32.00%	100.00%
(c)	Feelings of helpless	22.18%	6.18%	28.36%	9.82%	1.45%	32.00%	100.00%
(d)	Feelings of insecure	32.00%	7.64%	7.27%	9.82%	11.27%	32.00%	100.00%
(e)	Feelings of lack of motivation	12.36%	12.73%	28.73%	5.82%	8.36%	32.00%	100.00%
(f)	Feelings of lack of guidance	29.82%	14.18%	6.18%	15.64%	2.18%	32.00%	100.00%
(g)	Feeling of stressfulness	22.91%	10.91%	7.27%	10.18%	16.73%	32.00%	100.00%

S. N.	Psychological factors	Magnitude of impact (Per cent of Respondents)					N/A	Grand Total
		Never	Rarely	Sometime	Frequently	Always		
I	II	III	IV	V	VI	VII	VIII	IX
(h)	Feelings of lack of confidence	37.45%	16.00%	6.91%	7.64%	0.00%	32.00%	100.00%
(i)	Feeling of happiness	28.73%	21.82%	5.09%	7.64%	4.73%	32.00%	100.00%
(j)	Opportunity to rise in cadre	41.09%	8.36%	10.55%	5.09%	2.91%	32.00%	100.00%
(k)	Cumulative effect on performance level	11.27%	8.73%	34.55%	9.45%	4.00%	32.00%	100.00%

* Works independently hence doesn't belongs to any team

Source: Field Investigation

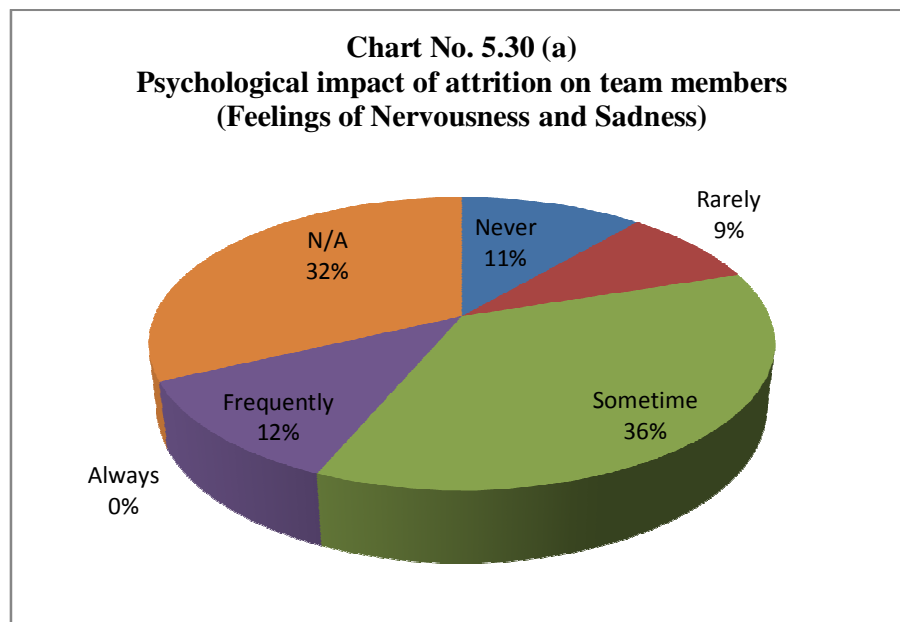


Chart No. 5.30 (b)
Psychological impact of attrition on team members
(Feelings of Loneliness)

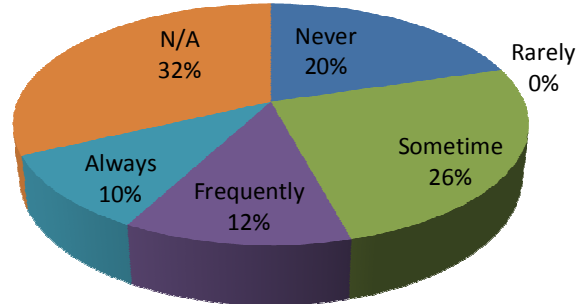


Chart No. 5.30 (c)
Psychological impact of attrition on team members
(Feelings of Helplessness)

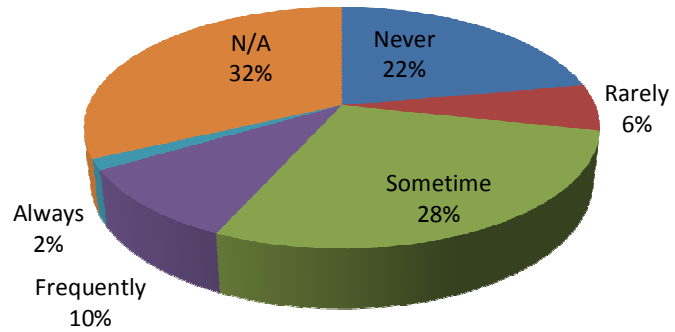


Chart No. 5.30 (d)
Psychological impact of attrition on team members
(Feelings of insecure)

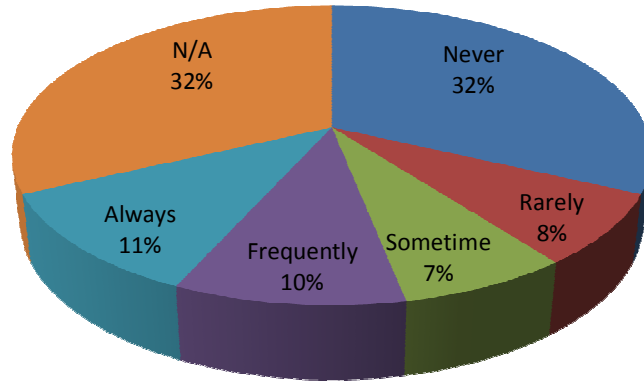


Chart No. 5.30 (e)
Psychological impact of attrition on team members
(Feelings of lack of unmotivation)

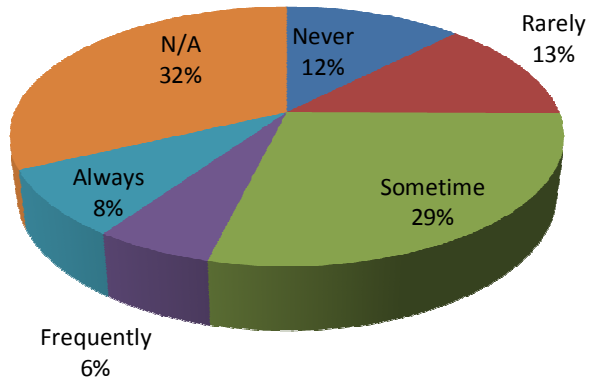


Chart No. 5.30 (f)
Psychological impact of attrition on team members
(Feelings of lack of guidance)

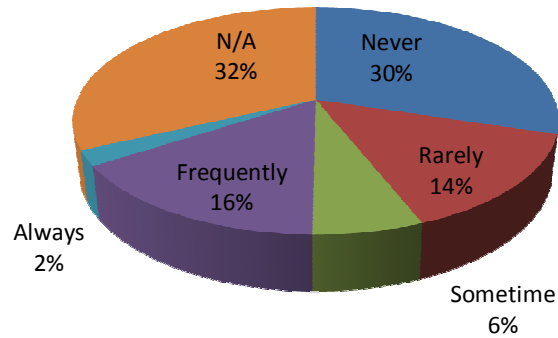


Chart No. 5.30 (g)
Psychological impact of attrition on team members
(Feeling stressfulness)

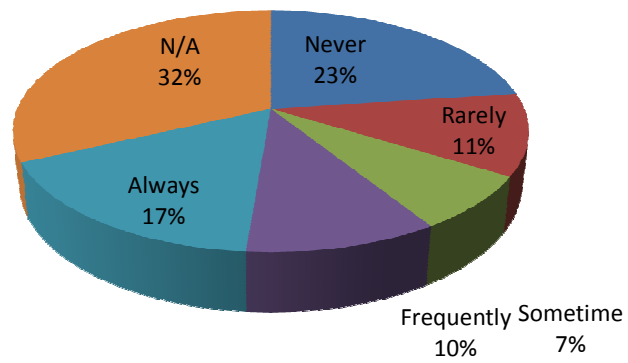


Chart No. 5.30 (h)
Psychological impact of attrition on team members
(Feelings of lack of confidence)

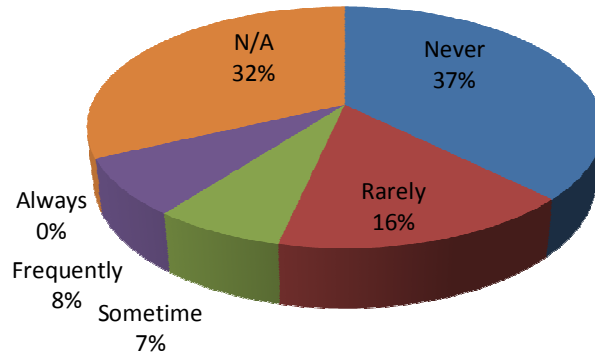


Chart No. 5.30 (i)
Psychological impact of attrition on team members
(Feeling of happiness)

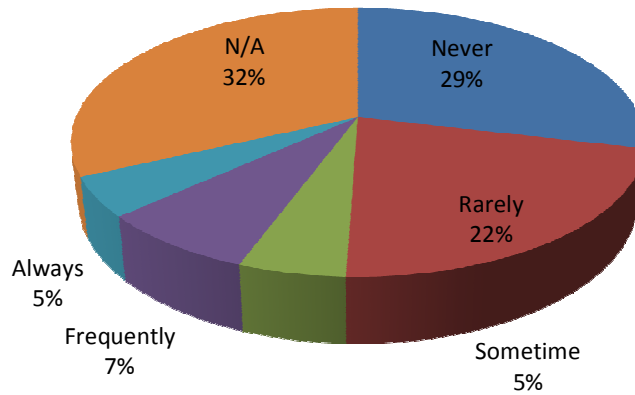


Chart No. 5.30 (j)
Psychological impact of attrition on team members
(Opportunity to rise in cadre)

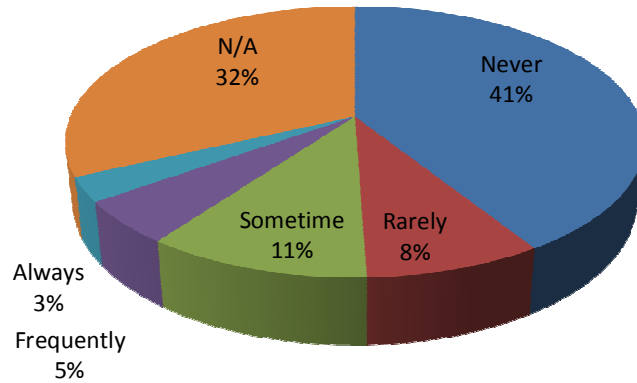
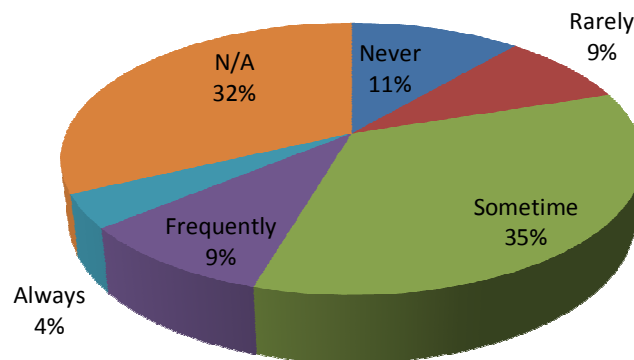


Chart No. 5.30 (k)
Psychological impact of attrition on team members
(Cumulative effect on performance levels)



It is to be expected that the magnitude of the impact of each one of these parameters has been understandably different. This has been appropriately illustrated with the help of appropriate pie *diagram* for each one of the listed parameters to bring home the point.

Section-(H) Employee Relations with Superiors

In this section an attempt has been made to quantify several aspects embodying the relationship of workers in workplace under consideration with their superiors.

One of the very significant factors which can cause the attrition phenomena to occur may be considered to be the relationship of the supervisory staff in the present workplace and compared it with that in the previous companies from where the workers were drawn. This relationship has been sought to be quantified on a five point scale with the help of several parameters such as; (a) boss maintaining high standard of performance; (b) boss dealings in a fair manner with every one; (c) communication of true impressions by the workers to the boss; (d) serious mistakes freely reported to the boss and his help sought; (e) backing received from the boss by the subordinates; (f) supervisors positive role in building team work; and (g) boss opens to constructive criticism from subordinates. The total score in case of each one of the parameter have been averaged out and rated as 'x' in the present job while the same rating with respect of previous job has been 'y'. The average deviations: ('x'- 'y') have been worked out and on that basis an index of deviations have been ranked in respect of present jobs and previous job. All these quantified details have been presented in *Table No.5.31*.

Table No. 5.31
Comparative analysis of supervisory relationship between both the workplaces
(Present and Previous)

S. N.	Factors	Present Job		Previous Job		Deviation of Averages	
		Total Score	Average Score (x)	Total Score	Average Score (y)	(x-y)	Index of Deviation
I	II	III	IV	V	VI	VII	VIII
(a)	Boss maintains high standards of performance	1048	3.8109	738	3.8238	0.012	6
(b)	Boss deals fairly with everyone	1070	3.8909	672	3.4819	0.409	1
(c)	Honestly tell my boss where I really think	1157	4.2073	764	3.9585	0.248	4
(d)	Make serious mistake, I m not reluctant to go to my boss for help	1021	3.7127	702	3.6373	0.075	5
(e)	Boss stands up for his subordinates	955	3.4727	744	3.8549	0.382	7
(f)	Supervisor does good job of	1051	3.8218	689	3.5699	0.251	3

S. N.	Factors	Present Job		Previous Job		Deviation of Averages	
		Total Score	Average Score (x)	Total Score	Average Score (y)	(x-y)	Index of Deviation
I	II	III	IV	V	VI	VII	VIII
	building teamwork in his group						
(g)	Boss accepts constructive criticism from his subordinates	1008	3.6655	643	3.3316	0.333	2

Source: Field Investigation

It will be seen that the average scores 'x' on all parameters listed has been rated at a higher value in the present workplace assignments than in the previous job. This would clearly indicate that the respondents have displayed a strong sense of superiority in respect of work culture of present workplace in comparison to the situation prevalent to the previous job. This would further indicate that the workers having got into the present workplace are not likely to move out of it and look around for fresh jobs. This would naturally have an impact on attrition phenomena and brings about a considerable reduction in the attrition rate.

Section-(I) Attitude of Employees

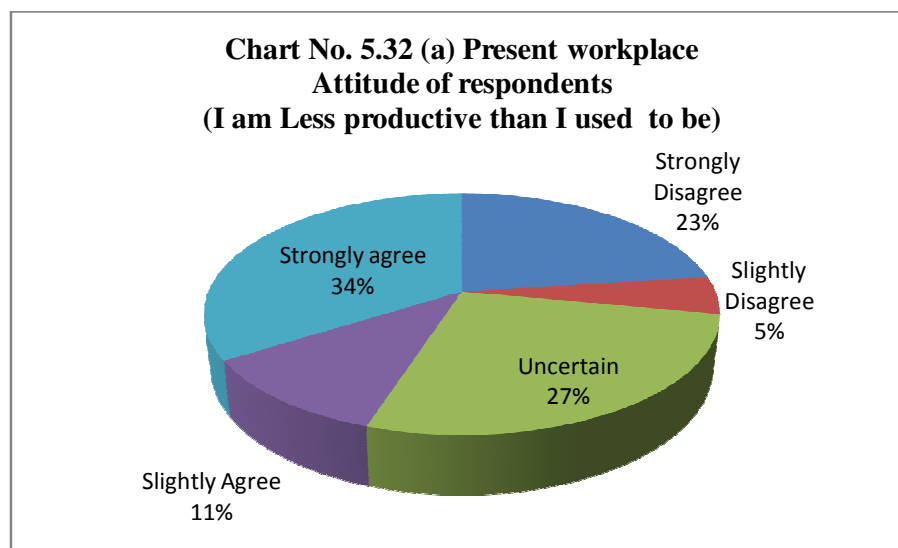
It must be pointed out that attitude is a very highly sophisticated psychological phenomena, the quantification of which is very difficult. Nevertheless, in the present study an attempt has been to quantify it on the basis of the information obtained during the field investigation. This information is in respect of the present job and the previous job of a worker. The related quantified information on this score has been presented in 4 tables.

Table No. 5.32
Comparative analysis of attitude of respondents between both the workplaces
(Present and Previous)

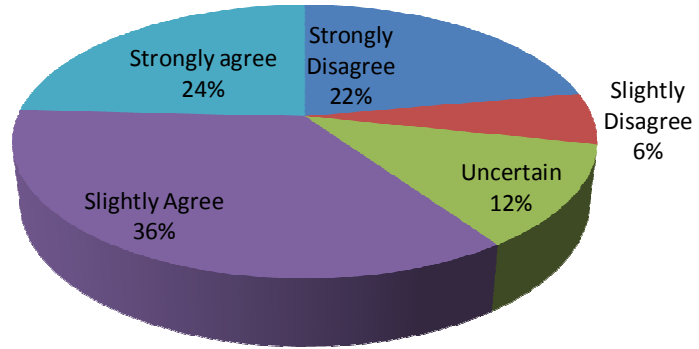
S. N.	Statements	Attitude of respondents (Per cent of respondents)											
		Present workplace						Present workplace					
		*1	*2	*3	*4	*5	Total	*1	*2	*3	*4	*5	Total
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
(a)	I am Less productive than I used to be	23	5	27	11	34	100	22	6	12	35	24	100
(b)	My work group is very productive	7	12	11	27	43	100	34	19	21	3	23	100
(c)	My working group puts all of their efforts into their job	6	8	19	21	47	100	23	13	47	9	7	100
(d)	My pay depends mostly upon how well I do my job	6	6	17	38	33	100	27	0	19	18	36	100

*1= Strongly Disagree, *2=Slightly Disagree, *3=Uncertain, *4=Slightly Agree, *5=Strongly agree

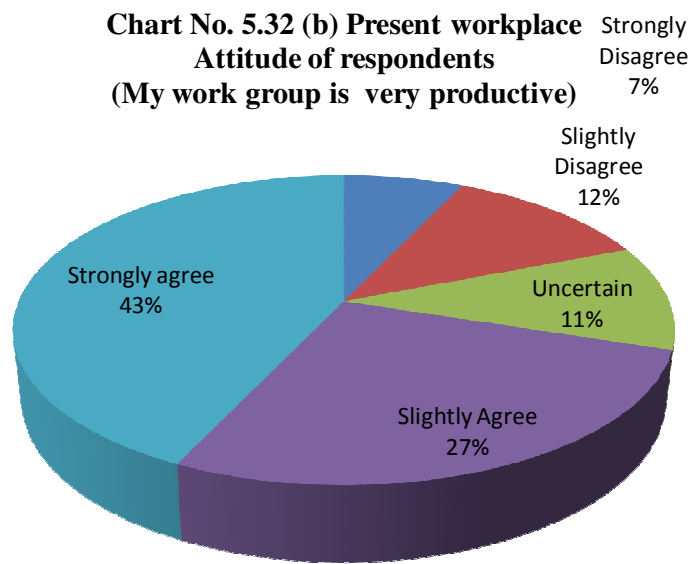
Source: Field Investigation



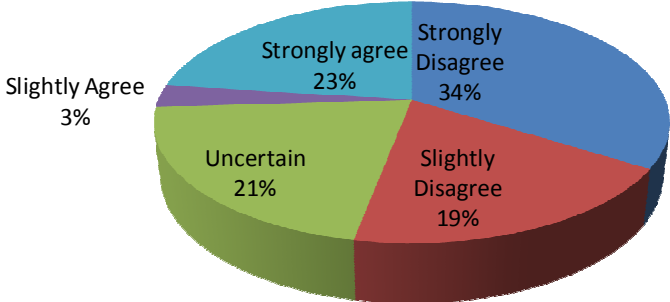
**Chart No. 5.32 (a) Previous workplace
Attitude of respondents
(I am Less productive than I used to be)**



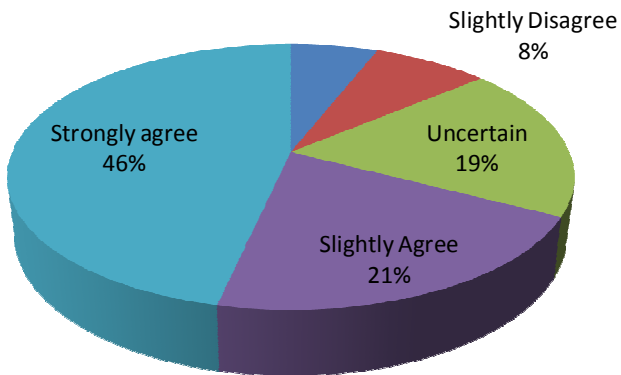
**Chart No. 5.32 (b) Present workplace
Attitude of respondents
(My work group is very productive)**

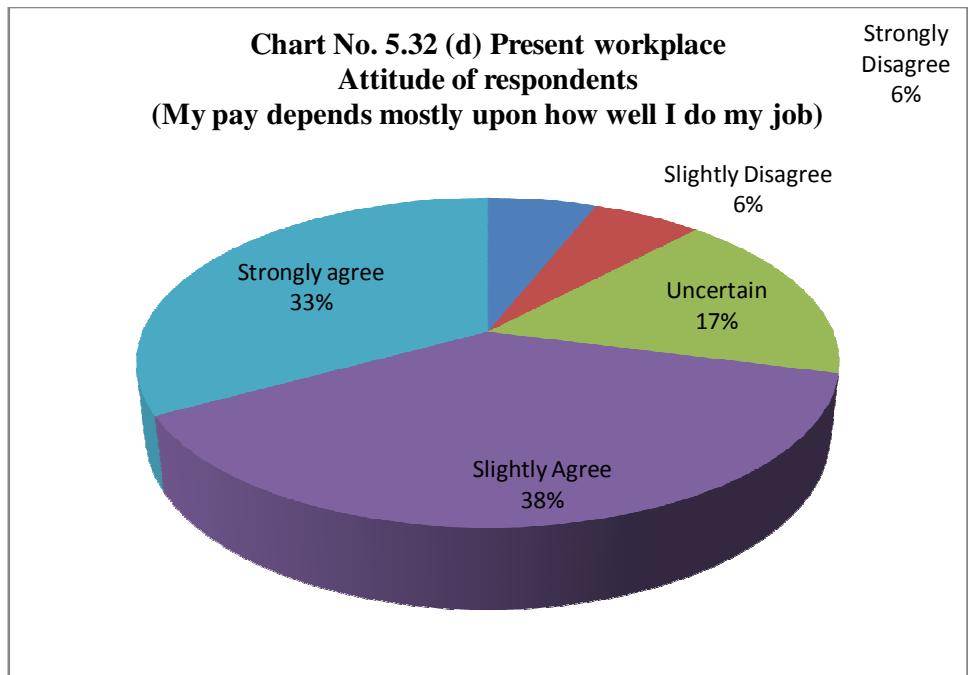
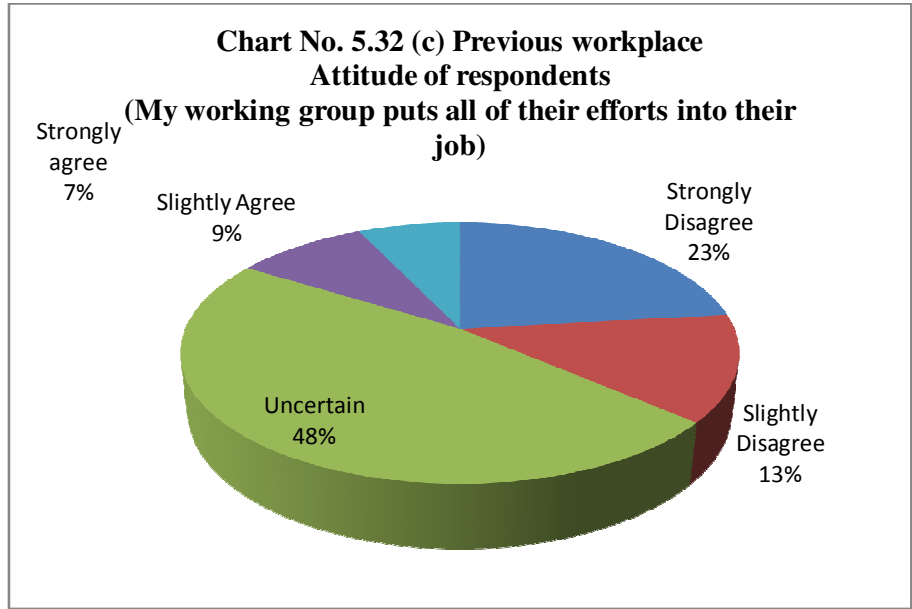


**Chart No. 5.32 (b) Previous workplace
Attitude of respondents
(My work group is very productive)**

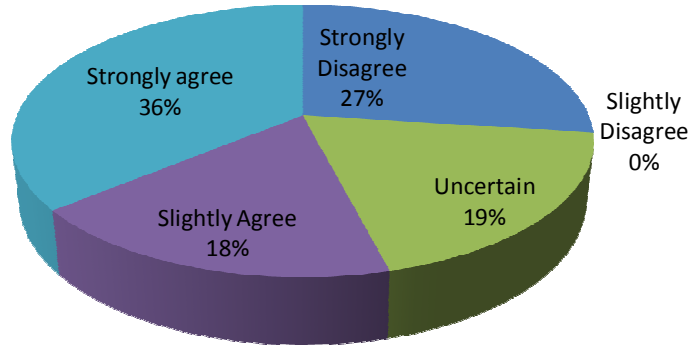


**Chart No. 5.32 (c) Present workplace
Attitude of respondents
(My working group puts all of their efforts into their job)**





**Chart No. 5.32 (d) Previous workplace
Attitude of respondents
(My pay depends mostly upon how well I do my job)**



In practical, all the situations, the attitude of workers always plays a significant role in the occurrence or otherwise of the attrition phenomena and also plays a strong role in the quantification of the attrition rate. An attempt has been made to bring about a comparative analysis of the attitude of the respondents in respect of their present jobs and compared it with that of previous workplaces. This attitude has been attempted to be quantified on a five point scale with the help of responses sought in regard to forth statements; (a) I am less productive than I am used to be; (b) my work group is very productive; (c) my working group puts all of their efforts into their job; and (d) my pay depends mostly up on how well I do my job.

The quantified responses have been presented in *Table No. 5.32* and illustrated suitably for each one of the statements in *pie diagrams* for responses in the present workplaces and those in the previous workplaces. It will be seen that, the quantified responses in respect of all the four statements for the present job appear to be more positive and clearly indicate that once the workers join the present workplace he would not be inclined to leave his assignment thereby reducing the attrition rate.

It is quite possible to identify several factors which will bring about improvement in the efficiency levels of the respondents. For the purposes of present study, these factors have been identified as; (a) better planning; (b) more cooperation from other areas of department; (c) more authority; (d) clear responsibilities; (e) other factors; (f) additional manpower; (g) improved supervisory relations; (h) changes in work environment; (i) more freedom; (j) changes in supplies tools and equipments;

and (k) better information. The total score in case of each one of the parameter have been averaged out and rated as 'x' in the present job while the same rating with respect of previous job has been 'y'. The average deviations: ('x'-'y') have been worked out and on that basis an index of deviations have been ranked in respect of present jobs and previous job. All these details have been presented in **Table No. 5.33**.

Table No. 5.33
Factors needed to improve respondent's productivity

S. N.	Factors	Present Job		Previous Job		Deviation (x-y)	Index
		Total	Average (x)	Total	Average (y)		
I	II	III	IV	V	VI	VII	VIII
(a)	Better planning	1064	3.8691	571	2.9585	0.9105	2
(b)	More cooperation from other areas or department	965	3.5091	697	3.6114	-0.1023	10
(c)	More authority	1006	3.6582	714	3.6995	-0.0413	9
(d)	Clearer responsibilities	981	3.5673	631	3.2694	0.2978	7
(e)	Other	1109	4.0327	767	3.9741	0.0586	8
(f)	Additional manpower	1065	3.8727	633	3.2798	0.5929	6
(g)	Improved supervisory relations	1023	3.7200	536	2.7772	0.9428	1
(h)	Changes in work environment	1035	3.7636	601	3.1140	0.6496	5
(i)	More freedom	1041	3.7855	593	3.0725	0.7129	3
(j)	Changes in supplies, tools, equipment	970	3.5273	546	2.8290	0.6983	4
(k)	Better information	1010	3.6727	742	3.8446	-0.1718	11

Source: Field Investigation

It will be seen that, the quantified values of responses in regard to the present job have naturally varying in respect of each one of these parameters; and further that, they have been varying as between the present job and previous job. Without going into the detail quantification in regard to each one of the listed parameters, it will be clearly observed that, the positive thrust of the responses was clearly towards the present job from the position obtained in the previous job. Such a situation would definitely prevent the movement of workers in present job to other institutions and would naturally considerably minimize the occurrence of the attrition phenomena and bring about a reduction in the attrition rate.

It has to be appreciated that the factors listed above accounting for the improvement or increase in the productivity levels would be different for a several categories of the workers. This aspect has got kept to be in mind and appreciated during the course of policy formation. An attempt has been made to ascertain the likely increases in the productivity levels if the above mentioned identified factors likely to improve productivity are furnished by the management. And the responses obtained in this regard for each one of the category of the workers have been presented in *Table No. 5.34*.

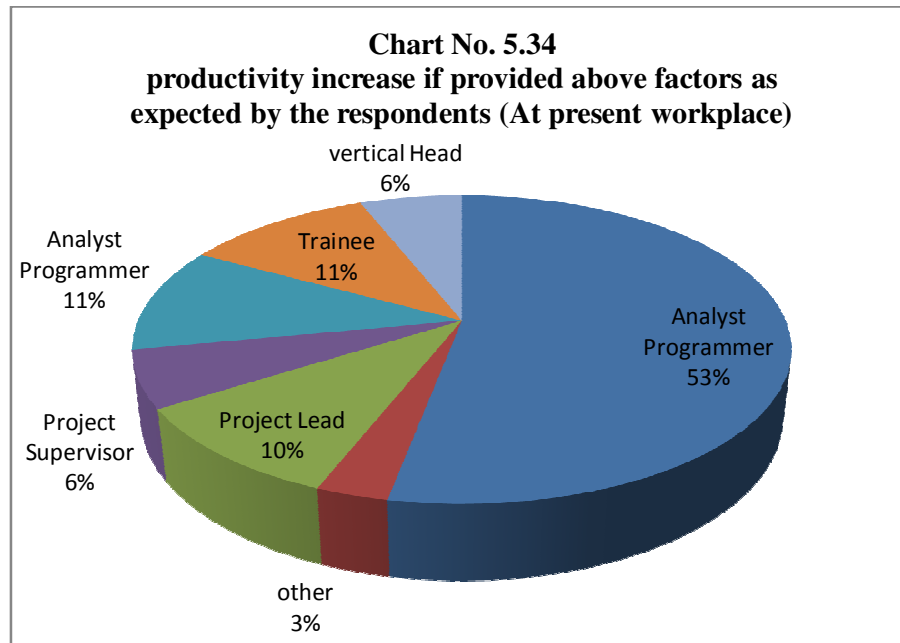
Table No. 5.34
Probable productivity increase if provided above factors as expected by the respondents (At present workplace)

S. N.	Per cent increase in productivity	Designation (Per cent of respondents)							Grand Total
		1	2	3	4	5	6	7	
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Up to 10	6%	0%	3%	1%	1%	0%	0%	11%
2	10 to 25	7%	1%	3%	1%	3%	0%	1%	15%
3	25 to 50	26%	0%	1%	1%	4%	4%	4%	41%
4	50 to 80	5%	0%	0%	0%	0%	0%	0%	6%
5	More than 80	9%	2%	4%	3%	2%	7%	1%	27%
6	Grand Total	53%	3%	10%	6%	11%	11%	6%	100%

1=Analyst Programmer, 2=other, 3=Project Lead, 4=Project Supervisor, 5=Sr. Analyst Programmer, 6=Trainee, 7=vertical Head

Source: Field Investigation

It will be seen the increases in the productivity levels as indicated by the respondents for various categories of workers has been understandably different. This has been also effectively illustrated by the Pie *Diagram 5.34*.



It is interesting to make a comparative study of the responses of the present workplace workers in regard to the probable increase in the productivity levels if the identified factors were furnished in their respected previous job environment. The quantified responses in this regards have been presented in *Table No. 5.35* and appropriately illustrated in *Pie Diagram 5.35*. The inferences which one can probably draw on the basis of quantified responses for previous jobs are not very different from those drawn. It would appear therefore that the observations made on the basis of responses of present workplace jobs appear to be more or less valid even in case of the previous jobs of the workers. It may not be out of place to suggest that quantification of efficiency levels is very difficult to obtain and it is even more difficult to quantify the probable increases in productivity levels if the factors contributing to productivity are furnished to the organizations wither present of previous of the workers.

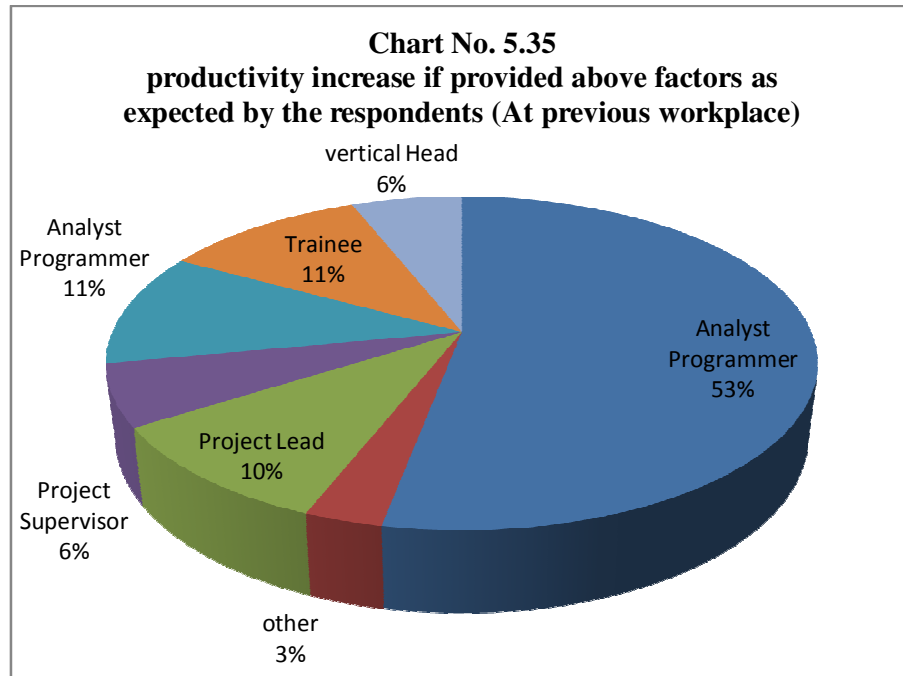
Table No. 5.35
Probable productivity increase if provided above factors as expected by the respondents (At previous workplace)

S. N.	Per cent increase in productivity	Designation (Per cent of respondents)							Grand Total
		1	2	3	4	5	6	7	
I	II	III	IV	V	VI	VII	VIII	IX	X
1	Up to 10	4%	0%	3%	1%	0%	0%	0%	8%
2	10 to 25	11%	1%	3%	1%	3%	4%	2%	25%

S. N.	Per cent increase in productivity	Designation (Per cent of respondents)							Grand Total
		1	2	3	4	5	6	7	
I	II	III	IV	V	VI	VII	VIII	IX	X
3	25 to 50	14%	0%	3%	1%	3%	0%	2%	22%
4	50 to 80	0%	0%	0%	0%	0%	0%	0%	0%
5	More than 80	11%	0%	1%	0%	3%	0%	0%	15%
6	N/A	13%	2%	1%	3%	3%	7%	3%	30%
7	Grand Total	53%	3%	10%	6%	11%	11%	6%	100%

1=Analyst Programmer, 2=other, 3=Project Lead, 4=Project Supervisor, 5=Sr. Analyst Programmer, 6=Trainee, 7=vertical Head

Source: Field Investigation



However, all the inferences could be merely of indicative nature and should be considered merely as such.

As has been brought out earlier the number of respondents in present workplace was 275. This number included 30 per cent, that is, 82 workers who joined the present workplace as fresher and without working in any other company previously. Remaining 193 respondents had joined the IT workplace under consideration after working in various companies earlier for varied lengths of time. During the course of earlier presentation and analysis, in table 5.17 and pie diagram 5.17, reasons for joining present workplace have been identified and quantified,

similarly, in table 5.18 the reasons for leaving the previous companies before joining present workplace have been highlighted, quantified and illustrated in pie diagram 5.18. It will be seen that in these two tables, namely, 5.17 and 5.18 fourteen factors were identified and an attempt was made to quantify their role either in the decision of the workers for joining present workplace or for leaving the previous companies before joining present workplace. The quantification in the earlier analysis refers to the percentage level of contribution only.

However, it was thought desirable to identify two variables, namely, the satisfaction level of respondents and their commitment to the organization and quantify their contribution specifically for reasons to continue with present workplace.

To this end, 193 responses were considered mainly of the workers who joined present workplace after having served previous companies and with respect to this section of the respondent's average level of commitment and satisfaction have been worked out in terms of mean and the standard deviation obtained in the process. These quantified details have been presented in *Table No. 5.36*. It will be seen that the value of the mean level of satisfaction worked out to 3.9018 while the mean commitment level stood at 2.1244. The standard deviation in respect of satisfaction level was of the order of 0.49224 while the standard deviation for commitment level worked out to 0.67321. It may be emphasized that these values have been worked out on the basis of responses of only 193 workers as explained earlier.

Table No. 5.36
Descriptive Statistics

S.N.	Parameters	Mean	Std. Deviation	N
I	II	III	IV	V
1	Satisfaction	3.9018	.49224	193
2	Commitment	2.1244	.67321	193

Source: Field Investigation

Obviously, this is the first step for working out the Pearson correlation in respect of averages for level of job satisfaction and organizational commitment amongst 193 workers. It may be pointed out that Pearson's correlation has been worked out with the help of the formula given in the SPSS package for the purpose.

It will be seen that, the Pearson's correlation value has been worked out to 0.249 in both the cases of average level of job satisfaction and organizational commitment.

As a matter of fact, as this value approaches one a higher degree of significance of correlation can be indicated but if it approaches zero the correlation level is indicated to be of lower level. In the present case the value of correlation placed at 0.249 for both the parameters is definitely significant, since, it is positive and approaching one, however, it must be pointed out that this value does not appear to be very strongly significant as it appears to be much below the half way mark of 0.5. It must be mentioned at the same time, that only two of the fourteen parameters have been picked up for this statistical analysis and in consideration of this fact the value of 0.249 should be treated as quite significant. It was not possible to quantify the values of other parameters as the responses were not consistent enough to be quantified in a way suggested by SPSS package.

It must be pointed out that the significant level of correlation in respect of average level of job satisfaction and organizational commitment would certainly have substantial impact on the occurrence of attrition phenomenon and strongly influence the rate of attrition. As a matter of fact, these two parameters would go a long way in increasing the level of embeddedness thereby minimize the occurrence of attrition phenomena and reducing the attrition rate. This aspect of embeddedness and its impact on the occurrence of the attrition phenomena has been elaborated in the chapter on concluding observations.

PART-IV

Hypotheses Testing

This part considers the testing of two hypotheses on the basis of the data obtained during the course of field investigation. In Section-(A), hypothesis H-3 has been tested while in section-(B) hypothesis H-4 has been tested. The policy implications with respect to each one of these hypothesis have been indicated.

Section-(A): Testing of Hypothesis-H3

In this section, the hypothesis H-1, namely, *'Excessive workload and heavy stress coupled with lack of relaxation would lead to a higher level of attrition in the services sector'* has been considered.

The relevant data in respect of this hypothesis has been obtained from Question No. 3.9 and 3.10 listed in the questionnaire. It will be seen that 14 parameters have been listed and the respondent workers were requested to offer their priority codes ranging from 1 to 10. It is quite obvious that the attrition phenomena involving leaving a job would be a complex function of the 14 listed variables. However, it is also obvious that two parameters namely, (i) role of bearable work pressure (workload) and (ii) lack of relaxation; and to the impact of stress could be the most significant from the point of view of structuring appropriate policy mix for purposes of lowering the attrition rate.

Both the parameters have been quantified in the context of present workplace describing the association with reason to join present job as well as keeping in mind previous assignment to study reason for leaving past assignments. The respondents have been asked to quantify the extent of reasons associated in joining the present assignment and the reasons behind leaving the previous job. In this way, total 14 parameters have been identified and quantified in questions 3.9 and 3.10. The detailed discussion in this regards has already been presented in the Table No. 5.16 and 5.17 of the present chapter.

Thus, for the purpose of testing present hypothesis, the respondents have been asked to give rating between 1 and 10 to show the important role of parameters in leaving and or joining the assignments to each of the parameters, where '1' represents

least important role and '10' has been treated as most important role of variables under consideration.

One of the major steps in testing any hypothesis relates to the formation of the technical hypothesis. This means formulation of null hypothesis and alternate hypothesis. *Table No. 5.37* presents several aspects of formulation of technical hypothesis and also defines the *technical hypothesis* for each one.

Table No. – 5.37

Defining Technical hypotheses- H3

S. N.	Parameters / Variables	Present Workplace	Previous Workplace	H ₀	H _a
I	II	III	IV	V	VI
1	Role of Stress	Significant in decision of joining	Significant in decision of leaving	There is no any leading role of this variable in decision to leave or join the assignments	There is a significant role of this variable in decision to leave or join the assignments
2	Bearable work pressure (work load) and lack of relaxation	Significant in decision of joining	Significant in decision of leaving	There is no any leading role of this variable in decision to leave or join the assignments	There is a significant role of this variable in decision to leave or join the assignments

These technical hypotheses have been tested using ' χ^2 ' test with the help of SPSS package. The detail test statistics and appropriate analysis has been presented in below sections.

It would appear necessary to offer *statistical description* of the variables used for purposes of testing hypothesis H-3

Selected statistical measures have been used to illustrate and describe behavior of the variables under consideration. Out of 275 respondents only 193 responses have been considered suitable for further processing of comparative assessment of present workplace and previous workplaces. This is because 82 respondents have started their career at IT workplace under consideration, and naturally these respondents (82 respondents) were required to be eliminated from further discussions. Thus, ultimately

193 responses have been considered as they have previous experience other than present IT workplace.

In *Table No. 5.38* efforts have been made to describe variables with the help of selected statistical measures, namely, (a) mean; (b) median; and (c) std. deviation.

To the extent of variable *Stress* at present workplace arithmetic mean observed as 5.9119 with median 5.0045. This mean that, rating for this variable is slightly above the standard average of rating scale (that is 5.5), it also may be suggested that the entire observations can be divided into two halves at the point of scale observed at 5 (that is the median). Thus, no any concrete inferences can be drawn out of these observations regarding impact of this variable stress while deciding to join the new assignment. Comparatively to the extent of previous work place stress has been ranked at 5.5285 averagely with the median observed at 5.008. This description leads to the interpretation such as stress is the less important variable considered while decision of leaving the work place in the services sector.

Thus naturally it can be pointed here that the variable stress is not that much of significance in decision of joining any new assignment and at the same time considered at lower level while taking decision of quitting the previous assignment.

In the same way, respondents have been ranked with respect to variable *work pressure and lack of relaxation* at higher level as its mean observed at 6.0881 to the extent of present workplace with median at 5.0019. While, to the extent of previous workplace; mean of this variable has been observed at 4.1969 with the median value observed exactly at 3.000. After scrutinizing the above descriptive values, it can be mentioned that the decision of leaving previous assignment cannot be decided significantly on the basis of variable work pressure and lack of relaxation but at the same time this variable has been considered to be significant while joining the new assignment.

Summing up, in the services sector, it has to be noted that the parameter stress has less significance in the decision making regarding joining a new assignment. However, this parameter assumes significant proportion in regard to the decision of leaving the present assignment. The parameter work pressure and lack of relaxation

have negligible impact on the decision making for leaving a previous assignment but have more significance in regard to the decision making for joining a new assignment.

Table No. 5.38
Descriptive Statistics

S.N.	Descriptive Measures	Present Workplace		Previous Workplace	
		Stress	Work Pressure and lack of relaxation	Stress	Work Pressure and lack of relaxation
I	II	III	IV	V	VI
(a)	N	193	193	193	193
(b)	Mean	5.9119	6.0881	5.5285	4.1969
(c)	Median	5.0045	5.0019	5.008	3.0000
(d)	Std. Deviation	2.8334	2.4468	2.7839	3.0843

Source: Field investigation

Further testing of this hypothesis has been performed with the help of chi-square test. For this purpose, the required statistical data in respect of the present workplace and the previous workplaces have been furnished in Table No. 5.39 and 5.40 (A) to (D). The analysis would be as follows:

Table No. 5.39
Chi-Square Test Statistics

S.N.	Statistics	Present work place		Previous Work Place	
		Stress	Work Pressure and lack of relaxation	Stress	Work Pressure and lack of relaxation
I	II	III	V	IV	VI
1	Chi-Square ^a	139.694	109.228	61.974	93.788
2	d.f.	9	9	9	9
3	Asymp. Sig.	.000	.000	.000	.000
4	Corresponding Table Values (c)	16.9	16.9	16.9	16.9

a= 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.3.

Source: Field investigation

Without going into the further details of frequency calculations, it has been proposed to discuss the results of test statistics only. Thus, on scrutinizing the results mentioned in the Table No. 5.39; in case of parameter stress, the chi-square test value observed at 139.694 and corresponding table value for the given degrees of freedom (that is 9) has been placed at 16.9 for alpha considered as 0.05. It has been clearly observed that the test value is significantly larger than the table value. This fact has

been revealed for all other parameters irrespective of the workplaces.

It has to be mentioned further, the fact that the observation of large test statistics than table value would reveal that there is a significant difference between observed frequencies and expected frequencies. On these statistical grounds it can be noted here that the residual observed in Table No. 5.40 (A) to 5.40 (D) is also significant.

Thus, finally considering all the above discussions it would be proposed here that, the hypotheses null for both of the parameters have been rejected. Hence, alternate hypothesis mentioned in the Table No. 5.37 have been accepted.

Table No. 5.40 (A)
Frequency of Parameter Stress (Present Work-place)

S.N.	Rating of parameter in decision of joining	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	4	19.3	-15.3
2	2.00	29	19.3	9.7
3	3.00	6	19.3	-13.3
4	4.00	17	19.3	-2.3
5	5.00	56	19.3	36.7
6	6.00	9	19.3	-10.3
7	7.00	8	19.3	-11.3
8	8.00	14	19.3	-5.3
9	9.00	9	19.3	-10.3
10	10.00	41	19.3	21.7
	Total	193		

1= Less significant and 10= Most Significant

Source: Field investigation

Table No. 5.40 (B)
Frequency of Parameter Stress (Previous Work-place)

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	3	19.3	-16.3
2	2.00	31	19.3	11.7
3	3.00	27	19.3	7.7
4	4.00	23	19.3	3.7
5	5.00	19	19.3	-.3
6	6.00	8	19.3	-11.3

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
7	7.00	34	19.3	14.7
8	8.00	14	19.3	-5.3
9	9.00	4	19.3	-15.3
10	10.00	30	19.3	10.7
	Total	193		

1= Less significant and 10= Most Significant

Source: Field investigation

Table No. 5.40 (C)

Frequency of Parameter Work Pressure and Lack of Relaxation

(Present Work-place)

S.N.	Rating of parameter in decision of joining	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	9	19.3	-10.3
2	2.00	6	19.3	-13.3
3	3.00	7	19.3	-12.3
4	4.00	23	19.3	3.7
5	5.00	55	19.3	35.7
6	6.00	6	19.3	-13.3
7	7.00	26	19.3	6.7
8	8.00	26	19.3	6.7
9	9.00	10	19.3	-9.3
10	10.00	25	19.3	5.7
	Total	193		

1= Less significant and 10= Most Significant

Source: Field investigation

Table No. 5.40 (D)

Frequency of Parameter Work Pressure and Lack of Relaxation

(Previous Work-place)

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
1	1.00	53	19.3	33.7
2	2.00	28	19.3	8.7
3	3.00	22	19.3	2.7
4	4.00	14	19.3	-5.3
5	5.00	9	19.3	-10.3
6	6.00	12	19.3	-7.3
7	7.00	24	19.3	4.7
8	8.00	5	19.3	-14.3

S.N.	Rating of parameter in decision of leaving	Observed N	Expected N	Residual
I	II	III	IV	V
9	9.00	6	19.3	-13.3
10	10.00	20	19.3	.7
	Total	193		

1= Less significant and 10= Most Significant

Source: Field investigation

Section-(B): Testing of Hypothesis-H4

In this section an attempt has been made to test the second hypothesis, H-4, namely, *'The management with appropriate policy mix can go a long way in reducing the level of attrition in the services sector'*. For this purpose the data were specifically collected with the help of canvassed questionnaire during the course of investigation. The question number 3.11.1 listed in the questionnaire was responded to, and on the basis of responses obtained the analysis has been proceeded with after testing and interpreting the observations. It must be emphasized that this hypothesis testing would offer results which would directly be inputs in the policy mix of the corporate house, hence, this hypothesis H-4 has been given the predominance along with the hypothesis H-3.

The responses obtained have been quantified on the basis of five point likert scale. As has been pointed out earlier, the significant aspect of five point likert scale may be pointed out as its standard mean observed to be 3. Thus, the observed mean of the primary data can be tested on the basis of significant difference between observed mean and standard mean. This aspect has been logically applied in formulation of *Technical Hypothesis* as mentioned in the *Table No. 5.41*.

Table No. – 5.41

Defining of Technical Hypotheses-H4

S. N.	Variable No.	Question of Hypothesis	H ₀	H _a
I	II	III	IV	V
1	V1 to V21	On the 5 point scale standard average is 3 which shows neither agree nor disagree. Now, can it be said that the observed mean is significantly differed from the standard average of 3?	there is no significant difference	There is significant difference

The test statistics have been mentioned in Table No. 5.42 and Table No. 5.43. The appropriate interpretations in respect of the technical hypothesis have been subsequently presented.

Table No. – 5.42
One-Sample Statistics

S.N.	Variable under consideration	N	Mean	Std. Deviation	Std. Error Mean
I	II	III	IV	V	VI
1	Opinion regarding management with proper policy mix will avoid unusual leaving of employees in services sector	275	4.4327	.55205	.03329

Source: Field investigation

Table No. – 5.43
One-Sample ‘t’ Test for Hypothesis-H2

S. N.	Variable under consideration	Test Value = 3					
		t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
1	Opinion regarding management with proper policy mix will avoid unusual leaving of employees in manufacturing sector	43.038	274	.000	1.4327	1.3672	1.4983

Source: Field investigation

On scrutinizing the results of calculations mentioned above in **Table No. 5.42** and **Table No. 5.43** the inferences are as follows-

The significance value obtained displays a tendency to be less than 0.05. As is normally expected in such cases, the column label Sig. (2-tailed) has been displaying a probability from the ‘t’ distribution with degrees of freedom working out to 274. Thus, the value listed is the probability of obtaining an absolute value greater than or equal to the observed ‘t’ statistics.

In case of present hypothesis, the Significance value obtained works out to 0.00 and is considerably lower than 0.05. This clearly shows that the alternate hypothesis is validated and the null hypothesis is rejected.

CHAPTER-6

PROCESSING, TABULATION AND ANALYSIS OF THE DATA: COMPARATIVE ANALYSIS OF MANUFACTURING SECTOR (AUTOMOBILE INDUSTRY.) AND SERVICES SECTOR (IT ACTIVITY)

In the present chapter tabulation, processing and analysis of the data obtained from field investigation regarding Manufacturing Sector represented by automobile industry and Service Sector (represented by IT activity) have been presented in a comparative way. This comparative analysis has been presented in respect of several parameters where the comparison was possible and considered to be desirable.

Considering the format of the questionnaire which was designed for collecting the field information, the present chapter has been divided into four parts and subdivided into various sections and sub-sections. *Part-I* deals with (a) demographic information of workers and also highlights (b) their professional information. In *Part-II*, an attempt has been made to furnish details regarding the role of workers (section-C) while section-D brings out details about the skills and competence levels of the workers. In *Part-III* the perceptions and views of the workers have been elicited. In section-(E) the expectation of the workers and their views regarding the organization / management / decision makers in the company have been studied. In section-(F) the job satisfaction and levels of organizational commitment have been emphasized. In section-(G) details regarding the job embeddedness have been obtained but have been analyzed in chapter-7 while the details regarding the team work of workers at various levels and of various categories have been considered in this section. In section-(H) the perception of employees in respect of superiors have been detailed. In section-(I), attention has been focused on the attitude of employees in respect of various aspects relating to the work culture.

Each one of these parts and sections has been further subdivided into various subsections in consideration of the data obtained during the course of field investigation.

As will be seen from the chapter on research methodology several hypotheses were structured and formulated for conducting the present study. In *Part-IV* of the present chapter, an attempt has been made to stress the hypothesis and indicate the level to which they have been either validated or invalidated.

In previous two chapters all these parameters listed above have been handled in regard to the data obtained for the manufacturing sector (represented by automobile industry)- Chapter-4 and the Service Sector (represented by IT activity)-Chapter-5. It may be pointed out that, all the parameters studied in Chapters-4 and-5 did not lend themselves for a comparative assessment. Hence, in the present chapter only the selected parameters have been focused up on with a view to bringing about the comparative scenario obtained in the Manufacturing Sector represented by automobile industry and Service sector.

PART-I

Section-(A): General Information:

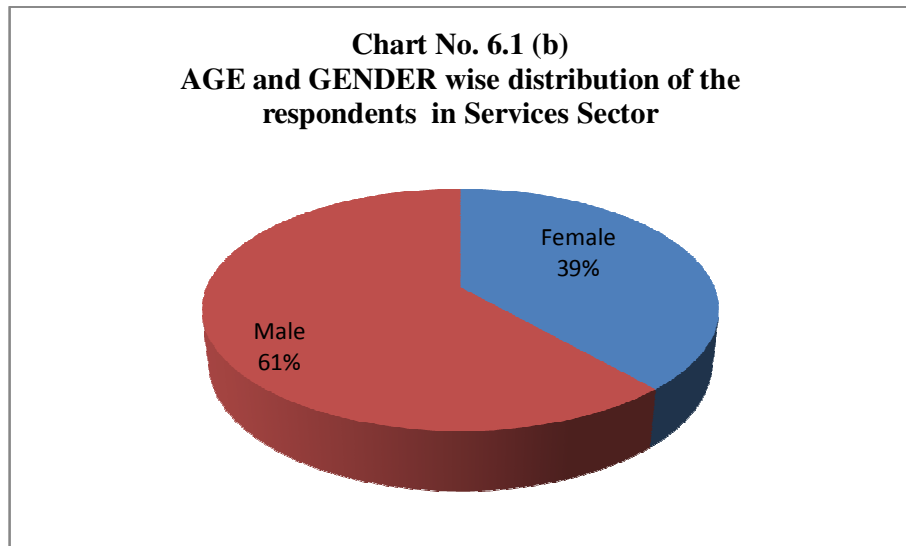
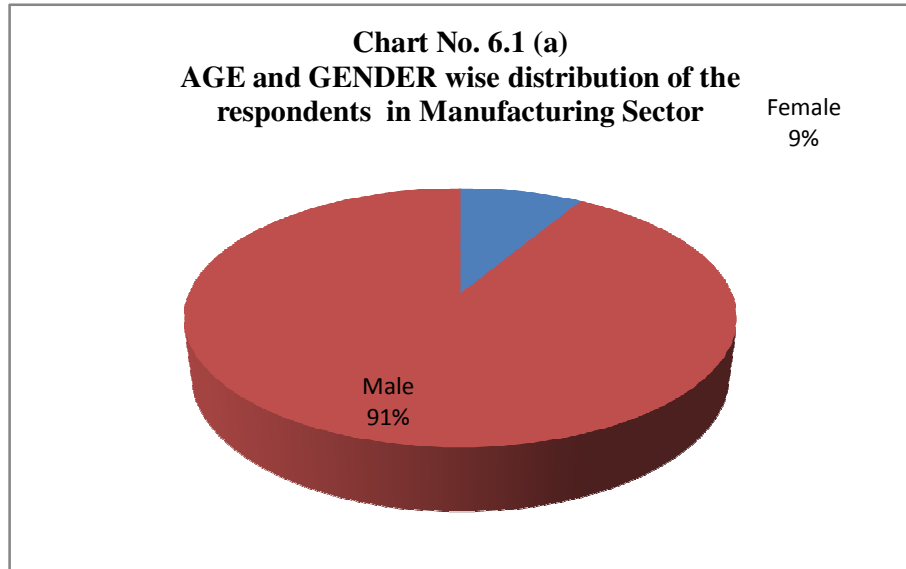
To begin with, in *Table No. 6.1* and *Pie Diagram No. 6.1* some demographic and professional parameters have been presented. It will be seen that there is a distinct gender preference displayed in the context of the Service Sector (represented by IT activity) where a little less than 40 per cent (38.54 per cent to be exact) belong to female category, while in the manufacturing sector represented by automobile industry the females accounts for less than 10 per cent (8.59 per cent to be exact) to the total workforce. This was to be expected in consideration of the fact that the service sector (represented by IT activity) jobs can be handled and managed with efficiency levels by females which are quite comparable to those of males (and on some occasions even better than males). Another aspect which warrants attention is the fact that in the age group between 20 and 30 the workers in the Service Sector (represented by IT activity) account for about 86.18 per cent of the work force while in the manufacturing sector represented by automobile industry this age group accounts for only 57.30 per cent. These two aspects will certainly have an impact on attrition phenomena as influence the attrition rates in the respective sector of the economic activity.

Table No. 6.1

AGE and GENDER wise distribution of the respondents (No. of employees)

S.N.	Age	Manufacturing Sector			Service Sector		
		Female	Male	Total	Female	Male	Total
I	II	III	IV	V	VI	VII	VIII
1	20 to 25	21	106	127	33	20	53
2	26 to 30	2	94	96	48	114	162
3	31 to 35	1	65	66	25	28	53
4	36 to 40 and above	6	54	60	0	7	7
5	Total	30	319	349	106	169	275
		8.59	91.40	100	38.54	61.45	100

Source: Field Investigation



Educational qualification wise distribution of the workforce in the two categories of activities also displays a very significant difference. These details have been furnished in **Table No. 6.2** and illustrated by appropriate **Pie Diagram No. 6.2**. It will be seen that the educational qualification does not seem to have much relevance in the Manufacturing Sector (represented by automobile industry) since educated workforce up to under graduate level accounts for well over 50 per cent of the total workforce while in the service sector it accounts for just 4 per cent. As against this the proportion of workforce in the graduate and post graduate levels in the Manufacturing Sector (represented by automobile industry) is a little less than 10 per cent (9.08 per cent to be exact), while in case of the Service Sector (represented by IT activity) it

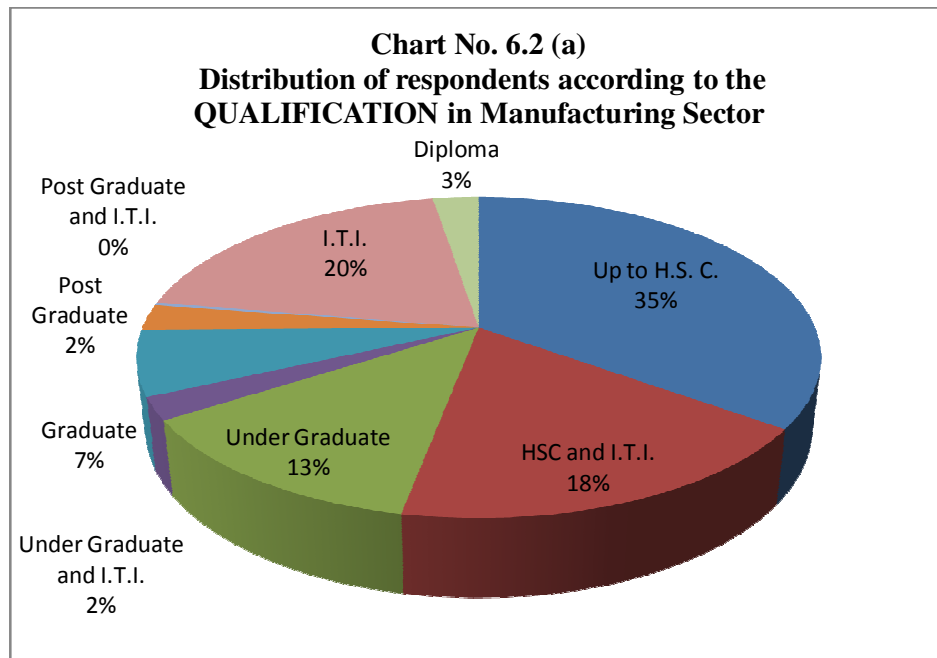
accounts for well over 95 per cent (95.28 per cent to be exact). Both these issues would naturally have a considerable impact on attrition phenomena and influence the attrition rate.

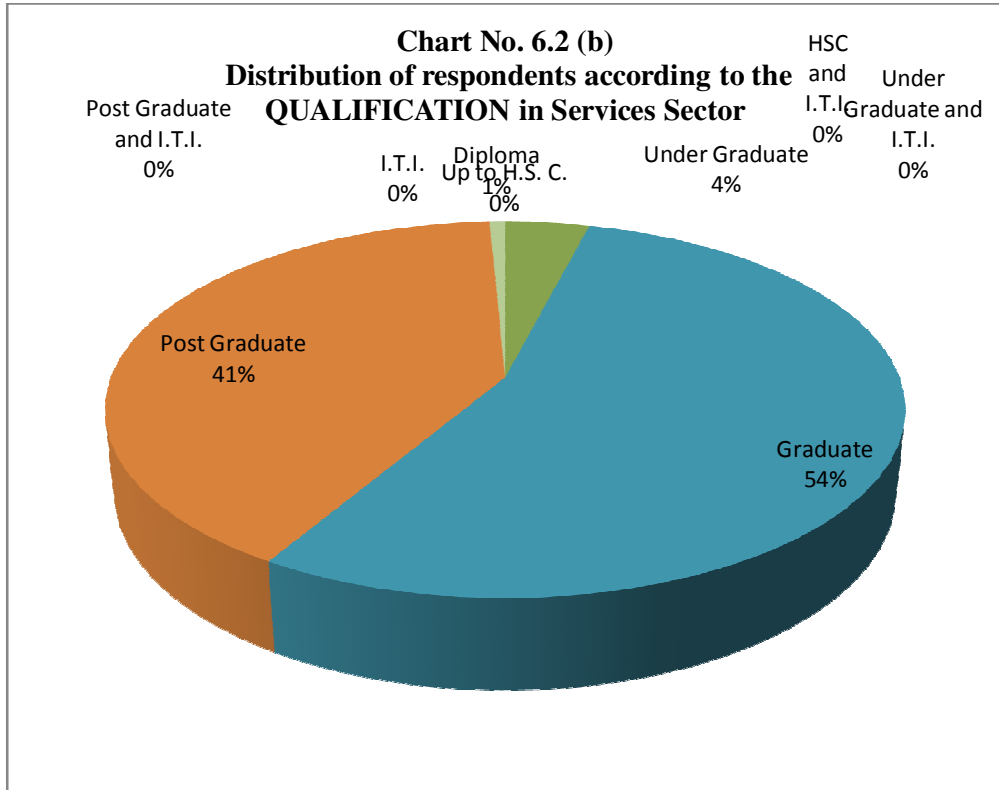
Table No. 6.2

Distribution of respondents according to the QUALIFICATION

S.N.	Educational Qualification of the respondents	Manufacturing Sector		Services Sector	
		In numbers	In Percentages	In numbers	In Percentages
I	II	III	IV	V	VI
1	Up to H.S. C.	122	34.96%	0	0.00%
2	HSC and I.T.I.	63	18.05%	0	0.00%
3	Under Graduate	45	12.89%	11	4.00%
4	Under Graduate and I.T.I.	8	2.29%	0	0.00%
5	Graduate	23	6.59%	150	54.55%
6	Post Graduate	9	2.58%	112	40.73%
7	Post Graduate and I.T.I.	1	0.29%	0	0.00%
8	I.T.I.	69	19.77%	0	0.00%
9	Diploma	9	2.58%	2	0.73%
10	Grand Total	349	100.00%	275	100.00%

Source: Field Investigation





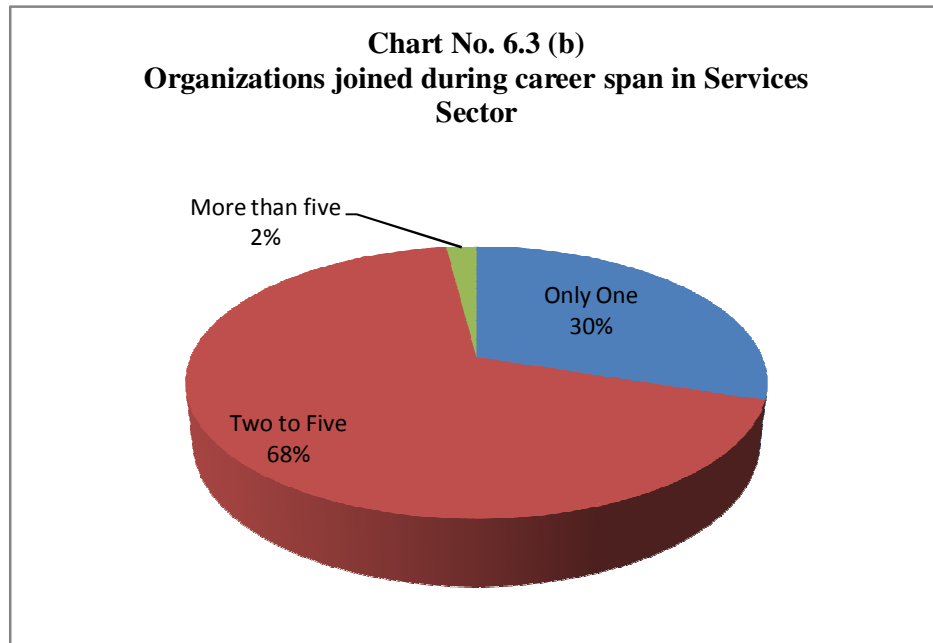
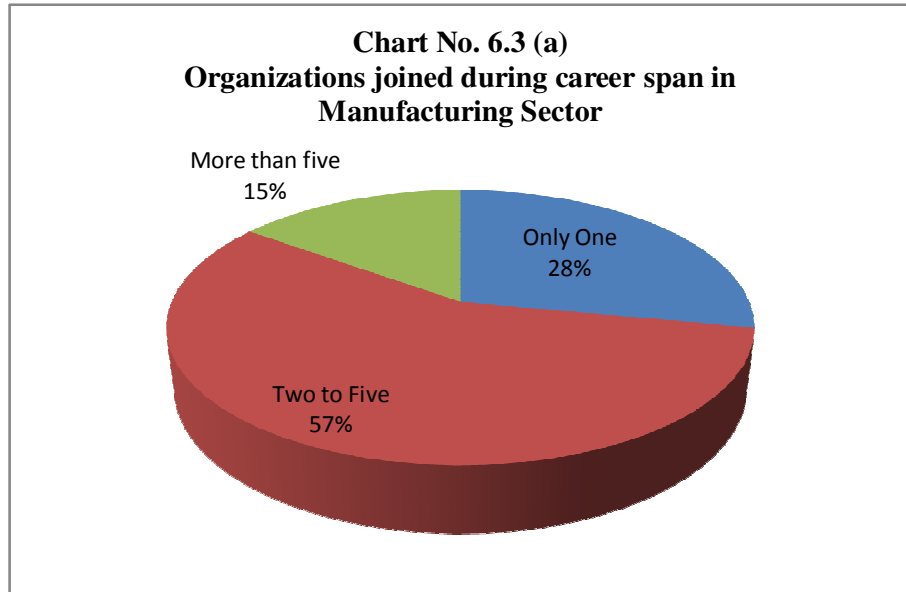
Section-(B): Professional Information:

However, the details furnished in the table number 6.3 backed up by appropriate pie diagrams relate to the mobility of workforce after having joined a particular company and having stayed there for a specified length of time, substantiate what has been said earlier. This has been brought out in *Table No. 6.3* backed up by appropriate *Pie Diagrams No. 6.3*. It will be seen that in the Manufacturing Sector (represented by automobile industry) the movement of workforce after working in a company for about five years was of order of 85 per cent while in the Service Sector (represented by IT activity) it was of the order of 98 per cent.

Table No. 6.3
Organizations joined during career span

S.N.	Number of organizations joined	Number of Employees (In percentages)	
		Manufacturing Sector	Services Sector
I	II	III	IV
1	Only One	28	30
2	Two to Five	57	68
3	More than five	15	2
5	Total	100	100

Source: Field Investigation



In *Table No. 6.4* the responses in the two types of activities relating to the promotions given which were based on average performances have been indicated. It will be seen that with respect to this parameter about the average promotions in relation to the performances, there does not appear to be much to choose from in the two categories of the activities. The proportion of promotions given to the workers in manufacturing activity with performance levels lower than the company standards worked out to about a little over one fourth (28.63 per cent to be exact), while such promotions in the Service Sector (represented by IT activity) accounted for a little

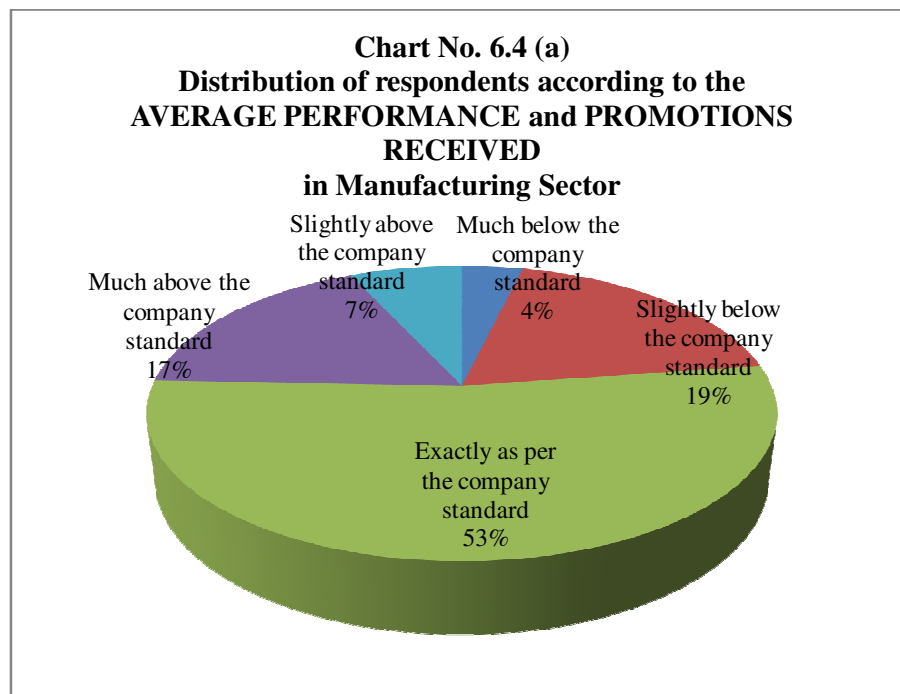
over one-tenth only (11.63 per cent to be exact). The percentage of promotions much above the company standards in case of the Manufacturing Sector (represented by automobile industry) worked out to a little less than one fourth (24.33 per cent to be exact), while they worked out to a little above one fourth in the Service Sector (represented by IT activity) (27.99 per cent to be exact). On this basis, it is difficult to draw any inference, although, one might suggest that in the Service Sector (represented by IT activity) promotions appear to be more performance related than in the Manufacturing Sector (represented by automobile industry). It may further be seen that the promotions in the Manufacturing Sector (represented by automobile industry) related to the performance levels appear to be a little higher than 50 per cent (52.72 per cent), while in the Services Sector (represented by IT activity) they worked out to a little above 60 per cent (60.36 per cent). Nevertheless, the data furnished do not appear to be leading to any definite conclusion of the promotions being based on the performance levels in any one of the two sectors of the activity. Although, the Service Sector (represented by IT activity) appears to be a little better placed than the Manufacturing Sector (represented by automobile industry) in this regards this has been further illustrated with help of *Bar Chart No. 6.4*.

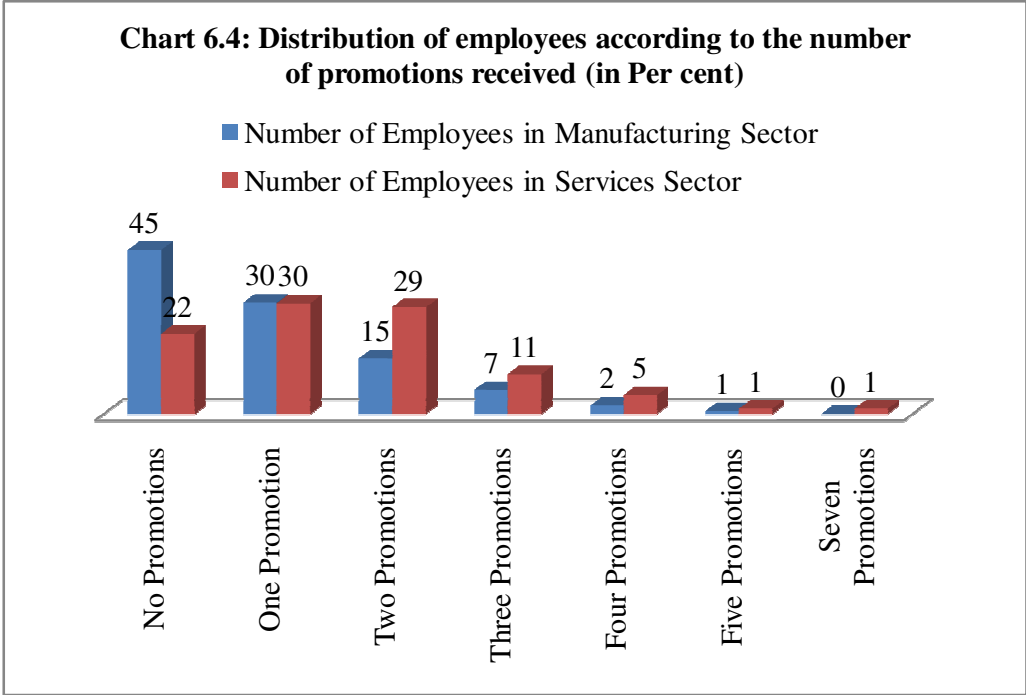
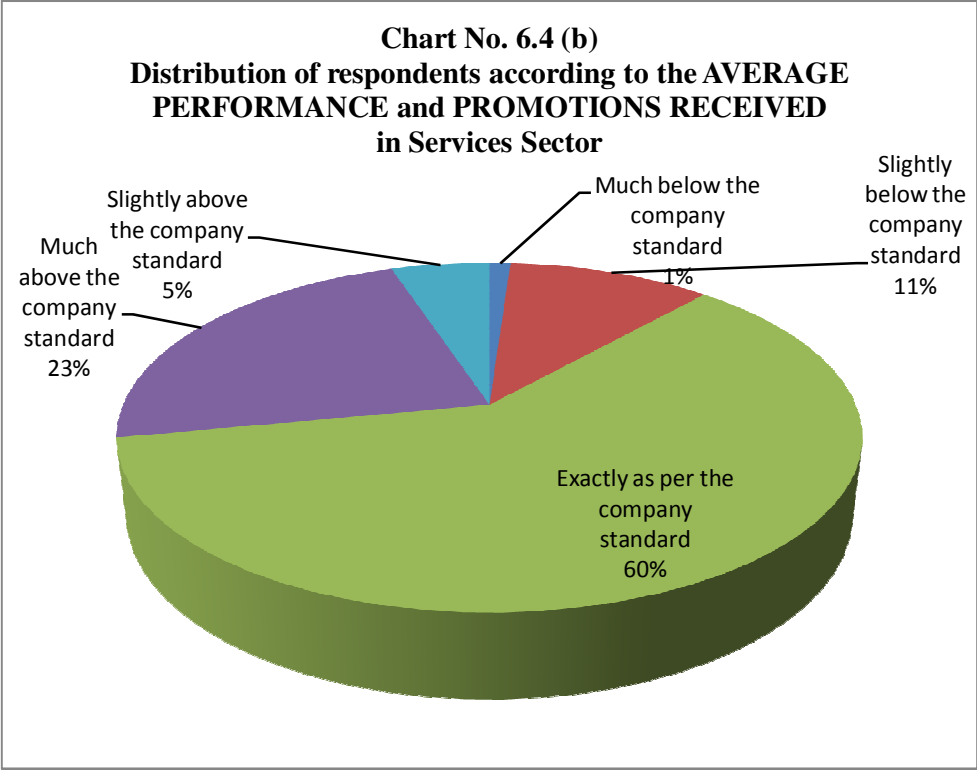
Table No. 6.4
Distribution of respondents according to the AVERAGE PERFORMANCE and PROMOTIONS RECEIVED

S.N.	Average Performance of the Respondents	Total Promotions Received by the Respondents for Automobile and in brackets for IT									Auto-mobile (%)	IT (%)
		No Promotions	One	Two	Three	Four	Five	Seven	Grand Total			
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
1	Much below the company standard	7 (0)	6 (0)	0 (0)	0 (3)	0 (0)	0 (0)	0 (0)	13 (3)	3.72	1.09	
2	Slightly below the company standard	43 (12)	10 (4)	3 (9)	2 (1)	7 (1)	1 (2)	0 (0)	66 (29)	18.91	10.54	
3	Exactly as per the company standard	83 (39)	52 (52)	31 (57)	15 (10)	1 (8)	2 (0)	0 (0)	184 (166)	52.72	60.36	
4	Much above the company standard	13 (7)	31 (16)	18 (14)	0 (15)	0 (5)	0 (2)	0 (4)	62 (63)	17.46	22.90	

S.N.	Average Performance of the Respondents	Total Promotions Received by the Respondents for Automobile and in brackets for IT									
		No Promotions	One	Two	Three	Four	Five	Seven	Grand Total	Auto-mobile (%)	IT (%)
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
5	Slightly above the company standard	10 (2)	7 (11)	1 (0)	6 (1)	0 (0)	0 (0)	0 (0)	24 (14)	6.87	5.09
6	Grand Total	156 (60)	106 (83)	53 (80)	23 (30)	8 (14)	3 (4)	0 (4)	349 (275)	100	100

Source: Field Investigation





PART-II

Section-(C) Role played by the respondents and Satisfaction

In any enterprise, whether manufacturing or Service Sector (represented by IT activity), the remuneration paid to the workers in the form of pay packets, would naturally constitute a very significant factor in determining the level of satisfaction. It needs to be pointed out that the level of satisfaction of higher order would naturally prevent the prevalence of the attrition phenomena and would considerably reduce the attrition rate. It is to be accepted also that the level of satisfaction would naturally differ as between the Service Sector (represented by IT activity) and the Manufacturing Sector (represented by automobile industry). It will also be difference for the workers putting in different levels of services. Responses in this regards have been obtained from the manufacturing and Service Sector (represented by IT activity) and have been tabulated and presented in *Table No. 6.5*, appropriate illustrations with the help of pie diagrams have also been presented.

Table No. 6.5

Comparative presentation for both sectors regarding Satisfaction of employees related to Remuneration, average overall satisfaction against organizational commitment

S. N.	Sectors		Satisfaction Regarding Remuneration					
			Yes	L1	No	L2	Grand Total	L3 Total
I	II	III	IV	V	VI	VII	VIII	IX
1		Services (IT)	41%	3.83	49%	3.86	44%	3.84
2	Organizational Commitment	Less than One year	5%	3.23	7%	3.54	6%	3.40
3		One to Three Years	19%	3.90	36%	3.93	26%	3.92
4		Three to Five Years	11%	3.70	5%	3.81	8%	3.73
5		Looking for Lifetime	6%	4.32	0%		3%	4.32
6		Manufacturing (Automobile)	59%	4.07	51%	3.62	56%	3.89
7		Less than One year	1%	3.11	7%	3.22	3%	3.20
8		One to Three Years	7%	3.70	12%	3.45	9%	3.56
9		Three to Five Years	7%	3.56	5%	4.16	6%	3.77
10		Looking for Lifetime	44%	4.23	28%	3.70	37%	4.06
11			Grand Total	100%	3.97	100%	3.74	100%	3.87

L1=Overall level of job Satisfaction against *satisfied* respondents for remuneration, L2=Overall level of job Satisfaction against *not satisfied* respondents for remuneration, L3=Grand Total for Overall level of job satisfaction. Source: Field Investigation

On an overall basis, it will be seen that, the level of satisfaction in the Service Sector (represented by IT activity) is of a much lower order (41 per cent) in respect of the pay packages offered in comparison to the Manufacturing Sector (represented by automobile industry) (59 per cent) in regard to the workers who were not satisfied with the pay packets stood at 44 per cent as against 56 per cent in case of Manufacturing Sector (represented by automobile industry). This would indicate that since the proportion of workers satisfied in the pay packages in the Service Sector (represented by IT activity) is lower than that in the Manufacturing Sector (represented by automobile industry), a stronger tendency to leave the present assignment and look for a fresh one appears to be prevalent in the Service Sector (represented by IT activity) than in the Manufacturing Sector (represented by automobile industry).

Several other details which have been presented in the table need not be commented upon as they do not appear to be very relevant. On the whole, therefore, on account of the pay packets alone the attrition rate in the Service Sector (represented by IT activity) would appear to be in higher order than in Manufacturing Sector (represented by automobile industry).

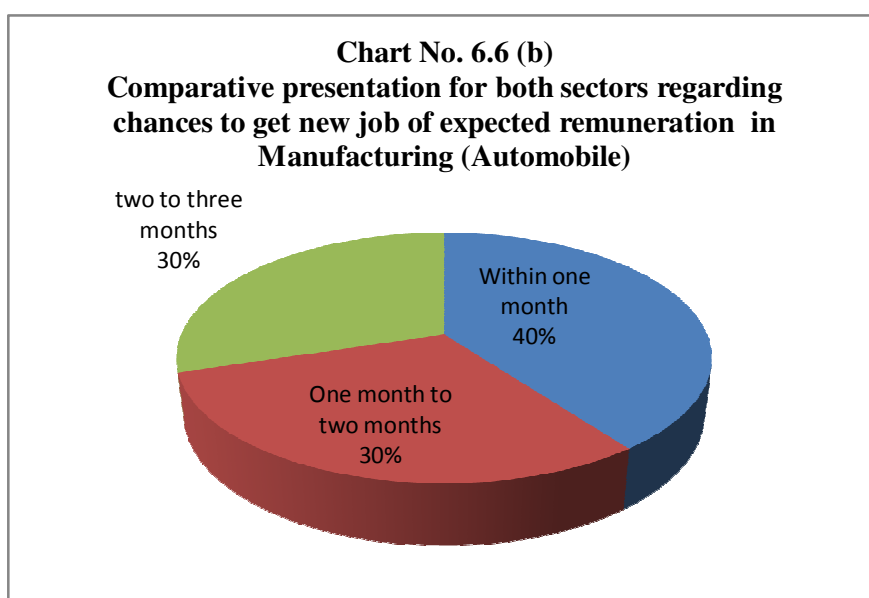
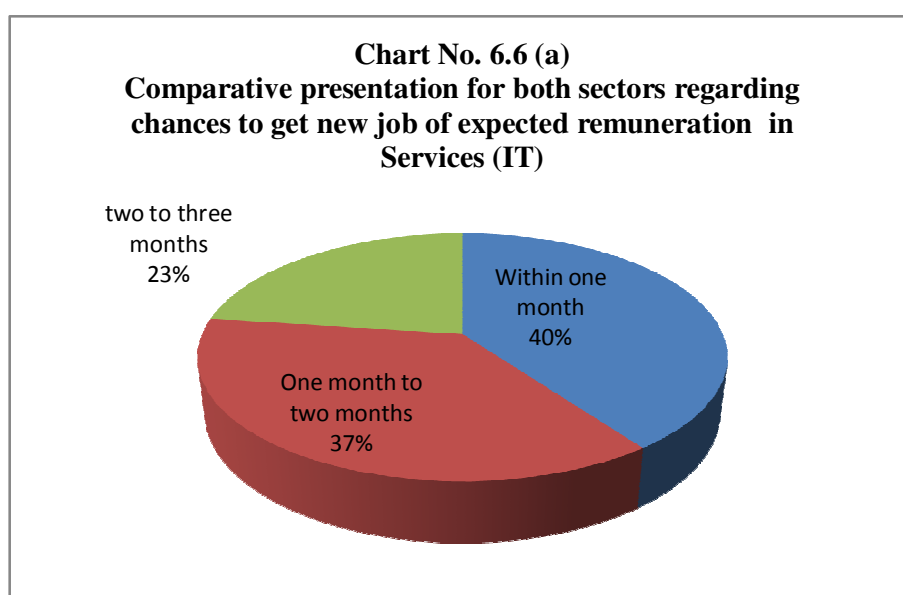
It must be appreciated that, the tendency to leave the present job and going for a fresh one would depend upon the availability of job opportunities in the Service Sector (represented by IT activity) and Manufacturing Sector (represented by automobile industry). The time dimension in these opportunities will be available would also be quite relevant. Necessary responses obtained in this regards for the two sectors have been presented in *Table No. 6.6* and illustrated by *Pie Diagram 6.6*. It will be seen that whether in the Manufacturing Sector (represented by automobile industry) or Service Sector (represented by IT activity) the availability of job opportunity does not show a very considerable difference this may be because of the fact that the availability of job opportunities would be a function of several macro level parameters like investment flows and technological changes and more specifically the time period in which the data were collected.

Table No. 6.6

Comparative presentation for both sectors regarding chances to get new job of expected remuneration

S. N.	Sectors	Chances to get new job of expected remuneration			
		Within one month	One month to two months	two to three months	Grand Total
I	II	III	IV	V	VI
1	Manufacturing	39.83%	30.37%	29.80%	100.00%
2	Services	40.00%	37.09%	22.91%	100.00%
3	Grand Total	39.90%	33.33%	26.76%	100.00%

Source: Field Investigation



Some of the job related variables play a significant role in causing the attrition phenomena and influencing the attrition rate. It is quit natural that the responses in this regards should be different as between the Service Sector (represented by IT activity) and Manufacturing Sector (represented by automobile industry) in relation to the parameters, namely; (a) requirement of the job for the complex / high level skills; (b) requirement of the job for cooperation with other workers; (c) simple and repetitive nature of the job; (d) no feedback received in the execution of the job from the superiors; (e) job requirement for the use of personal initiative and judgment; (f) chance to complete the piece of work assigned from start to finish; and (g) overall satisfaction level while performing in this assignment. The responses in this regards were obtained, processed, tabulated and presented in **Table No. 6.7** and were placed on a five point scale ranging from one to five. The way the scale was structures for this purpose shows that the strong agreement to the proposition was given the lowest numerical value while the strong disagreement was give the highest numerical value. Naturally, therefore, if the value approaches to one it would be indicative of strong agreement while if it approach five, it will be indicative of strong disagreement. Further, the average level of agreement both for the manufacturing and services sector was sought to be ascertained for the present work or the previous work.

Table No. 6.7

Comparison for job description related to Present Job and Previous Job

S. N.	Job Characteristics	Average Level of Agreement			
		Manufacturing (Automobile)		Services (IT)	
		Present Work Place	Previous work place	Present Work Place	Previous work place
I	II	III	IV	V	VI
(a)	This job required to use no. of complex or high level skills	1.85	2.04	1.26	1.62
(b)	This job requires a lot of cooperative work with other peoples	1.80	1.89	1.40	1.98
(c)	Present job is quite simple and repetitive.	2.71	3.09	3.19	3.12
(d)	In this job supervisors or seniors never give any 'feedback' about how work is being performed	2.81	2.94	2.95	2.45
(e)	This job denies any chance to	2.67	2.79	2.42	2.25

S. N.	Job Characteristics	Average Level of Agreement			
		Manufacturing (Automobile)		Services (IT)	
		Present Work Place	Previous work place	Present Work Place	Previous work place
I	II	III	IV	V	VI
	use personal initiative or judgment in carrying out the work				
(f)	This job provide a chance to completely finish the piece of work that began our self	2.39	2.13	1.51	2.21
(g)	Generally speaking, I am very pleased with my job	2.28	2.28	1.87	2.44

1=Strongly Accurate, 2=Slightly Accurate, 3=Uncertain, 4=Slightly Inaccurate, 5=Strongly Inaccurate

Source: Field Investigation

The data clearly revealed that both in the manufacturing and services sector the level of agreement in regard to the present and the previous job shows a healthy movement with respect to all the parameters that have been listed and in respect of which the data were obtained it is not possible to offer any comment in regard to the quantification and say as to whether the movement in one sector is of a higher order than the one in the other sector. It may be pointed out that the Pune Region which is a hub for the Manufacturing Sector (represented by automobile industry) particularly the automobile sector with a golden triangle between Pune-Nashik and Mumbai has been accredited with a very positive and successful outlook in the automobile manufacturing activity. And the services destinations of the Service Sector (represented by IT activity) in Pune are comparable to any in India despite the head starts in Bangalore and Hyderabad. Thus it will be seen that both in the manufacturing and Service Sector (represented by IT activity) in Pune the progressive characteristic is evident although a comparative assessment does not appear to be possible not does it appear to be meaningful.

The phenomenon of attrition and its rate both in the manufacturing and services sector would depend up on several parameters such as; (a) amount of job security, pay fringe benefits; (b) fairness of the promotion policy and practices; (c) communication of specific role; (d) the nature of challenge in the job; (e)

opportunities available for career growth; (f) clear definition of targets and their communication; (g) fair treatment, respect, support and guidance received from the superiors; (h) sense of accomplishment in job; (i) prospect for personal growth and development; (j) relations with the colleagues and coworkers; and (h) the training given when required. It may be mentioned that most of these parameters are psycho social in character and their quantification is rather difficult an attempt has been made to obtain the details from the respondents the satisfaction levels in the present job and the way it deviated from the previous job. The formula for deviation is:

= arithmetic mean (level of satisfaction for previous job) – arithmetic mean (level of satisfaction for present job)

On the basis of the actual value obtained from deviation index has been worked out which would be roughly indicative of the significance attached by the respondents to the various parameters listed above. All these details has been presented in *Table No. 6.8* and illustrated with the help of *Bar Chart No. 6.8*.

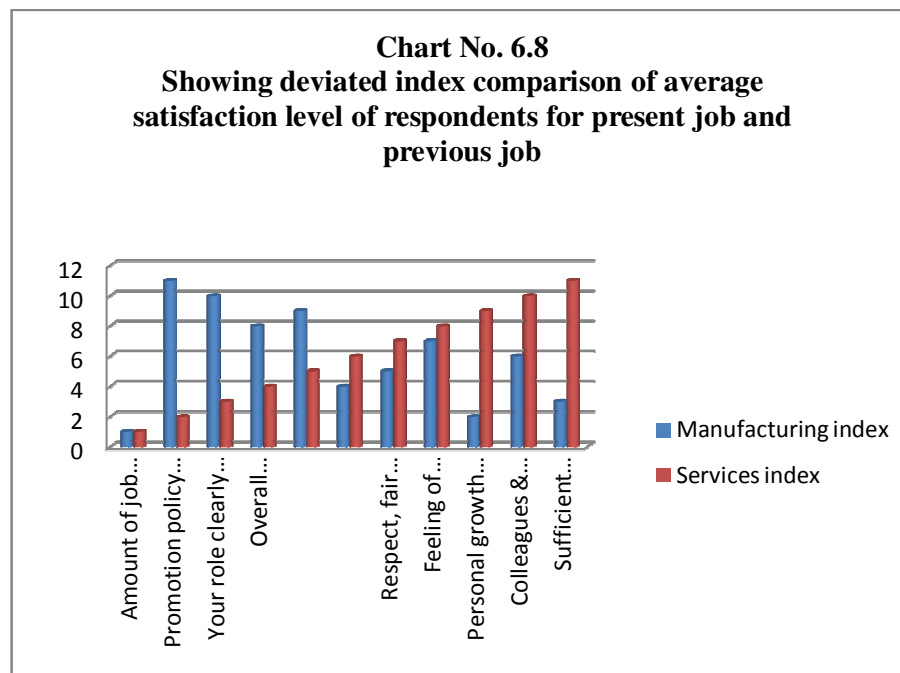
Table No. 6.8
Showing deviated index comparison of average satisfaction level of respondents for present job and previous job

S. N.	Index (Factors of job satisfaction)	Manufacturing		Services	
		*Deviation	Index	*Deviation	Index
I	II	III	IV	V	VI
(a)	Amount of job security pay & fringe benefits	1.226190	1	0.227979	1
(b)	Promotion policy & practices are fair	0.337302	11	0.217617	2
(c)	Your role clearly communicated to you	0.341270	10	0.202073	3
(d)	Overall quality, amount of challenge	0.658730	8	0.088083	4
(e)	Ample opportunity available for career growth	0.539683	9	0.015544	5
(f)	Targets are clearly defined & communicated	1.007937	4	-0.015544	6
(g)	Respect, fair treatment, support & guidance you are receiving from your superiors	0.845238	5	-0.056995	7
(h)	Feeling of worthwhile accomplishment for doing	0.706349	7	-0.124352	8

S. N.	Index (Factors of job satisfaction)	Manufacturing		Services	
		*Deviation	Index	*Deviation	Index
I	II	III	IV	V	VI
	this job				
(i)	Personal growth & development	1.214286	2	-0.139896	9
(j)	Colleagues & coworkers	0.750000	6	-0.155440	10
(k)	Sufficient trainings are giving when required	1.063492	3	-0.155440	11

* Deviation between satisfaction level of present job and previous job.
 (Formula for deviation=arithmetic mean (level of satisfaction for previous job) - arithmetic mean (level of satisfaction for present job))

Source: Field Investigation



It will be seen that, in the two sectors under consideration, namely, the manufacturing and services, the deviation index is indicative of very significant changes in the ranking. This is to be expected, since, the structure and nature of the two sectors is considerably different and the role each one of the parameters would play in bringing about the average satisfaction level would be different. Only for the sake of illustration it may be pointed out that in the Manufacturing Sector (represented by automobile industry) the fairness of promotion policy and practices have been ranked at no. 11 while this parameter is ranked at no. 2 in the Service Sector (represented by IT activity). Such a difference in ranking obtained from the responses in the two sectors would give significant inkling to the decision makers in

the two sectors while chalking out appropriate policy frames and adopting several measures to bring about a reduction in attrition rate.

In any activity whether in the manufacturing or services sector the professional hazards are always witnessed these may result in (a) headaches; (b) twinges; (c) muscle trembling; (d) lack of appetite; (e) sickness; (f) increase in errors due to above problems; (g) effect on efficiency. All these parameters have been quantified for both the manufacturing and services sector and the details are presented in *Table No. 6.9*.

Table No. 6.9

Showing physical difficulties observed at work place and its effect on efficiency
(No. of employees in percentages)

S.N.	Physical Problems	Frequency of occurrence Present (in brackets – Previous)						Total
		Never	Rarely	Sometime	Frequently	Always	* N/A	
I	II	III	IV	V	VI	VII	VIII	IX
(a) Headache								
1	Manufacturing	33 (38)	39 (21)	24 (7)	4 (0)	0 (6)	0 (28)	100 (100)
2	Services	22 (16)	25 (25)	36 (21)	16 (5)	1 (2)	0 (30)	100 (100)
(b) Twinges								
1	Manufacturing	55 (34)	16 (18)	26 (14)	3 (2)	0 (4)	0 (28)	100 (100)
2	Services	20 (23)	31 (5)	41 (30)	7 (10)	1 (1)	0 (30)	100 (100)
(c) Muscle Trembling								
1	Manufacturing	66 (42)	17 (19)	11 (6)	4 (5)	2 (4)	0 (28)	100 (100)
2	Services	25 (23)	35 (21)	32 (22)	7 (4)	1 (1)	0 (30)	100 (100)
(d) Lack of appetite								
1	Manufacturing	53 (44)	25 (15)	12 (6)	3 (4)	7 (3)	0 (28)	100 (100)
2	Services	21 (11)	29 (21)	37 (30)	11 (7)	2 (1)	0 (30)	100 (100)
(e) Sickness								
1	Manufacturing	36 (17)	40 (29)	16 (24)	7 (1)	1 (1)	0 (28)	100 (100)

S.N.	Physical Problems	Frequency of occurrence Present (in brackets – Previous)						* N/A	Total
		Never	Rarely	Sometime	Frequently	Always			
I	II	III	IV	V	VI	VII	VIII	IX	
2	Services	20 (13)	35 (15)	31 (35)	12 (4)	3 (3)	0 (30)	100 (100)	
(f) Increase in errors due to above problems									
1	Manufacturing	48 (33)	33 (29)	16 (9)	1 (2)	2 (0)	0 (28)	100 (100)	
2	Services	27 (23)	28 (24)	34 (19)	9 (4)	1 (1)	0 (30)	100 (100)	
(g) Effect on efficiency									
1	Manufacturing	68 (43)	18 (17)	4 (9)	4 (1)	6 (2)	0 (28)	100 (100)	
2	Services	30 (32)	17 (5)	39 (25)	7 (4)	7 (4)	0 (30)	100 (100)	

* N/A- Not applicable, because under this category all employees are fresher and worked in only one organization.

Highlighted area: shows significant incremental change in observed for the employees regarding characteristics of the present and previous employment

Source: Field Investigation

Most of these parameters are psycho medical in nature and would not only bring about degrees of discomfort in the course of performing the work and might ever liger subsequently. As a result, the physical hardships and discomforts would have an impact on the efficiency levels of the workers and might result in the occurrence of the attrition phenomena with an impact on the attrition rate.

The only comment one would like to offer at this stage is the physical hardships experienced by the workers are of different nature in the manufacturing and services sector and would have to be differently handled with appropriate medical attention. Lack of timely medical attention to the workers could result in a drop of the efficiency levels and might even go on to increase the attrition rates. The impact of each one of the medical discomforts of the workers would be understandably different in the two sets of activities and would call for different sets of curative measures.

Yet another factor which would influence the attrition phenomena and subsequently the attrition rate could be the belongingness of the workers to the formal and informal groups of the workers at the workplace. In this connection the information was sought as to whether the workers belonged to any formal and

informal groups at the workplace during their previous jobs or in their present assignments. This information has been processed and tabulated in *Table No. 6.10*. Although this is a very significant indicator which should have very considerable influence on the attrition phenomena, it appears from the data presented in this regard that there does not seem to be considerable or significant difference in the value of parameters for the Manufacturing Sector (represented by automobile industry) or the Service Sector (represented by IT activity). This appears to be the strange inference but it emerges from whatever responses that were obtained during the course of field investigation.

Table No. 6.10
Showing belongingness of respondents to formal and informal group at
workplace

(In Percentages)

S.N.	Designations of Respondents	Manufacturing		Services		Grand Total Present	Grand Total Previous
		Present workplace	Previous workplace	Present workplace	Previous workplace		
I	II	III	IV	V	VI	VII	VIII
1	Formal	48.46%	43.48%	51.54%	56.52%	100%	100%
2	Informal	38.20%	43.33%	61.80%	56.67%	100%	100%
3	*N/A	0.00%	45.81%	0.00%	54.19%	100%	100%
4	Grand Total	44.07%	44.07%	55.93%	55.93%	100%	100%

* Under this category, respondents are fresher

Source: Field Investigation

It would be interesting to find out the effectiveness belonging of the respondents to the formal group (as processed and tabulated in Table No. 6.10 (A)) and informal group (as tabulated in Table No. 6.10 (B)). These two tables have compiled the responses on a five point scale indicating where the belonging to the groups was; (a) never experienced; (b) rarely; (c) sometime; (d) frequently; (e) always. Here also, any firm inferences regarding the sense of belonging to the formal (Table 6.10-A) or the informal (Table 6.10-B) groups do not seem to appear which would lead to any meaningful substantiation in this regard.

Table No. 6.10 (A)

Showing EFFECTIVENESS of belongingness of respondents to FORMAL group at workplace on the efficiency of respondents

S. N.	Designations of Respondents	Manufacturing		Services		Grand Total Present	Grand Total Previous
		Present workplace	Previous workplace	Present workplace	Previous workplace		
I	II	III	IV	V	VI	VII	VIII
(a)	Never	25.00%	10.00%	75.00%	90.00%	100.00%	100.00%
(b)	Rarely	60.71%	6.25%	39.29%	93.75%	100.00%	100.00%
(c)	Sometime	67.47%	93.33%	32.53%	6.67%	100.00%	100.00%
(d)	Frequently	22.22%	52.63%	77.78%	47.37%	100.00%	100.00%
(e)	Always	15.45%	0.00%	84.55%	100.00%	100.00%	100.00%
(f)	*N/A	50.75%	44.20%	49.25%	55.80%	100.00%	100.00%
	Grand Total	44.07%	44.07%	55.93%	55.93%	100.00%	100.00%

*N/A-Includes respondents who does not belongs to either formal group and nor informal group

Source: Field Investigation

Table No. 6.10 (B)

Showing EFFECTIVENESS of belongingness of respondents to INFORMAL group at workplace on the efficiency of respondents

S. N.	Designations of Respondents	Manufacturing		Services		Grand Total Present	Grand Total Previous
		Present workplace	Previous workplace	Present workplace	Previous workplace		
I	II	III	IV	V	VI	VII	VIII
1	Never	21.43%	9.09%	78.57%	90.91%	100.00%	100.00%
2	Rarely	78.95%	0.00%	21.05%	100.00%	100.00%	100.00%
3	Sometime	67.52%	68.00%	32.48%	32.00%	100.00%	100.00%
4	Frequently	28.57%	66.67%	71.43%	33.33%	100.00%	100.00%
5	Always	16.67%	16.67%	83.33%	83.33%	100.00%	100.00%

S. N.	Designations of Respondents	Manufacturing		Services		Grand Total Present	Grand Total Previous
		Present workplace	Previous workplace	Present workplace	Previous workplace		
I	II	III	IV	V	VI	VII	VIII
6	*N/A	38.20%	44.20%	61.80%	55.80%	100.00%	100.00%
7	Grand Total	44.07%	44.07%	55.93%	55.93%	100.00%	100.00%

Source: Field Investigation

While understanding the attrition phenomena, it is necessary to ascertain the reasons why the respondents chose to leave the previous company as also the reason why the choice of the present company is being made. All these responses obtained have been presented separately for the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity) for indicating why the present company was joined (*Table No. 6.11*) and why the previous company was left (*Table No. 6.12*). The average weight and the total weight with respect to various parameters has been assigned and further indexed. All the parameters so indexed have been ranked from 1 to 14 which would indicate the significance of each one of the parameters while accepting the present job or leaving the previous assignment. These parameters have been; (a) improving the experience; (b) career growth; (c) compensation offered; (d) better designation; (e) work culture; (f) a clear role at the workplace; (g) challenging nature of the job; (h) good relations with superiors; (i) independence while performing the job; (j) bearable work stress; (k) parental mobility; (l) no stress; (m) basic desire not to work in one organization; and (n) opportunities to learn in a assignment.

Table No. 6.11
Showing the reasons for joining the present company (Arranged by higher priority)

S. N.	Factors under consideration	Manufacturing (Automobile)			Services (I.T.)		
		Index	Total Weight	Average Weight	Index	Total Weight	Average Weight
I	II	III	IV	V	VI	VII	VIII
(a)	Improving experience	1	2751	7.8825	1	2045	7.4364
(b)	Career growth	2	2594	7.4327	2	1979	7.1964

S. N.	Factors under consideration	Manufacturing (Automobile)			Services (I.T.)		
		Index	Total Weight	Average Weight	Index	Total Weight	Average Weight
I	II	III	IV	V	VI	VII	VIII
(c)	Compensation	3	2544	7.2894	3	1870	6.8000
(d)	Better designation	6	2365	6.7765	4	1851	6.7309
(e)	Work culture	5	2505	7.1777	5	1832	6.6618
(f)	Role is clear	7	2223	6.3696	6	1800	6.5455
(g)	Challenging job	9	2197	6.2951	7	1798	6.5382
(h)	Good relation with supervisor	11	2092	5.9943	8	1790	6.5091
(i)	Independence while performing job	4	2527	7.2407	9	1757	6.3891
(j)	Bearable work stress	10	2141	6.1347	10	1642	5.9709
(k)	Parental mobility	12	2053	5.8825	11	1581	5.7491
(l)	No role stress	13	2053	5.8825	12	1550	5.6364
(m)	Never desire work one org.	14	1590	4.5559	13	1547	5.6255
(n)	learning in job	8	2211	6.3352	14	1426	5.1855

Source: Field Investigation

Table No. 6.12
Showing the reasons for leaving the previous company
(Arranged by higher priority)

S. N.	Factors under consideration	Manufacturing (Automobile)			Services (I.T.)		
		Index	Total Weight	Average Weight	Index	Total Weight	Average Weight
I	II	III	IV	V	VI	VII	VIII
(a)	Compensation	4	1405	5.5754	1	1434	7.4301
(b)	Better designation	1	1974	7.8333	2	1409	7.3005
(c)	Better work profile	2	1608	6.3810	3	1403	7.2694
(d)	Lack of career growth	3	1530	6.0714	4	1199	6.2124
(e)	Higher studies	12	883	3.5040	5	1129	5.8497
(f)	No learning in job	13	813	3.2262	6	1077	5.5803
(g)	Role stress	6	1295	5.1389	7	1067	5.5285
(h)	No challenge in job	7	1237	4.9087	8	997	5.1658
(i)	Unfavorable work culture	9	1161	4.6071	9	992	5.1399
(j)	Unfavorable working environment	5	1356	5.3810	10	914	4.7358

S. N.	Factors under consideration	Manufacturing (Automobile)			Services (I.T.)		
		Index	Total Weight	Average Weight	Index	Total Weight	Average Weight
I	II	III	IV	V	VI	VII	VIII
(k)	Parental mobility distance	8	1222	4.8492	11	870	4.5078
(l)	Not get along with the immediate superior	10	945	3.7500	12	850	4.4041
(m)	Unbearable work pressure	11	934	3.7063	13	810	4.1969
(n)	Never desire to work within one org.	14	642	2.5476	14	748	3.8756

Source: Field Investigation

The results obtained and presented after processing and tabulation in Table 6.11 and Table 6.12 would it lead to very interesting inferences. For instance,

- (i) Whether it is the case of joining the present job or quitting the previous assignment the ranking of the parameters for the manufacturing and services sector has been understandably different;
- (ii) For instance, improving experience has been indexed at number one while assigning reasons for joining the present company while learning facilities offered in the job have been indexed at number eight in the Manufacturing Sector (represented by automobile industry) while in the Service Sector (represented by IT activity) it has been indexed at fourteen;
- (iii) In regard to so many other parameters of manufacturing sector pertaining to manufacturing and services sector similar inferences would emerged;
- (iv) While these are the inferences which may be broadly drawn to quantify the reasons as to why the respondents have joined the present company in preference to previous assignment, the situation in regard to the reasons why the previous company was left (Table No. 6.11) by the respondents appear to be different;
- (v) For instance, the compensation offered in the Manufacturing Sector (represented by automobile industry) has been indexed at four as against its indexing at number one in the Service Sector (represented by IT activity), again total lack of learning in the job which would obviously of

the repetitive nature of the manufacturing sector has been ranked at number thirteen, while this parameter has been indexed at number six in the services sector;

- (vi) In the same way the weight ages given for leaving the previous assignment and joining the present one have been substantially different in the Manufacturing Sector (represented by automobile industry) and the IT industry.
- (vii) A detailed comment does not appear to be warranted;
- (viii) It will be clearly seen that the reasons for joining the present job whether in the Manufacturing Sector (represented by automobile industry) or the IT establishment are substantially different as also the reasons for quitting in these two sectors.

If the attrition rate is required to be handled appropriately, suitable policy measures are required to be adopted both in the manufacturing and the Service Sector (represented by IT activity). It must be emphasized, however, that the structure of the policy measures would have to be substantially different as between two sectors. The emphasis has to be on retaining the labor force and preventing it from movement from one job to the other assignments with a view to preventing the occurrence of attrition phenomena and bring about a reduction in the attrition rate. In this context, the indexing of the parameters attempted in Table No. 6.11 (reasons for joining the present assignment) and 6.12 (reasons for leaving the previous job) would be handy in structuring appropriate retention policies of the workforce so that the attrition rate is reduced.

It will be seen from *Table No. 6.13 (chart no. 6.13)* that there is a very high degree of consensus among the respondents from the manufacturing and services sectors in regard to the structuring of appropriate policy mix for reducing the attrition rate. In the Manufacturing Sector (represented by automobile industry) a little over 97 per cent of the respondents desired the structuring of appropriate policy while in case of the services sector the percentages of the workers worked out to a little over 90 per cent. An inference which appears to be emerged from these responses appears to be that the workers in both sectors are not very keen on quitting the present assignment and getting on to a fresh assignment provided proper management with appropriate

policy mix is structured so that the highly performing employees do not leave the present assignment and join the fresh one.

Table No. 6.13

Distribution of opinions regarding ‘proper management with appropriate policy mix will avoid unusual leaving of highly performing employees’

S.N.	Responses	Sectors	
		Manufacturing	Services
I	II	III	IV
1	Yes	97.09%	90.54%
2	No	02.91%	9.46%
3	Grand Total	100%	100%

Source: Field Investigation

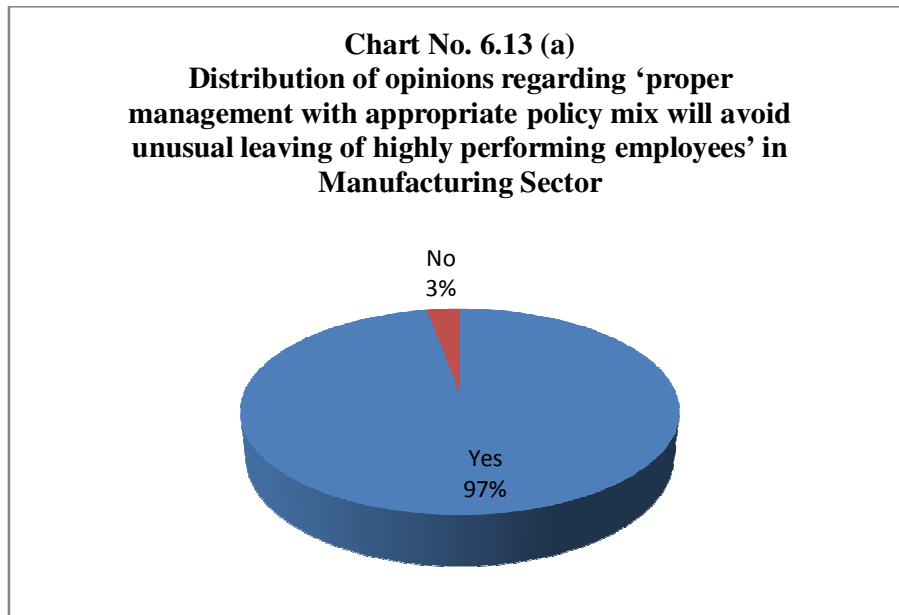
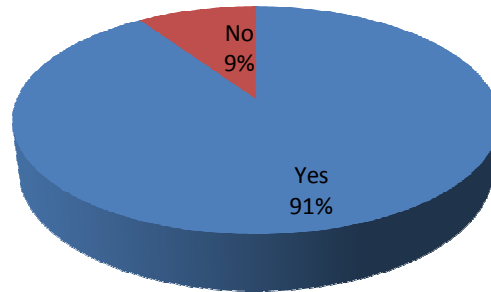


Chart No. 6.13 (b)
Distribution of opinions regarding 'proper management with appropriate policy mix will avoid unusual leaving of highly performing employees' in Services Sector



Section-(D) Skills and Other Parameters

It very often visualized in the corporate world that the skills of the workers are not appropriately used as a result of which a certain element of frustration occurs among the workers. The non utilization or underutilization of the skills of the workforce has almost a universal applicability in the corporate houses whether they belong to the Manufacturing Sector (represented by automobile industry) or the Service Sector (represented by IT activity). In this regards responses were obtained both in the manufacturing and services sector and these responses were quantified on the basis of a five point scale such as the utilization of the skill- (a) never used; (b) used rarely; (c) used sometimes; (d) used frequently; and (e) used always. It was realized that these responses would be different as between the various sections and departments of the corporate houses such as (a) machine operation of production; (b) Machine operation office; (c) clerical; (d) managerial; (e) leadership qualities; (f) functional; (g) skill of motivating other employees; (h) presentation skills; (i) problem solving skills; (j) error handling skill; (k) soft skills; (l) programming knowledge; and (m) software knowledge.

It has been observed on the basis of obtained data processed, quantified and tabulated in respect of various mentioned sections and presented in **Table No. 6.14** that most of the skills possessed by the workers have been considerably underused. This would naturally result in the enhanced cost and price escalation of the product. It also appears that, there does not appear to be a regular systematic policy of human audit performed either in the Manufacturing Sector (represented by automobile industry) or the Service Sector (represented by IT activity) so that the existing skills and efficiencies of the workers are given due weight ages in the process of extracting work from them and fixing their pay packages. All these details have been systematically presented and quantified which may be a starting point both in the manufacturing and services sector for structuring an appropriate policy towards utilization of the skills possessed by the workers. It goes without saying that information base would go a long way in structuring such a policy to reduce the attrition rate.

Table No. 6.14
Distribution of skills available with the respondents and utilization
(Present Work Place)

S.N.	Uses of skills	Sectors		
		Manufacturing	Services	Grand Total
I	II	III	IV	V
Machine Operation – Production				
1	Yes	100%	0.00%	100.00%
1.1	Never Used	0.00%	0.00%	0.00%
1.2	Using Rarely	100%	0.00%	100.00%
1.3	Using Sometime	0.00%	0.00%	0.00%
1.4	Using Frequently	100%	0.00%	100.00%
1.5	Using Always	100%	0.00%	100.00%
2	No	10.13%	10.13%	100.00%
2.1	N/A	10.13%	10.13%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Machine Operation- Office				
3	Yes	67.70%	32.30%	100.00%
3.1	Never Used	100.00%	0.00%	100.00%
3.2	Using Rarely	69.23%	30.77%	100.00%
3.3	Using Sometime	52.73%	47.27%	100.00%
3.4	Using Frequently	82.54%	17.46%	100.00%
3.5	Using Always	61.76%	38.24%	100.00%
4	No	47.68%	52.32%	100.00%
4.1	N/A	47.68%	52.32%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Clerical				
5	Yes	76.02%	23.98%	100.00%
5.1	Never Used	100.00%	0.00%	100.00%
5.2	Using Rarely	100.00%	0.00%	100.00%
5.3	Using Sometime	46.67%	53.33%	100.00%
5.4	Using Frequently	83.33%	16.67%	100.00%
5.5	Using Always	98.04%	1.96%	100.00%
6	No	46.73%	53.27%	100.00%
6.1	N/A	46.73%	53.27%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Managerial				
7	Yes	59.01%	40.99%	100.00%
7.1	Never Used	100.00%	0.00%	100.00%
7.2	Using Rarely	71.43%	28.57%	100.00%

S.N.	Uses of skills	Sectors		
		Manufacturing	Services	Grand Total
I	II	III	IV	V
7.3	Using Sometime	70.21%	29.79%	100.00%
7.4	Using Frequently	29.90%	70.10%	100.00%
7.5	Using Always	91.23%	8.77%	100.00%
8	No	54.23%	45.77%	100.00%
8.1	N/A	54.23%	45.77%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Leadership				
9	Yes	52.67%	47.33%	100.00%
9.1	Never Used	100.00%	0.00%	100.00%
9.2	Using Rarely	83.33%	16.67%	100.00%
9.3	Using Sometime	37.50%	62.50%	100.00%
9.4	Using Frequently	32.69%	67.31%	100.00%
9.5	Using Always	75.00%	25.00%	100.00%
10	No	58.60%	41.40%	100.00%
10.1	N/A	58.60%	41.40%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Functional				
11	Yes	44.19%	55.81%	100.00%
11.1	Never Used	100.00%	0.00%	100.00%
11.2	Using Rarely	92.00%	8.00%	100.00%
11.3	Using Sometime	32.97%	67.03%	100.00%
11.4	Using Frequently	27.70%	72.30%	100.00%
11.5	Using Always	70.27%	29.73%	100.00%
12	No	70.36%	29.64%	100.00%
12.1	N/A	70.36%	29.64%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Skill of motivating other employees				
13	Yes	54.12%	45.88%	100.00%
13.1	Never Used	100.00%	0.00%	100.00%
13.2	Using Rarely	93.10%	6.90%	100.00%
13.3	Using Sometime	67.62%	32.38%	100.00%
13.4	Using Frequently	38.74%	61.26%	100.00%
13.5	Using Always	63.25%	36.75%	100.00%
14	No	64.04%	35.96%	100.00%
14.1	N/A	64.04%	35.96%	100.00%
	Grand Total	55.93%	44.07%	100.00%

S.N.	Uses of skills	Sectors		
		Manufacturing	Services	Grand Total
I	II	III	IV	V
Presentation Skill				
15	Yes	42.86%	57.14%	100.00%
15.1	Never Used	96.30%	3.70%	100.00%
15.2	Using Rarely	46.81%	53.19%	100.00%
15.3	Using Sometime	27.98%	72.02%	100.00%
15.4	Using Frequently	42.70%	57.30%	100.00%
15.5	Using Always	91.12%	8.88%	100.00%
16	No	91.12%	8.88%	100.00%
16.1	N/A	55.93%	44.07%	100.00%
	Grand Total	42.86%	57.14%	100.00%
Problem Solving Skill				
17	Yes	48.98%	51.02%	100.00%
17.1	Never Used	0.00%	0.00%	0.00%
17.2	Using Rarely	97.30%	2.70%	100.00%
17.3	Using Sometime	74.03%	25.97%	100.00%
17.4	Using Frequently	35.40%	64.60%	100.00%
17.5	Using Always	49.01%	50.99%	100.00%
18	No	100.00%	0.00%	100.00%
18.1	N/A	100.00%	0.00%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Error Handling				
19	Yes	45.55%	54.45%	100.00%
19.1	Never Used	100.00%	0.00%	100.00%
19.2	Using Rarely	92.68%	7.32%	100.00%
19.3	Using Sometime	57.14%	42.86%	100.00%
19.4	Using Frequently	36.64%	63.36%	100.00%
19.5	Using Always	38.97%	61.03%	100.00%
20	No	95.38%	4.62%	100.00%
20.1	N/A	95.38%	4.62%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Soft Skills				
21	Yes	45.22%	54.78%	100.00%
21.1	Never Used	100.00%	0.00%	100.00%
21.2	Using Rarely	91.67%	8.33%	100.00%
21.3	Using Sometime	77.78%	22.22%	100.00%
21.4	Using Frequently	26.72%	73.28%	100.00%
21.5	Using Always	29.59%	70.41%	100.00%
22	No	100.00%	0.00%	100.00%

S.N.	Uses of skills	Sectors		
		Manufacturing	Services	Grand Total
I	II	III	IV	V
22.1	N/A	100.00%	0.00%	100.00%
	Grand Total	55.93%	44.07%	100.00%
		45.22%	54.78%	100.00%
Programming Knowledge				
23	Yes	29.31%	70.69%	100.00%
23.1	Never Used	100.00%	0.00%	100.00%
23.2	Using Rarely	98.04%	1.96%	100.00%
23.3	Using Sometime	41.67%	58.33%	100.00%
23.4	Using Frequently	7.80%	92.20%	100.00%
23.5	Using Always	29.00%	71.00%	100.00%
24	No	100.00%	0.00%	100.00%
24.1	N/A	100.00%	0.00%	100.00%
	Grand Total	55.93%	44.07%	100.00%
Software Knowledge				
25	Yes	32.93%	67.07%	100.00%
25.1	Never Used	100.00%	0.00%	100.00%
25.2	Using Rarely	96.92%	3.08%	100.00%
25.3	Using Sometime	46.30%	53.70%	100.00%
25.4	Using Frequently	15.57%	84.43%	100.00%
25.5	Using Always	11.21%	88.79%	100.00%
26	No	100.00%	0.00%	100.00%
26.1	N/A	100.00%	0.00%	100.00%
	Grand Total	55.93%	44.07%	100.00%

Source: Field Investigation

It has to be appreciated that it is one thing to have a certain specified skills and quite another to have opportunities to utilize it. These two quantified situations have been presented in Table No. 6.14, it will be seen that in the Manufacturing Sector (represented by automobile industry) about 88 per cent of the skills posses by the workers are actually put to use while about 12 per cent of the skills virtually go waste. Since, there are no adequate opportunities to put these skills to use. The position in the Service Sector (represented by IT activity) is understandably different. Almost the entire skills possessed by the workers (98.54 per cent) have been effectively utilized, while a little less than 2 per cent goes waste.

Having said that, it was thought desirable to get responses according to the demand for skills available in the Manufacturing Sector (represented by automobile industry) as also in the Service Sector (represented by IT activity), and the attempts required to procure such assignments. All the relevant details have been quantified, processed and tabulated in *Table No. 6.15* and appropriately illustrated in *Pie Diagram 6.15*.

Table No. 6.15

Distribution of respondents according to the Demand for skills and attempt to grab demand

S.N.	Trying to procure demand for the skills	Sectors	
		Manufacturing	Services
I	II	III	IV
1	Yes	35.52%	74.17%
1.1	ONCE - Attempted Job interview in a month	14.60%	33.08%
1.2	TWICE - Attempted Job interview in a month	16.03%	19.26%
1.3	THRICE - Attempted Job interview in a month	3.71%	9.82%
1.4	FOUR TIME – Attempted Job Interview in a month	1.14%	9.82%
1.5	More than FIVE TIME – Attempted Job Interview in a month	0.00%	2.17%
2	No	64.48%	25.83%
	Grand Total	100%	100%

Source: Field Investigation

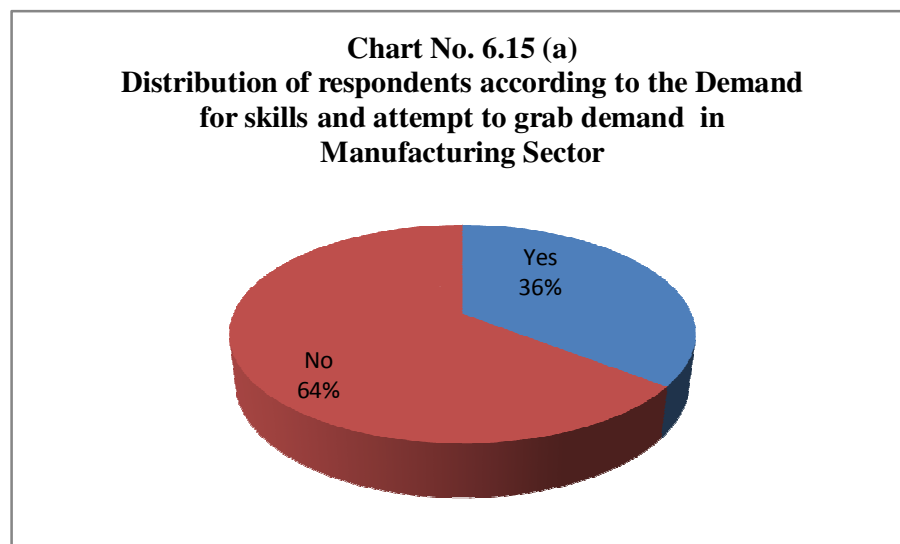
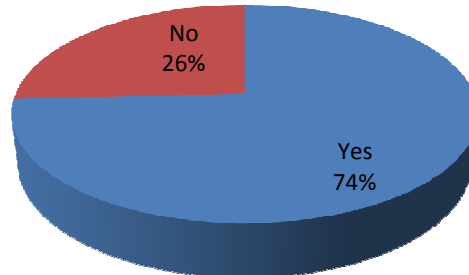


Chart No. 6.15 (b)
Distribution of respondents according to the Demand for skills and attempt to grab demand in Services Sector



It will be seen that the position taken earlier in respect of the demand for specified skills has been substantiated on the basis of the quantified data presented in the *Table No. 6.15*. In the Manufacturing Sector (represented by automobile industry) about two-thirds of the respondents (64.48 per cent) have indicated that their skills have no demand in the market while a little more than one-third (35.52 per cent) indicated that the demand for their skills exist. In contrast to this situation in the service sector almost three-fourth (74.17 per cent) respondents indicated the availability of demand for their skills while a little over one-fourth (25.83 per cent) suggested a lack of availability. Such a contrasting situation in the two sectors manufacturing and services sector appears to be quite understandable in the context to the Indian economy. Further, as will be seen, the respondents in the Manufacturing Sector (represented by automobile industry) were required to put in more attempts to avail of whatever opportunities that was available, while in the services sector smaller number of attempts could procure for the respondents the opportunities to obtain the jobs. This also appears to be quite understandable in the current scenario confronting the manufacturing and the services sector.

These observations would seem to have considerable impact on the attrition phenomena and influence the attrition rate. It may not be wrong to infer that as result of opportunities available in the services sector and considerably insignificant efforts required to be put through to obtain the jobs, the attrition rate in the services sector is likely to be much higher than in the Manufacturing Sector (represented by automobile industry).

It goes without saying that the commitment of the workers and their loyalty always plays a substantive role in the occurrence of the attrition phenomena and also influences the attrition rate. Information in this regards from the employees both in the Manufacturing Sector (represented by automobile industry) and Service Sector (represented by IT activity) was sought during the field investigation. The responses obtained have been quantified, processed, tabulated and presented in **Table No. 6.16**. For this purpose four parameters were sought to be quantified, namely; (a) behavior of the superior; (b) overall policy of the management; (c) culture of the company; and (d) cumulative impact of all these three variables.

Table No. 6.16
Commitment of the employees for the present company and the reasons for this commitment (Per cent of respondents)

S. N.	Commitment of respondents to the present Job	Manufacturing (Services in Brackets)				
		Less than One year	1 to 3 years	3 to 5 years	Looking for lifetime	Grand Total
I	II	III	IV	V	VI	VII
1	A	4 (1)	4 (3)	14 (15)	52 (6)	75 (25)
2	A, B, C	0 (0)	0 (57)	0 (0)	43 (0)	43 (57)
3	A, C	0 (53)	0 (33)	0 (13)	0 (0)	0 (100)
4	A, C, B	0 (6)	0 (82)	0 (0)	0 (12)	0 (100)
5	B	2 (4)	28 (20)	1 (6)	36 (2)	68 (32)
6	C	2 (5)	7 (33)	6 (6)	37 (4)	52 (48)
7	D	6 (10)	9 (38)	2 (7)	29 (0)	46 (54)
8	Grand Total	3 (6)	9 (26)	6 (8)	37 (3)	56 (44)

Note: A=Superior's Behavior, B= Overall Management Policy, C=Culture of the company, D= All three

Source: Field Investigation

It must be pointed out that the three parameters mentioned above have a very high level of psycho-social basis and the quantification is very difficult, if not impossible. Nevertheless, the data so presented in **Table No. 6.16** may be treated as merely indicative and would not lead to any strong inferences. As would be seen from the data presented, the commitment of the employees and their loyalty to the present company is vastly different as between the Manufacturing Sector (represented by automobile industry) and Service Sector (represented by IT activity). This is of course quite understandable.

PART-III

Section-(E): Employee Expectations and Needs

During the course of field investigation views and the opinions were sought to ascertain the extent to which they differ as between the manufacturing activity and the services sector. The views were with respect to; (a) adequacy of training; (b) fair treatment with respect; (c) a clear indication as to what is expected during the execution of job; (d) nature of working conditions whether tolerable and conforming to the safety norms; (e) a reasonable of workload; (f) fair package and the benefits; (g) opportunity and freedom to make suggestions for consideration of the superiors; (h) fair degree of evaluation backed up by the credit given to the worker; and (i) reasonable opportunities to utilize knowledge, skills and training experience. The responses in regard to these parameters were put on five point scale so that the nature of responses for two sectors- manufacturing (represented by automobile industry) and service sector (represented by IT activity) could be quantified and presented in **Table No. 6.17**. These responses have also been appropriately illustrated by the pie diagrams.

Table No. 6.17

The level of expectations of the respondents

S. N.	Factors of expectations	Level of expectation					Grand Total
		Mostly less than expected	Slightly less than expected	Exactly as per expected	Slightly more than expected	Mostly more than expected	
I	II	III	IV	V	VI	VII	VIII
(a)	Receive adequate training						
	Manufacturing	11.46%	27.79%	45.56%	9.74%	5.44%	100.00%
	Services	8.00%	10.91%	30.55%	25.09%	25.45%	100.00%
(b)	Be treated fairly and with respect						
	Manufacturing	10.03%	20.34%	48.14%	14.90%	6.59%	100.00%
	Services	14.18%	8.00%	44.73%	19.27%	13.82%	100.00%
(c)	Be told what is expected of us as workers						
	Manufacturing	2.58%	30.09%	47.56%	3.15%	16.62%	100.00%
	Services	3.27%	18.18%	49.82%	14.18%	14.55%	100.00%
(d)	Have tolerable & safe working conditions						

S. N.	Factors of expectations	Level of expectation					Grand Total
		Mostly less than expected	Slightly less than expected	Exactly as per expected	Slightly more than expected	Mostly more than expected	
I	II	III	IV	V	VI	VII	VIII
	Manufacturing	5.73%	15.47%	51.00%	19.48%	8.31%	100.00%
	Services	9.82%	4.00%	30.18%	17.45%	38.55%	100.00%
(e)	Have a reasonable workload						
	Manufacturing	9.46%	21.20%	36.39%	9.17%	23.78%	100.00%
	Services	10.91%	8.00%	42.55%	18.91%	19.64%	100.00%
(f)	Receive fair wages & benefit						
	Manufacturing	25.21%	23.50%	37.82%	5.73%	7.74%	100.00%
	Services	9.82%	13.45%	47.64%	20.36%	8.73%	100.00%
(g)	Be given the opportunity to make suggestions & consider it						
	Manufacturing	15.76%	21.78%	40.11%	14.90%	7.45%	100.00%
	Services	12.73%	10.55%	52.00%	15.27%	9.45%	100.00%
(h)	Have our work fairly evaluated and to be given credit for it						
	Manufacturing	15.76%	31.81%	35.82%	11.75%	4.87%	100.00%
	Services	20.73%	10.18%	46.91%	15.27%	6.91%	100.00%
(i)	Have a reasonable opportunity to use our knowledge, skills, training or experiences						
	Manufacturing	1.72%	11.46%	45.27%	19.48%	22.06%	100.00%
	Services	11.64%	10.55%	39.27%	10.55%	28.00%	100.00%
(j)	Total	11.23%	10.42%	42.63%	17.37%	18.34%	100.00%

Source: Field Investigation

It will be seen that the responses in the two sectors have displayed considerable variations in regard to all the listed parameters. This, of course, is not surprising at all. The inferences that can be drawn on the basis of quantified data will merely be indicative of a certain input in the policy making with a view to retaining the employees the present job so as to bring about reduction in the frequency of the occurrence of the attrition phenomena, thereby considerably reducing the attrition rate.

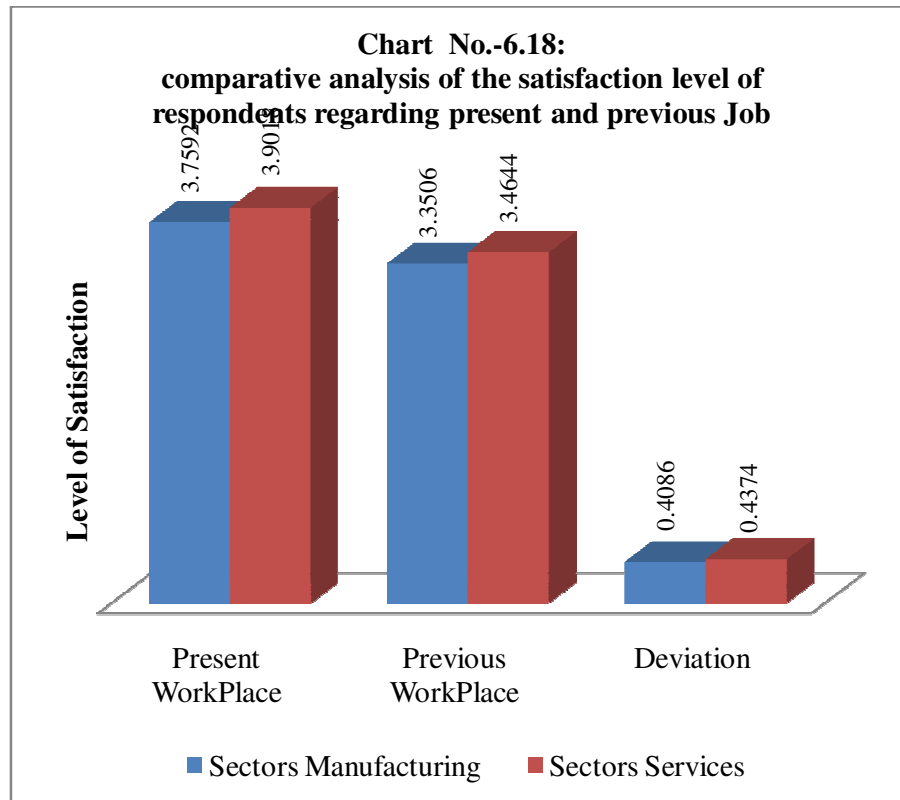
Section-(F) Overall Job Satisfaction

As a matter of fact, the attrition rate would be considerably influenced by the level of satisfaction experienced by the workers in the Manufacturing Sector (represented by automobile industry) as also in the Service Sector (represented by IT activity). There will always be a tendency for the workers to move away from an assignment offering a lower level of satisfaction, whatever it means, to an assignment offering a higher level of satisfaction. The responses obtained in regard to this parameter have been incorporated in *Table No. 6.18* and illustrated in a *Chart No. 6.18*. The information quantified in the table and the chart is clearly indicative of the fact that the movement of the workers has been on accepted lines both in the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity). That is, the workers have displayed a tendency to move away from a job offering a lower level of satisfaction to a job offering a higher level of satisfaction. It may be worthwhile to suggest that such a movement would continue only if a job offering a higher level of satisfaction is available either in the manufacturing or in the services sector. In so far as, such a job is not readily available, the movement of the workers is likely to be restricted and consequently would reduce the attrition rate in both the sectors manufacturing and services. The policy makers both in the manufacturing and the services sector should structure appropriate policies and programs to retain the workers in such a way that the level of satisfaction of workers is comparable to those available in the vicinity.

Table No. 6.18
Comparative analysis of the satisfaction level of respondents regarding present and previous Job

S.N.	Parameters	Manufacturing Sector		Services Sector	
		Present Workplace	Previous Workplace	Present Workplace	Previous Workplace
I	II	III	IV	V	VI
1	Level of Job Satisfaction	3.7592	3.3506	3.9018	3.4644
2	Deviation	0.4086		0.4374	

Source: Field investigation



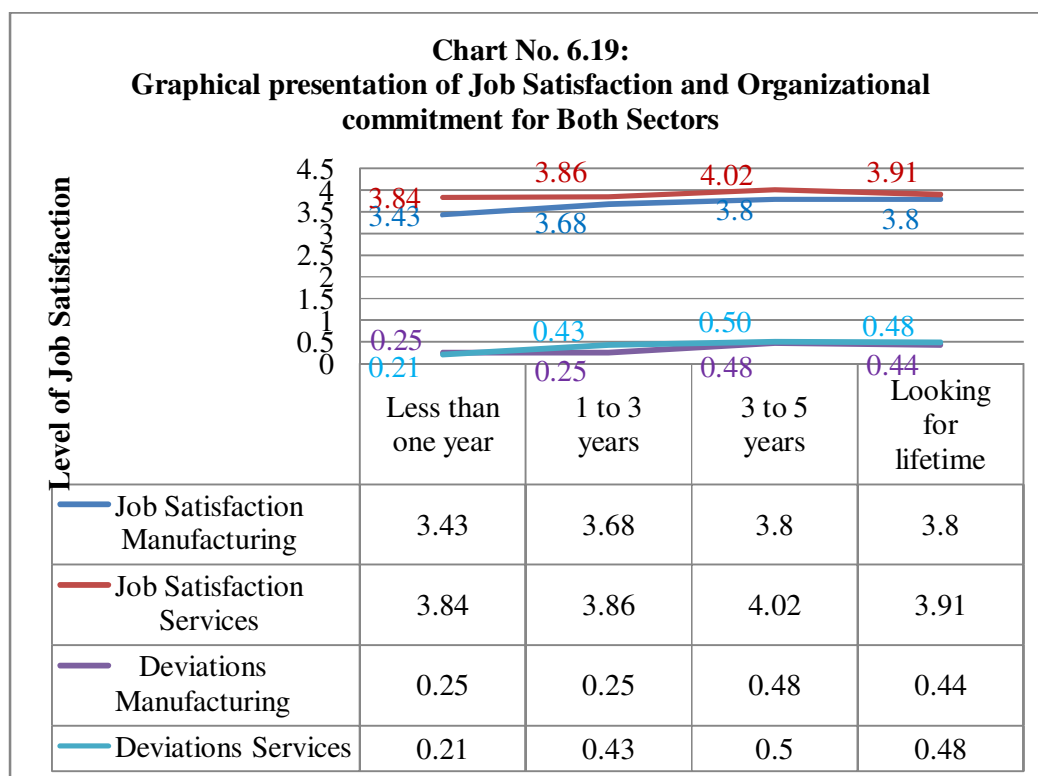
The satisfaction level, certainly, plays a significant role in influencing the attrition rate but if it is considered along with the commitment of the workers in the manufacturing and the services sector, this parameter attempts a considerable level of significance. The responses were sought, during the course of field investigation, from the workers both in the manufacturing and services sector in relation to the level of satisfaction coupled with the organizational commitment. And the data obtained was processed and tabulated and presented in **Table No. 6.19**. The degree of commitment has been spanned over four time durations, namely; (a) less than one year; (b) one to three years; (c) between three and five years; and (d) life time organizational commitment.

Table No. 6.19**Analysis of Satisfaction levels and Organizational Commitment for Both Sectors and both workplaces**

S. N.	Organizational Commitment	Sectors and Level of Job Satisfaction			
		Manufacturing Sector		Services Sector	
		Present Workplace	Previous Workplace	Present Workplace	Previous Workplace
I	II	III	IV	V	VI
(a)	Less than one year	3.43	3.17	3.84	3.62
(b)	to 3 years	3.68	3.43	3.86	3.43
(c)	3 to 5 years	3.80	3.31	4.02	3.51
(d)	Looking for lifetime	3.80	3.35	3.91	3.42
	Grand Total	3.75	3.35	3.90	3.46

Source: Field Investigation

It will be seen that the level of satisfaction and the level of organizational commitment spanned over various time dimensions mentioned above have been significantly different as between the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity) a comparison in respect of the satisfaction level and the organizational commitment in respect of the previous job has also been indicated. The differences in respect of these parameters are so substantially different for the two sectors that any separate inferences do not appear to be call for. Except that, if the value of parameter is of a higher order, the mobility of workers is likely to be less than if the value of the parameter were of a lower order.



The position obtained on the basis of data presented in Table No. 6.19 has been graphically represented in *Chart No. 6.19* for a clearer comprehension.

Table No. 6.20
Analysis of Pearson's correlation between Average level of Job satisfaction and Organizational Commitment

Table No. – 6.20(A): Descriptive Statistics

S.N.		Mean	Std. Deviation	N
I	II	III	IV	V
1	Level of Job Satisfaction	3.8210	.61610	445
2	Organizational Commitment	5.6337	3.44038	445

Source: Field Investigation

The data presented in Table No. 6.19 and illustrated in the Chart No. 6.19, as above, have been further substantiated on the basis of Pearson's correlation between average level of job satisfaction and organizational commitment as presented in *Table No. 6.20(A) and 6.20(B)*. The values obtained in regard to the Pearson's correlation between the two parameters average level of satisfaction and organizational

commitment substantiate the inference drawn earlier. A fresh comment does not appear to be warranted.

Table No. 6.20 (B): Correlations

S.N.	Parameters	Measures	Level of Job Satisfaction	Organizational Commitment
I	II	III	IV	V
1	Level of Job Satisfaction	Pearson Correlation	1	.187(**)
		Sig. (2-tailed)	.	.000
		Sum of Squares and Cross-products	168.534	176.239
		Covariance	.380	.397
		N	445	445
2	Organizational Commitment	Pearson Correlation	.187(**)	1
		Sig. (2-tailed)	.000	.
		Sum of Squares and Cross-products	176.239	5255.294
		Covariance	.397	11.836
		N	445	445

** Correlation is significant at the 0.01 level (2-tailed).

Source: Field Investigation

Section-(G) Team Work

Yet another significant factor which could influence the attrition rate, apart from, and in addition to the average level of job satisfaction and the organizational commitment, appears to be the team work which is involved in any corporate industrial establishment or the services enterprise. The team work could be with respect to a formal group which would have the approval or even the blessings of the management or the team work could be of a purely informal nature. Whether formal or informal, build up of a team would have a considerable impact on the occurrence of the attrition phenomena and influence the attrition rate. The responses in this regard were sought, processed and tabulated and presented in *Table No. 6.21* and appropriately illustrated in *Pie Diagram No. 6.21*. It will be seen that, both the formal and informal organizations have been attracting the workers in both in the manufacturing and services sector. The proportion of workers joining the workers organization in the Manufacturing Sector (represented by automobile industry) is a little over three-fourth (76.36 per cent) while those not joining account for a little less than one-fourth (23.64 per cent). In the services sector, however, the proportion of the

workers joining the workers team is less than that in the Manufacturing Sector (represented by automobile industry) and naturally, therefore, those workers not joining the workers team is considerably more. This aspect would have an influence on the attrition rate since; the workers forming a part of the workers team in the Manufacturing Sector (represented by automobile industry) would have a tendency to display a higher degree of organizational commitment than the workers in the Manufacturing Sector (represented by automobile industry). This would lead to a higher level of mobility of workers and therefore, a higher level of attrition rate in Service Sector (represented by IT activity) than in the Manufacturing Sector (represented by automobile industry). This inference is absolutely consistent with the inferences drawn earlier in respect of the attrition rate being higher in the services sector than in the manufacturing sector.

Table No. 6.21

Distribution of respondents according to the status of having team members at work place

S. N.	Types of Team	Do you have a team members at your present Workplace					
		Manufacturing			Services		
		Yes	no	Total	Yes	no	Total
I	II	III	IV	V	VI	VII	VIII
1	Informal	6%	0%	6%	4%	0%	4%
2	formal	36%	0%	36%	27%	0%	27%
3	N/A	0%	13%	13%	0%	14%	14%
4	Grand Total	42%	13%	55%	31%	14%	45%
		76.36%	23.46%	100.00%	68.88%	31.12%	100.00%

Source: Field Investigation

Chart No. 6.21 (a)
Distribution of respondents according to the status of having team members at work place in Manufacturing Sector

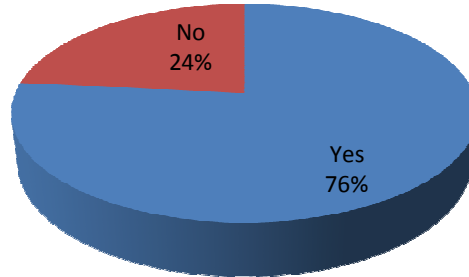
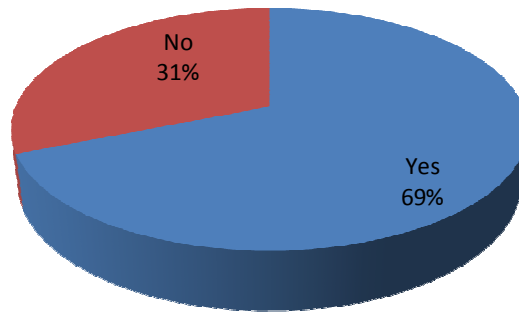


Chart No. 6.21 (b)
Distribution of respondents according to the status of having team members at work place in Service Sector



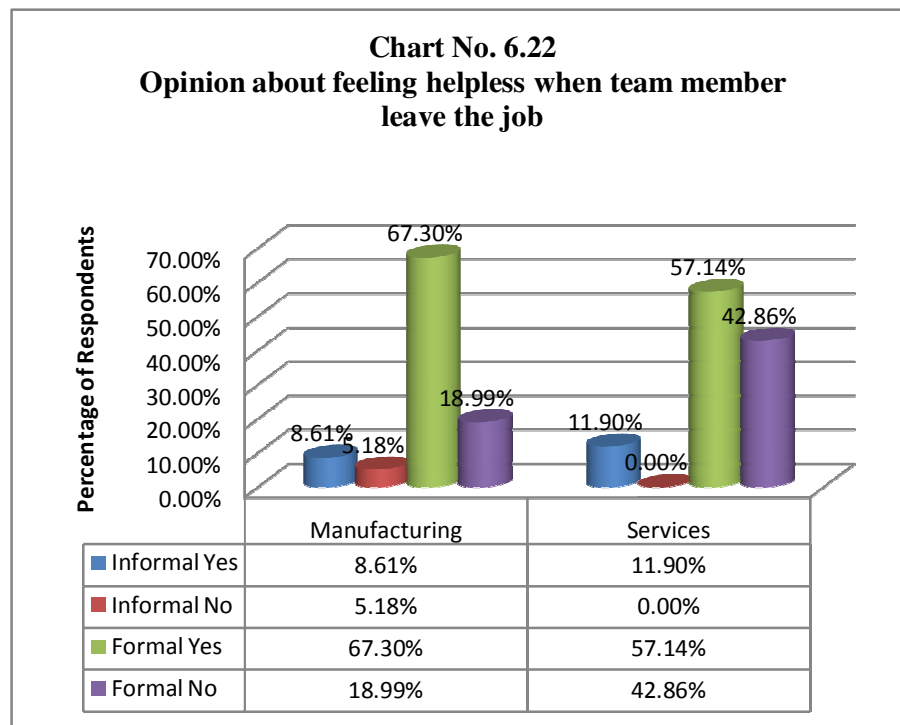
When the attrition occurs the workers left behind experience a sense of helplessness as they are left behind to perform about the same workload with fewer hands. This situation occur both in case of workers leading the formal group or informal group. Whichever way one chooses to look at, the attrition phenomena would impact the efficiency level and enhance the cost of production. An attempt has been made to find out the views of the workers who have been left behind as a result of the mobility of workforce away from the present assignment. These responses have been obtained, processed and tabulated and presented in *Table No. 6.22* and supported by appropriate *Pie Diagram No. 6.22*.

Table No. 6.22

Opinion about feeling helpless when team member leave the job

S. N.	Type of Team	Feel helpless when team member leave the job	Manufacturing	Services
I	II	III	IV	V
1	Informal	Yes	8.61%	11.90%
2		No	5.18%	0.00%
3		Total Informal	13.79%	11.90%
4	Formal	Yes	67.30%	57.14%
5		No	18.99%	42.86%
6		Total Formal	86.29%	88.10%
7	Grand Total		100%	100%

Source: Field Investigation



It will be seen that the workers left behind in the Manufacturing Sector (represented by automobile industry) experience the pinch of workers who have left the organization, which is of a higher order than the one experienced in the Service Sector (represented by IT activity). Even this quantification being purely of a psycho social nature does not lend itself to rigorous quantification, although, the values could be treated only as indicative. The inference is quite obvious, in the Service Sector (represented by IT activity) the disruption of the work cause because of the workers leaving is felt to be of a much higher order and therefore an adverse impact on the

productivity levels would be registered of a higher order than in the Manufacturing Sector (represented by automobile industry). The decision makers in the services sector would have to take into account this aspect of a larger damage caused by the attrition phenomena while adopting suitable measures to reduce the impact on the attrition rate.

The extent, to which the adverse effect on team work is experienced on the workers leaving the jobs in the manufacturing and the services sector, is bound to be different. This aspect has been considered by obtaining suitable responses. The quantification of these responses after due processing and tabulation have been presented in **Table No. 6.23** and supported by appropriate **Pie Diagram No. 6.23**. It will be seen that the adverse impact failed in the Service Sector (represented by IT activity) is of a very high order in comparison to that experience in the Manufacturing Sector (represented by automobile industry). For instance, if the adverse impact on the team work is less than 20 per cent, its negative or adverse effect works out to 67.31 per cent in the manufacturing sector while it stands at 89.64 per cent in the service sector. Such a disproportionate negative impact on the team work as a result of the attrition phenomena in the manufacturing and the services sector, would certainly call for appropriate suitable policy measures in both these types of enterprises. It must be appreciated that the adversity of the negative impact is more or is of higher order in the services sector and therefore the need and urgency of such measures would of a higher order than in the Manufacturing Sector (represented by automobile industry). It is needless to emphasize the fact that in whichever type of activity manufacturing or Service Sector (represented by IT activity), team work amongst the workers whether of formal type of informal type would always play crucial role in determining the efficiency levels and hence, appropriate precaution and measures are required to be taken to combat such a situation.

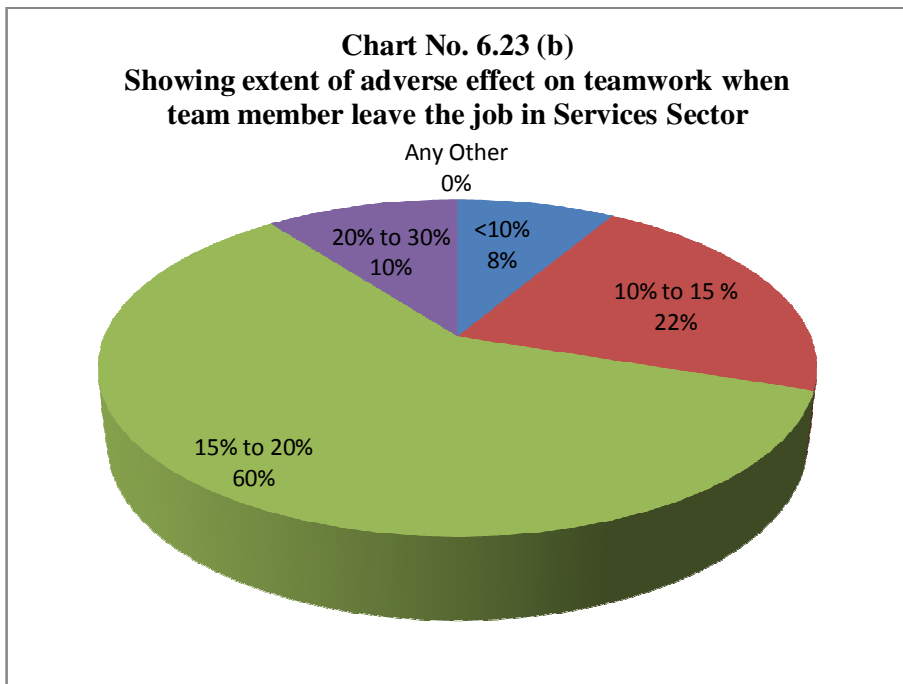
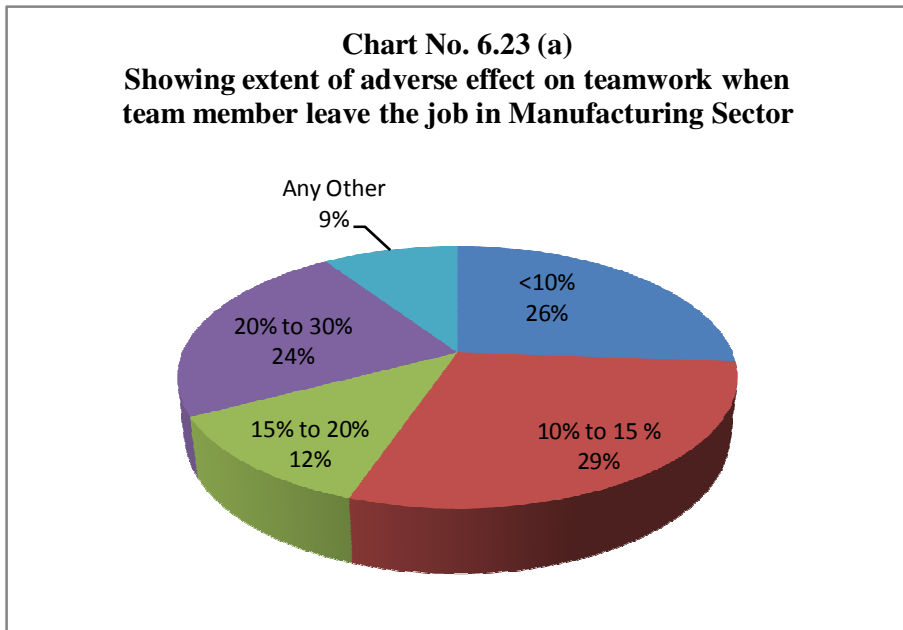
Table No. 6.23

Showing extent of adverse effect on teamwork when team member leave the job

S.N.	Per cent of negative effect on performances	Manufacturing	Services
I	II	III	IV
1	<10%	26.07%	8.49%
2	10% to 15 %	29.18%	21.60%
3	15% to 20%	12.06%	59.55%

S.N.	Per cent of negative effect on performances	Manufacturing	Services
I	II	III	IV
4	20% to 30%	23.35%	10.37%
5	Any Other	9.34%	0.00%
6	Grand Total	100.00%	100.00%

* Works independently hence doesn't belongs to any team
Source: Field Investigation



As a matter of fact, as and when the policy measures are taken and new members are recruited in the gaps left over by the quitting workers, a certain time frame is required for the new members to tune with the workers they join in. It is only after such a fine tuning of the old and new workers that the smooth functioning at the workplace can be obtained. For this reason responses were sought from the workers both in the manufacturing and services sector as to the time dimension required for the fine tuning of workers to occur so that all of them operate in a good team. These responses have been processed, tabulated and have been presented in **Table No. 6.24** and supported by relevant **Pie Diagram 6.24**. It will be seen that in the Manufacturing Sector (represented by automobile industry) the new workers to tune up with the old ones in a team would require about three to seven days for nearly one third of the new workers. As against this in the Service Sector (represented by IT activity) in the same time period three-fifth (59.09 per cent) would get tuned with the existing teams. This aspect certainly has relevance in the context of ascertaining the impact on the production and the productivity levels in the two types of enterprises-manufacturing and services sectors.

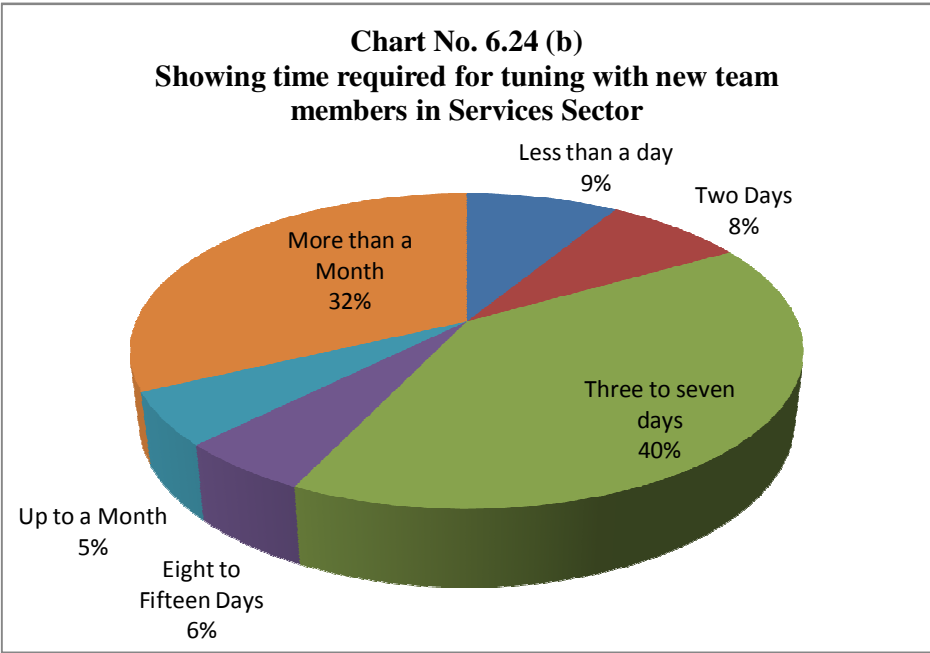
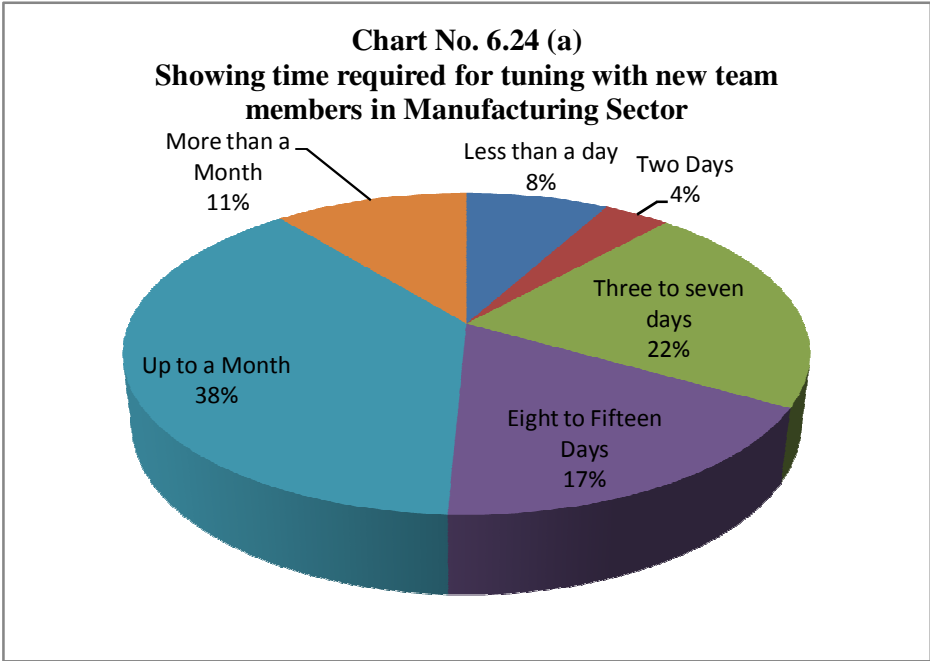
Table No. 6.24

Showing time required for tuning with new team members

S.N.	Designation	Manufacturing	Services
I	II	III	IV
1	Less than a day	8.02%	8.73%
2	Two Days	3.71%	8.00%
3	Three to seven days	21.49%	40.36%
4	Eight to Fifteen Days	17.48%	5.44%
5	Up to a Month	38.38%	5.44%
6	More than a Month	10.88%	31.99%
7	Grand Total	100.00%	100.00%

* Works independently hence doesn't belongs to any team

Source: Field Investigation



It is necessary to appreciate that there are several parameters of a purely psychological nature which would exert a considerable impact on the occurrence of the attrition phenomena and influence the attrition rate. As is well known, quantification of the parameters of a purely psychological nature has always been found to be difficult. Nevertheless, an attempt has been made, in the first place to identify such psychologically governed parameters and listed as; (a) feeling of

nervousness and sadness; (b) feelings of loneliness; (c) feelings of helplessness; (d) feelings of unsecured nature; (e) feelings of unmotivated; (f) feelings of lack of guidance; (g) feelings of stressfulness; (h) feelings of lack of confidence; (i) feelings of happiness; and (j) opportunities to replace the old employees. In the second place, in respect of all these psychological variables responses were obtained both from the manufacturing and services sectors and they have been quantified on a five point scale. Thirdly, all these responses have been processed, tabulated and presented in *Table No. 6.25*.

Table No. 6.25
Psychological impact of attrition on team members

S.N.	Psychological factors	Magnitude of impact (Per cent of Respondents)					*N/A	Grand Total
		Never	Rarely	Sometim e	Freque ntly	Always		
I	II	III	IV	V	VI	VII	VIII	IX
1	Feelings of Nervousness and Sadness							
1.1	Manufacturing	1.72%	28.08%	11.46%	30.09%	17.77%	10.89%	100.00%
1.2	Services	11.27%	8.73%	36.36%	11.64%	0.00%	32.00%	100.00%
2	Feelings of loneliness							
2.1	Manufacturing	17.48%	4.58%	28.65%	28.65%	9.74%	10.89%	100.00%
2.3	Services	20.36%	0.00%	25.45%	12.00%	10.18%	32.00%	100.00%
3	Feeling helplessly							
3.1	Manufacturing	19.77%	22.64%	21.78%	18.62%	6.30%	10.89%	100.00%
3.2	Services	22.18%	6.18%	28.36%	9.82%	1.45%	32.00%	100.00%
4	Feelings of unsecure							
4.1	Manufacturing	32.09%	20.92%	9.46%	22.92%	3.72%	10.89%	100.00%
4.2	Services	32.00%	7.64%	7.27%	9.82%	11.27%	32.00%	100.00%
5	Feelings of unmotivated							
5.1	Manufacturing	35.24%	26.93%	17.48%	3.72%	5.73%	10.89%	100.00%
5.2	Services	12.36%	12.73%	28.73%	5.82%	8.36%	32.00%	100.00%
6	Feelings of lack of guidance							
6.1	Manufacturing	18.34%	18.05%	21.49%	8.02%	23.21%	10.89%	100.00%
6.2	Services	29.82%	14.18%	6.18%	15.64%	2.18%	32.00%	100.00%
7	Feeling stressful							
7.1	Manufacturing	22.06%	21.20%	20.92%	9.17%	15.76%	10.89%	100.00%
7.2	Services	22.91%	10.91%	7.27%	10.18%	16.73%	32.00%	100.00%

S.N.	Psychological factors	Magnitude of impact (Per cent of Respondents)					*N/A	Grand Total
		Never	Rarely	Sometim e	Freque ntly	Always		
I	II	III	IV	V	VI	VII	VIII	IX
8	Feelings of lack of confidence							
8.1	Manufacturing	25.21%	25.79%	28.37%	3.44%	6.30%	10.89%	100.00%
8.2	Services	37.45%	16.00%	6.91%	7.64%	0.00%	32.00%	100.00%
9	Feeling happy							
9.1	Manufacturing	58.45%	12.61%	8.31%	1.72%	8.02%	10.89%	100.00%
9.2	Services	28.73%	21.82%	5.09%	7.64%	4.73%	32.00%	100.00%
10	Opportunity to take place of ex-employee							
10.1	Manufacturing	17.19%	16.62%	28.37%	2.58%	24.36%	10.89%	100.00%
10.2	Services	41.09%	8.36%	10.55%	5.09%	2.91%	32.00%	100.00%
11	Negative effects on your efficiency for performing your job & role because of above feelings							
11.1	Manufacturing	23.21%	22.92%	22.35%	17.77%	2.87%	10.89%	100.00%
11.2	Services	11.27%	8.73%	34.55%	9.45%	4.00%	32.00%	100.00%

* Works independently hence doesn't belongs to any team

Source: Field Investigation

It can be clearly seen that in respect of each one of the psychological parameters listed above the quantified values for the manufacturing and services sector have been substantially different. These would not surprise anybody, however, the quantified values would clearly indicate the thinking of the respondents as to whether they like to continue in the present job or change over to a fresh assignment. These quantified values would certainly be constituting guidelines for the decision makers both in the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity) with a view to mitigating the impact of attrition phenomenon and bringing about a reduction in the attrition rate. All these quantified details have been presented in the self explanatory table and appropriately illustrated by the pie diagrams. As a result any additional comments do not appear to be called for.

It has to be appreciated that in several sections earlier a reference has been made to the loss of production and productivity levels resulting from the attrition phenomena. It was suggested also that higher the attrition rate lower will be the productivity and vice versa. Loss in production and productivity, it was suggest also,

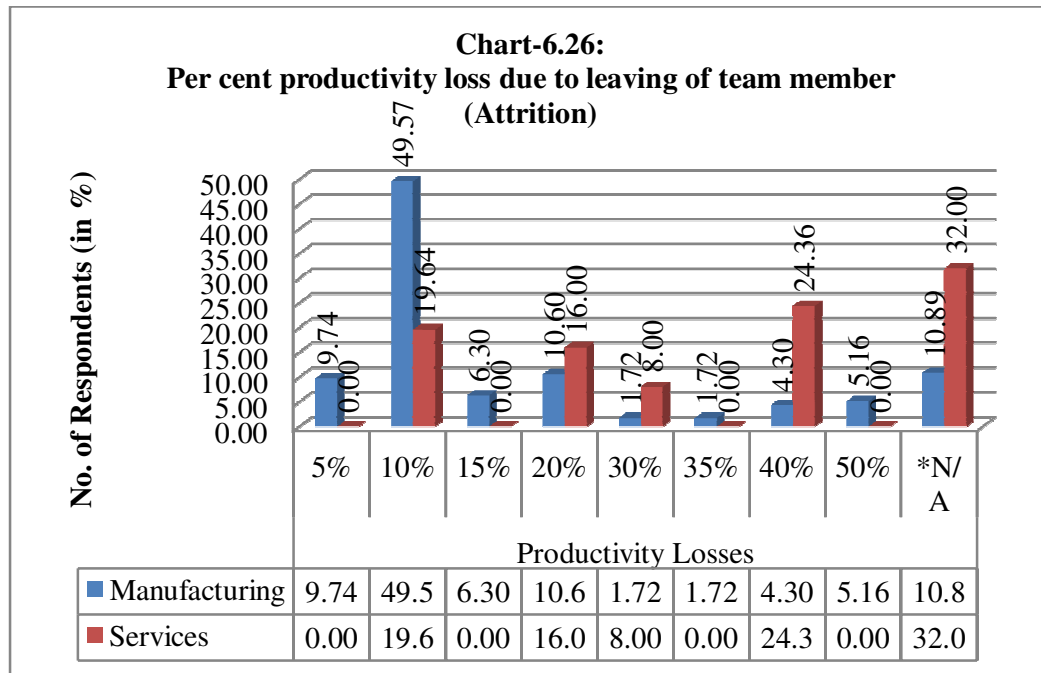
would lead to higher cost of production per unit of output and therefore would result in higher price of production. This naturally would mean loss in the share in the market because of reduction in the sales owing to higher cost of production and higher price of the product. In respect of this situation, an attempt has been made to obtain the perception of the workers as to what in their view, was likely to be loss in productivity in percentage terms as a result of the prevalence of the attrition phenomena. These perceptions were obtained both from the workers in the Manufacturing Sector (represented by automobile industry) as also in the Service Sector (represented by IT activity) and the responses have been quantified in terms of the productivity losses ranging between 5 per cent and 50 per cent, and the percentage of workers subscribing to such losses in the productivity levels because of the attrition phenomena. These responses have been tabulated and presented in **Table No. 6.26** and illustrated with the help of a **Bar Chart No. 6.26**.

Table No. 6.26

Per cent productivity loss due to leaving of team member (Attrition)

S.N.	Sectors	Per cent productivity losses (Figures in Per cent of employees)								Total
		5%	10%	15%	20%	30%	35%	40%	50%	
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Manufacturing	9.74	49.57	6.30	10.60	1.72	4.30	5.16	10.89	100.00
2	Services	0.00	19.64	0.00	16.00	8.00	24.36	0.00	32.00	100.00

Source: Field investigation



It will be seen that the perception of workers regarding the productivity losses in percentage terms both in the manufacturing and the services sector are vastly different. For instance, if the losses in productivity up to 15 per cent are considered, in the Manufacturing Sector (represented by automobile industry) the workers subscribing to this view add up to almost 66 per cent of the total respondents (65.61 per cent to be exact). As against this in the services sector this view is held by only about 20 per cent (19.64 per cent to be exact) of the respondents. If one were to considered the productivity losses ranging between 35 per cent and 50 per cent, in the Manufacturing Sector (represented by automobile industry) a little over 10 per cent (11.19 per cent to be exact) of the respondents subscribe to this view, while in the Service Sector (represented by IT activity) almost 25 per cent of the respondents (24.36 per cent) hold this position. While, the perception of productivity losses both in the manufacturing and services sector are substantially different as perceived by the workers, the position held by the management is again likely to be quite diverse; however, no information from the management sources was readily available. However, the point which needs to be emphasized is that the impact of the attrition phenomena on the productivity losses assumes a very significant dimension and needs to be attended to by the policy makers in both the type of enterprises.

Section-(H) Employee Relations with Superiors

The relations between the supervisory staff and the workers play a reasonably significant role in determining the occurrence of the attrition phenomena and also influence the attrition rate. These relations between the workers and supervisory staff have been quantified on the basis of several parameters such as; (a) fair treatment of the boss with everyone; (b) acceptance of constructive criticism made by the subordinates; (c) team work building by the supervisors; (d) feeling free to communicate to the boss the honest impressions of the workers; (e) seeking help from the boss when serious mistake is made; (f) maintenance of high performance standard by the boss; and (g) the boss stands up for and supports the subordinates. Responses in respect of these parameters were sought both from the Manufacturing Sector (represented by automobile industry) and Service Sector (represented by IT activity) and also in respect of the present job and the previous assignments. The idea was to work out the deviation of responses. To this end index of deviation has been worked out in respect of workers in the manufacturing sector as also for workers in the previous sector. The quantified responses have been presented in *Table No. 6.27*.

Table No. 6.27

**Comparative analysis of supervisory relationship between both the workplaces
(Present and Previous)**

S. N.	Indicators of Relationship	Deviation of Averages (Present and Previous scores)			
		Manufacturing Sector		Services Sector	
		Deviation	Index of Deviation	Deviation	Index of Deviation
I	II	III	IV	V	VI
(a)	Boss deals fairly with everyone	0.5278	2	0.409	1
(b)	Boss accepts constructive criticism from his subordinates	0.0040	7	0.333	2
(c)	Supervisor does good job of building teamwork in his group	0.0913	6	0.251	3
(d)	Honestly tell my boss is like what I really think	0.4281	3	0.248	4
(e)	When I make serious mistake, I am not reluctant to go to my boss for help	0.3849	4	0.075	5

S. N.	Indicators of Relationship	Deviation of Averages (Present and Previous scores)			
		Manufacturing Sector		Services Sector	
		Deviation	Index of Deviation	Deviation	Index of Deviation
I	II	III	IV	V	VI
(f)	Boss maintains high standards of performance	0.7103	1	-0.012	6
(g)	Boss stands up for his subordinates	0.2579	5	-0.382	7

Source: Field Investigation

The deviation score as measured by the index of deviation is obviously different in case of responses in the manufacturing sector and the services sector. These results are so strikingly different from the responses obtained from the two sectors that any specialized comments do not appear to be necessary. For instance, the maintenance of high levels of performance standards gives a deviation index of only one in the Manufacturing Sector (represented by automobile industry) while its value stands at six in case of Service Sector (represented by IT activity). This would be clearly indicative in the manufacturing sector that because of the experience and expertise gained by the bosses, their performances is of a much higher order than that of workers which can be easily demonstrated by them from time to time. This would naturally results in the workers being attracted towards the boss and a long run relationship between the workers and bosses would get developed during the course of time. Presumably, such a relationship of a personal nature would result in a bonding relationship would be of a binding nature and may prevent the occurrence of attrition phenomena and lower the attrition rate. As against this, in the services sector, there is no such demonstrative ability displayed by the bosses and such the personal bond between the worker and the bosses may be non existence or could be of weaker character. Obviously, therefore, on this count itself the occurrence of attrition phenomena in the services sector may happen and might even lead to an increase in the attrition rate.

An attempt has been made to identify and quantify various factors which would lead to the improvement of the productivity of the respondents in both the spheres of activity, namely, Manufacturing Sector (represented by automobile industry) and Service Sector (represented by IT activity). The factors identified for the

improvement of productivity is; (a) improvement in supervisory relationships; (b) better planning; (c) more freedom in workplace; (d) timely supplies of the workmen's tools; (e) changes in work culture; (f) additional manpower; (g) indication of clearer responsibilities; (h) more authority; (i) cooperation from other departments; (j) better information; and (k) any other.

It will be seen almost all these factors have a personal appeal and do not seem to reflect on the group behavior or the team work. The responses obtained have been processed, tabulated and presented in *Table No 6.27 (A)*. All these responses have been averaged out and the factors have been indexed according to the perceive level of significance of the workers.

Table No. 6.27 (A)
Factors needs to improve respondent's productivity for both Sectors in present workplace (Indexed According to the importance)

S.N.	Factors	Manufacturing Sector			Services Sector		
		Total	Average	Index	Total	Average	Index
I	II	III	IV	V	VI	VII	VIII
(a)	Improved supervisory relations	1069	4.2421	7	536	2.7772	1
(b)	Better planning	1051	4.1706	1	571	2.9585	2
(c)	More freedom	1005	3.9881	9	593	3.0725	3
(d)	Changes in supplies, tools, equipment	1106	4.3889	10	546	2.8290	4
(e)	Changes in work environment	937	3.7183	8	601	3.1140	5
(f)	Additional manpower	1016	4.0317	6	633	3.2798	6
(g)	Clearer responsibilities	1043	4.1389	4	631	3.2694	7
(h)	More authority	850	3.3730	3	714	3.6995	9
(i)	More cooperation from other areas or department	1075	4.2659	2	697	3.6114	10
(j)	Better information	837	3.3214	11	742	3.8446	11
(k)	Any other	1108	4.3968	5	767	3.9741	8

Source: Field Investigation

As to be expected the responses in both the spheres of activity, namely, manufacturing sector and services sector are vastly different and so are the quantified values. This need not be surprising at all, in consideration of the substantial differences in the spheres of these activities such differences in indexation are bound to exist. For instance, the productivity level in the manufacturing sector is bound to

increase if more cooperation is obtained from other areas or departments. This index scores has been placed at 2. As against this, the index score for this parameter in the services sector has been placed at 10. This would clearly indicate that the services sector activity is more individual oriented than the Manufacturing Sector (represented by automobile industry) activity which is governed and influenced by the team work between various areas of production or the various departments. Such a quantified information in respect of the parameters listed, will constitute a meaningful input in the decision making process of both the spheres of activities namely, Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity).

It was thought desirable to quantify the perceptions of workers in regard to increases in the productivity levels if the factors listed in Table No. 6.27 (A) are furnished in adequate measures and, as and when they are required. The responses have been quantified, processed and tabulated and presented in *Table No. 6.27 (B)* and illustrated appropriately in *Pie Diagram 6.27 (B)*.

Table No. 6.27 (B)
Probable productivity increase if provided above factors as expected by the respondents (At present workplace)

S. N.	Per cent increase in productivity	Manufacturing Sector	Services Sector
I	II	III	IV
1	Up to 10	8%	11%
2	10 to 25	5%	15%
3	25 to 50	51%	41%
4	50 to 80	3%	6%
5	More than 80	33%	27%
6	Grand Total	100%	100%

Source: Field Investigation

Chart No. 6.27B (a)
Probable productivity increase if provided above factors as expected by the respondents (At present workplace) in Manufacturing Sector

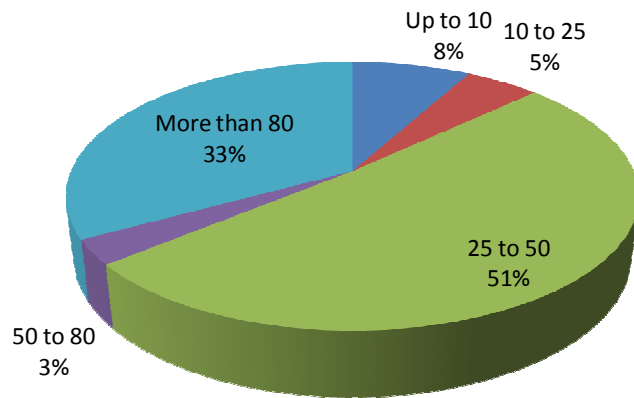
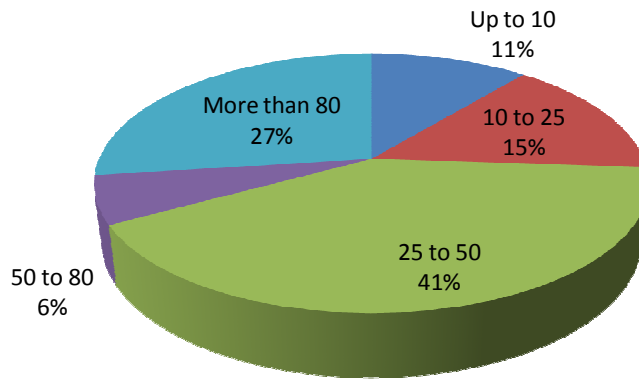


Chart No. 6.27B (b)
Probable productivity increase if provided above factors as expected by the respondents (At present workplace) in Services Sector



The responses have been quantified on the basis of a certain change in productivity levels for the two spheres of activities. It will be seen that, in both the spheres of activities the productivity enhancement is clearly on the cards. However, the quantified values of the perceptions in both the spheres of activity are naturally different. As every management would like to enhance the productivity levels with a view to lowering the prices of the product, so as to obtain a competitive edge in the market, appropriate policy measures would have to be chalked. The differences in the

perception levels regarding the percentage increase in the productivity in Manufacturing Sector (represented by automobile industry) and Service Sector (represented by IT activity) are clearly visible in the Table No. 6.27 (B) and these have been further illustrated in the pie diagram 6.27 (B).

Section-(I) Perceptions of Employees

The perceptions of the workers in both the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity) in respect of the present assignment has been sought to be quantified by placing the responses on a five point scale. The parameters in respect of which the responses were sought have been; (a) feeling of less productivity; (b) high level of productivity of the group; (c) based efforts put forward by the group; and (e) the correlation between the pay packets received and the performance level. It will be seen that these parameters are pertaining not only to an individual respondents but also to the group to which he belongs and more importantly it relates to in relationship between the pay packets and the performance level. All the responses have been processed, tabulated and presented in *Table No. 6.28* and appropriately illustrated by the *Pie Diagram 6.28 (A) to 6.28 (D)*.

It naturally to be expected that the quantification of the responses in respect of four parameters for the spheres of activities manufacturing and services would be different. These differences will be indicative of the policies of retention of chalked out by the different sectors for preventing the occurrence of retention phenomena or reducing the attrition rate.

The differences in the attitude and perception of the workers in the two sectors as quantified are so vastly different that different policy measures for mitigating the impact of attrition will be call for in both the spheres of activity, namely, manufacturing and services.

Table No. 6.28
Comparative analysis of contribution related attitude of respondents between
both the sectors for Present workplace

S. N.	Statements	Attitude of respondents (Per cent of respondents)											
		Manufacturing Sector						Services Sector					
		*1	*2	*3	*4	*5	Total	*1	*2	*3	*4	*5	Total
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV
(a)	I am Less productive than I used to be	50	14	10	18	8	100	23	5	27	11	34	100
(b)	My work group is very productive	3	6	11	24	55	100	7	12	11	27	43	100
(c)	My working group puts all of their efforts into their job	7	10	6	38	40	100	6	8	19	21	47	100
(d)	My pay depends mostly upon how well I do my job	12	6	15	22	45	100	6	6	17	38	33	100

*1= Strongly Disagree, *2=Slightly Disagree, *3=Uncertain, *4=Slightly Agree, *5=Strongly Agree

Source: Field Investigation

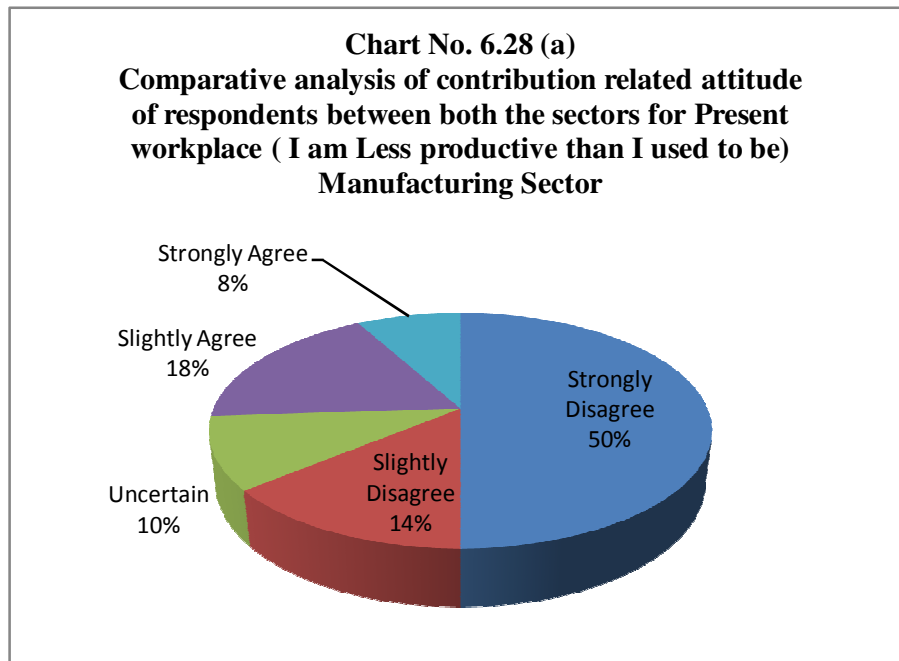


Chart No. 6.28 (a)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I am Less productive than I used to be)
Services Sector

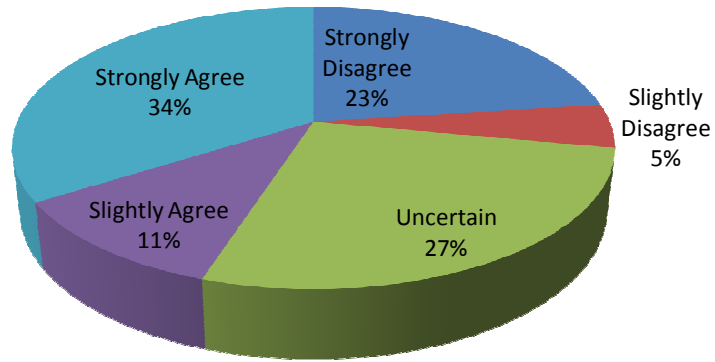


Chart No. 6.28 (b)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I My work group is very productive)
Manufacturing Sector

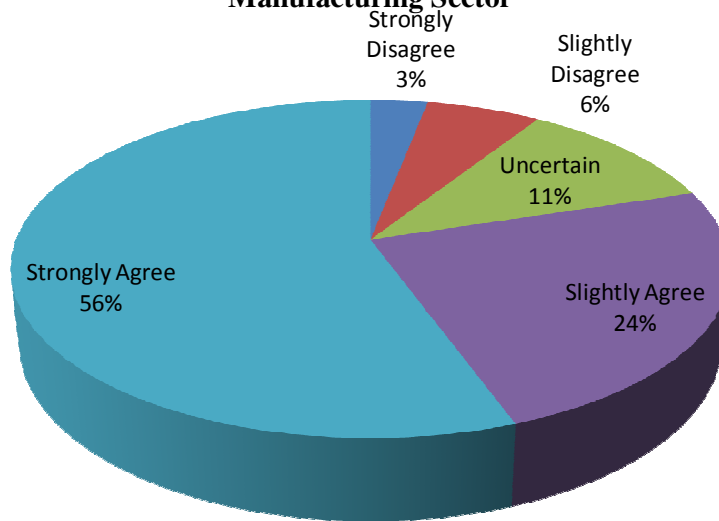


Chart No. 6.28 (b)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (I My work group is very productive)
Services Sector

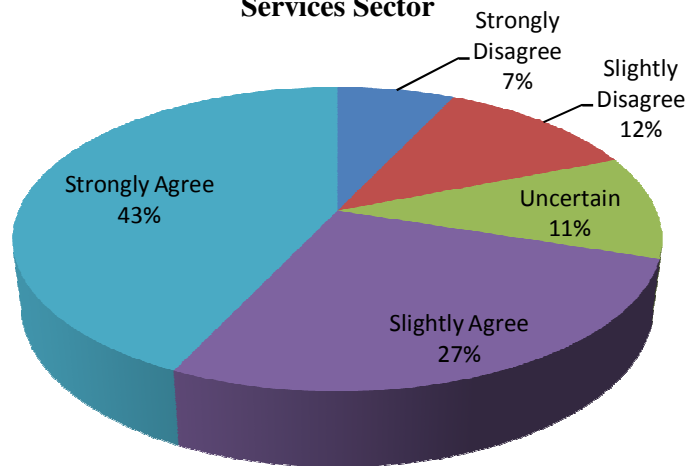


Chart No. 6.28 (c)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My working group puts all of their efforts into their job) Manufacturing Sector

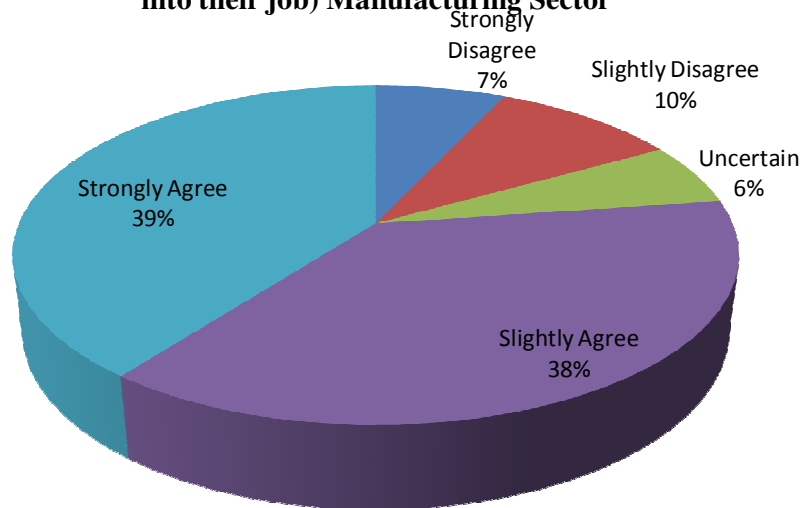


Chart No. 6.28 (c)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My working group puts all of their efforts into their job) Services Sector

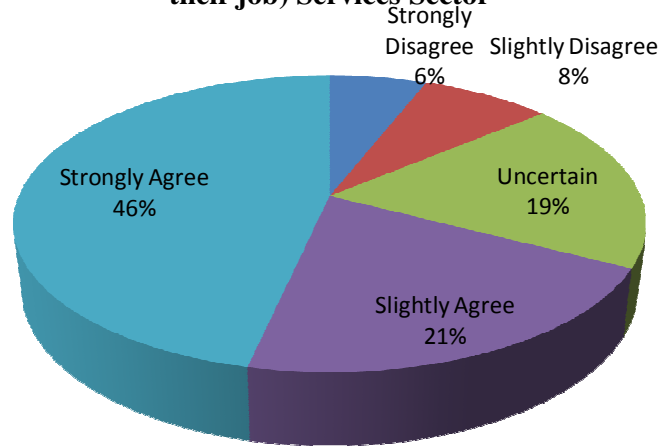


Chart No. 6.28 (d)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My pay depends mostly upon how well I do my job) Manufacturing Sector

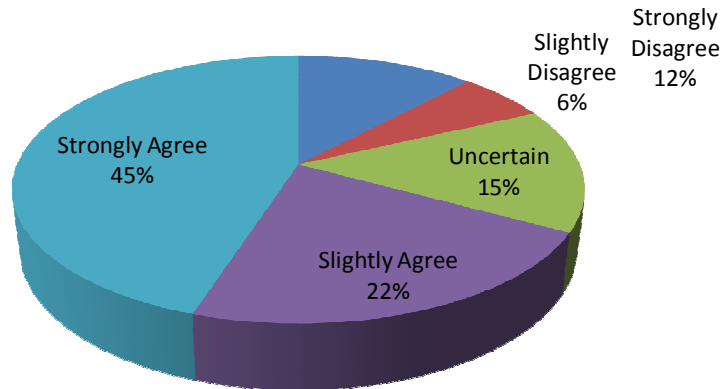
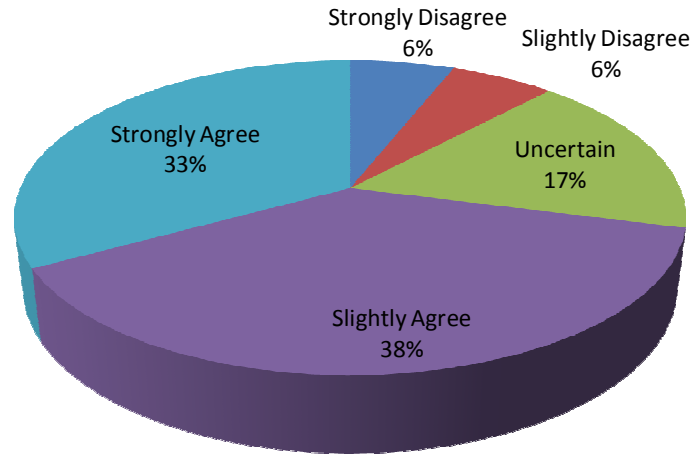


Chart No. 6.28 (d)
Comparative analysis of contribution related attitude of respondents between both the sectors for Present workplace (My pay depends mostly upon how well I do my job) Services Sector



It is quite natural that the respondents in the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity) should have different perceptions as to what constitute a dream job. There could be several factors which would determine the components of dream job as perceived by the workers in both the sectors. However, an attempt has been made to identify several parameters constituting the dream job, namely; (a) salary and compensation packets; (b) relationship with the boss; (c) work culture; and (d) any other factors. All these responses have been processed tabulated and quantified and presented in **Table No. 6.29** and appropriately illustrated with pie diagrams.

It will be clearly seen that all the respondents both in the manufacturing and services sector do not necessarily have any visualization of a dream job. One need not have any quarrel about this perception, since, an attempt has been made to quantify parameters and put them together with a view to perceiving a dream job. It may be pointed out that about 15 per cent (15.19 per cent) of the respondents in the Manufacturing Sector (represented by automobile industry) had no perception at all about what constitutes a dream job, while in the manufacturing sector, the percentage of the respondents on this count worked out to be a little over 22.55 per cent. Even after taking into account the respondents not having any idea of a dream job in both

the spheres of activities, a large number of respondents willing to conceive of a dream job in the Manufacturing Sector (represented by automobile industry) (84.81 per cent) and the services sector (77.45 per cent) exist.

Table No. 6.29
Opinions and factors considered by respondents regarding their concept of dream job

S. N.	Conditions of dream job	Do you think about your dream job	
		Manufacturing Sector	Services Sector
I	II	III	IV
(1)	Yes	(84.81 %)	77.45%
(a)	Salary and compensation	50.00 %	32.85%
(b)	Relation with boss	7.77 %	18.78%
(c)	Work culture	31.08 %	35.68%
(d)	Other	11.15 %	12.69%
(2)	No	15.19%	22.55%
	Total Grand	100.00 %	100.00 %

Source: Field Investigation

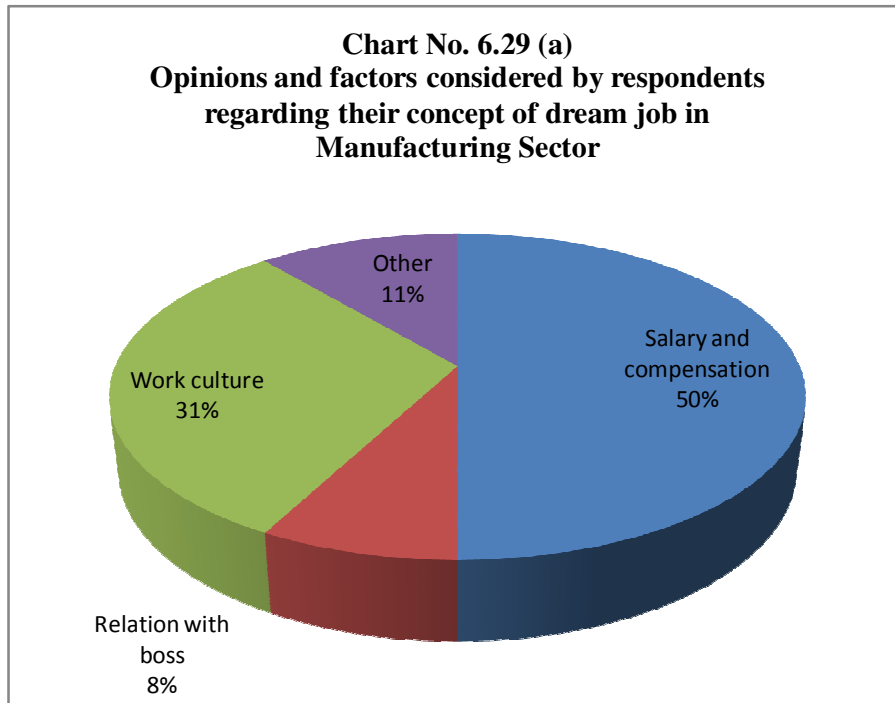
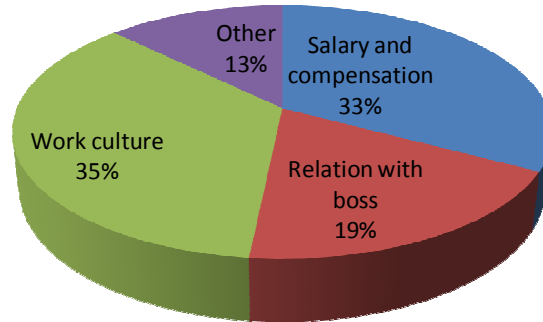


Chart No. 6.29 (b)
Opinions and factors considered by respondents
regarding their concept of dream job in Services
Sector



It must be noted, however, that salary and compensation would always play a crucial role in determining what constitutes a dream job, however, the weight age given by the respondents in the Manufacturing Sector (represented by automobile industry) and the Service Sector (represented by IT activity) is substantially different. Whereas, about 50 per cent of the respondents from the Manufacturing Sector (represented by automobile industry) thought salary and compensation to be a very significant variable, only about 32 per cent respondents in the services sector thought so. Work culture was considered to be fairly responsible both in the Manufacturing Sector (represented by automobile industry) (31.08 per cent) and Service Sector (represented by IT activity) (35.68 per cent). These two factors taken together accounted for over 80 per cent of the responses (81.08 per cent) in the Manufacturing Sector (represented by automobile industry), while they made for about 68 per cent (68.53 per cent) in the services sector.

PART-IV

Hypothesis Testing-H5

In the previous part of this chapter comparative assessment of attrition phenomena in the context of Manufacturing Sector (represented by automobile industry) and Service Sector (represented by IT activity) enterprises has been presented. In Part-IV of the present chapter, detailed discussion has been presented regarding hypothesis testing of H5, namely:

H-5: “The employees in the manufacturing sector are more embedded than those in the services sector resulting in lower level of attrition”

The variables considered for the testing of this hypothesis can be referred to in the questionnaire attached in the Chapter-3. It needs to be mentioned here that, question number 7.3 in the Section-G of the questionnaire has been considered for the testing of this hypothesis. In this question total 23 sub-questions have been asked to the respondents and measured on five point Likert scale. The respondents have asked to rate their level of agreeableness towards the situation described in the question. These questions have been used for measuring level of embeddedness of employees. Basically job embeddedness concept is depending on three criteria, namely; (a) organizational FIT; (b) LINK to the other employees and other stakeholders; and (c) the feeling of SACRIFICE while leaving the assignment. These three criteria have been explained with the help of above mentioned 23 sub-questions in Section-G of the pretested questionnaire.

Variable embeddedness has been computed by taking simple average of all these 23 variables. An effort have made to test the hypothesis by using ‘t’ test.

Test Statistics

Efforts have been made to describe the level of job embeddedness in each sector of activity with the help of **Table No. 6.30**. As has been seen from the table, average level of embeddedness in Manufacturing Sector (represented by automobile industry) (observed to be 3.8463) is slightly high than the level of embeddedness in Service Sector (represented by IT activity) (observed to be 3.7076).The observed difference in level of embeddedness has been of the order of 0.1387. The hypothesis

has been formulated to test whether this difference between average levels of job embeddedness is significant or it is due to chance. This aspect has been presented with the help of *Table No. 6.30*.

Table No. 6.30
Descriptive Statistics

S. N.		Sector	N	Mean	Std. Deviation	Std. Error Mean
I	II	III	IV	V	VI	VII
1	Level of Job Embeddedness	Manufacturing	252	3.8463	.70436	.04437
		Services	193	3.7076	.55116	.03967

Source: Field investigation

In the *Table No. 6.31*, ‘t’ statistics has been described for testing of hypothesis. The ‘t’ column displays the observed ‘t’ statistic for each sample, calculated as the ratio of the difference between sample means divided by the standard error of the difference. The df column displays degrees of freedom. For the independent samples t test, this equals the total number of cases in both samples minus 2.

The column labeled Sig. (2-tailed) displays a probability from the t distribution with 443 degrees of freedom. The value listed is the probability of obtaining an absolute value greater than or equal to the observed ‘t’ statistic, if the difference between the sample means is purely random.

The Mean Difference is obtained by subtracting the sample mean for Manufacturing Sector (represented by automobile industry) from the sample mean for Service Sector (represented by IT activity).

The 95 per cent Confidence Interval of the Difference provides an estimate of the boundaries between which the true mean difference lies in 95 per cent of all possible random samples of 445 respondents (252 from Manufacturing sector and 193 from Services sector).

On scrutinizing the results in Table No. 6.31, it can be observed that the significance value of the test is less than 0.05. Thus, it can be safely concluded that the average level of job embeddedness in automobile sector is greater than services sector. It is cleared that this inference is not due to the chance alone.

Table No. 6.31

Independent Sample ‘t’ Test

S. N.	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
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
1	Level of Job Embeddedness	12.875	.000	2.256	443	.025	.1387	.06145	.0178	.2594

Source: Field investigation

Summary

In the ultimate analysis it appears possible to offer a one line summary: “Considering the test results, it may be concluded that the average level of embeddedness in Manufacturing Sector (represented by automobile industry) has been comparatively higher than the Service Sector (represented by IT activity). This results in lower level of attrition in manufacturing sector than what has been observed in the services sector.”

CHAPTER-7

SUMMARY, CONCLUDING OBSERVATIONS AND SUGGESTIONS

Introduction

The present chapter on summary, concluding observations and suggestions has been divided and presented in three sections. In *Section-(i)*, summary of the study emphasizing on each chapter has been discussed and concluding observations emphasizing on a new construct of job embeddedness followed by summary of findings has been presented in *Section-(ii)*. The probable solutions in the lights of discussions made in above two sections has been presented in the form of suggestions in *Section-(iii)*.

Section-(i): Summary

Keeping in mind the title of the present study, namely, ‘Attrition- a comparative empirical study of its intensity, causative factors and remedial measures in the manufacturing and service sector enterprises in Pune (India)’, the earlier presentation has been divided into several chapters and each one of the chapters has been appropriately classified and sub-classified into various sections and sub-sections. The primary emphasis of the study has been on the comparative aspects of the attrition phenomena as was witnessed in the manufacturing sector (Represented by automobile industry with 32 companies) and the service sector (represented by IT activity with 27 companies).

The introductory comments to spell out several aspects of the study have been highlighted in Chapter-1 which elaborates the basic concept of the attrition phenomena and also presents the idea as to how the attrition rate can be quantified. Immediately thereafter, in Chapter-2 an attempt has been made to review the literature pertaining to attrition phenomena and the attrition rate resulting there from. The conceptualization of the phenomenon of attrition, as witnessed at the global level, has been presented in this chapter with a view to gaining a considerable degree of familiarity with the concept of the phenomenon of attrition. In Chapter-3, the problem handled in the present study has been clearly stated and the research methodology adopted for studying has been elaborated. Details regarding the database for the present study consisting mostly of the primary data collected with help of structured pretested questionnaire

have also been indicated. As far as possible the sample for the data collection has been so selected that it represents the universe to a very considerable extent. While, this is true of the manufacturing sector (represented by automobile industry.); where the management and trade unions were very cooperative. However, it does not appear to be true in case of service sector which is represented by the IT sector company and hence, the data in this regards cannot be treated as authoritative nature since in the IT sector the trade unions are not functioning and the IT company agree to furnish the information only on the basis of anonymity.

The processing, tabulation and analysis of the primary data relating to the manufacturing sector (represented by automobile industry), service sector (represented by IT activity) and a comparative assessment of the values obtained for several parameters, have been presented in chapters-4, 5, and 6, respectively. It must be pointed out the presentation of the primary data in the tabulated form has been appropriately supported by pie diagrams and the bar charts, as and when considered desirable. During the course of the presentation in the chapters-4, 5, and 6 an attempt has also been made to stress the hypothesis. All a long, the SPSS statistical package has been put into use which has very greatly facilitated the drawing of inferences for Chapters-4 and 5 relating to the manufacturing sector and the service sector. The SPSS package has also effectively used for presenting a comparative view of the quantified parameters in Chapter-6.

Section-(ii): Concluding Observations

In all these chapters appropriate inferences have already been drawn and the comparative assessment has also been offered. In this present chapter relating to the concluding observations for the study, it is not proposed to go over all the details which have already been presented, analyzed and discussed. But, an attempt has been made to introduce the element which has not been touched upon but is very relevant in the context of the attrition phenomena. It is proposed to elaborate, rather briefly, the concept of embeddedness which may constitute an antithesis to the attrition phenomena and as well as summary of the major findings observed in ultimate analysis has been presented in this chapter. Accordingly, the present section on concluding observations has been divided and presented in two subsections. The concept of job embeddedness has been concluded in the *Subsection- (a)* while summary of the findings has been presented in the *subsection- (b)*.

Subsection-(a): Context of Job embeddedness

As is well known the attrition phenomena related to the mobility of workforce from one enterprise to another; the concept of embeddedness would relate to the average length of time during which labour unit rests, stays put or get embedded in one enterprise. In this view of the matter higher the rate of embeddedness, lower will be the rate of attrition and it may be argued that if embeddedness of the workforce is effectively handled by formulating appropriate policies and adopting suitable measures, the attrition phenomena may not occur at all, and even if it does, its rate will be considerably reduced.

It appears useful to present and work on the construct of job embeddedness, reference to which has already been made in the Chapter on review of literature. In this context, yet another, at least one research study may be considered for conceptualizing the job embeddedness and quantifying it. It may be pointed out that this paper has been developed in entirely different context and yet, it appears to be relevant in the context of attrition phenomena being considered in the present study. It has already been pointed that higher the rate of embeddedness lower will be the rate of attrition and to that extent the personnel and organizational cost would be considerably reduced. In addition the dislocation of work culture in corporate houses will not come about, as a result of which, the cost of production per unit of output could be reduced leading to lowering of the price. This could also result into a higher market share of the enterprise and consequently increase level of profit. This chain reaction would be beneficial to any corporate house whether in the manufacturing sector or the service sector and therefore, the job embeddedness can always be treated as an effective counter to the attrition phenomena.

The research paper referred to has appeared in the Academy of Management Journal, 2001, 44¹. In this research paper three specific factors have been identified which could lead to the phenomenon of job embeddedness. These are (a) LINKS the workers developed with the other peoples they work with, that is equals, subordinates and superiors, the teams and groups they formulate either formally or informally; (b) the perception of the workers relating to the FIT in the matter of the job, the organization, the community and the culture in which they operate;

¹ Terence R. Mitchell, Brooks C. Holtom, Thomas W. Lee, Chris J. Sablinski, Miriam Erez, "WHY PEOPLE STAY: USING JOB EMBEDDEDNESS TO PREDICT VOLUNTARY TURNOVER", Academy of Management Journal, 2001, 44, 1102-1122

and (c) the SACRIFICES which the workers are required to suffer as they quit the present job to join a fresh one.

In the original research paper referred to these factors have been elaborated in the context of several activities. In the present study, however, an attempt has been made to elaborate and quantify the three factors namely, FIT, LINK, and SACRIFICE as constituting the job embeddedness in the context of manufacturing sector as also in the service sector. In both these activities data relating to the three parameters has been sought in respect of the present job of a worker as also his previous assignment. The details were obtained from the respondents and placed on a five point scale. All these details have been quantified and presented in *Table No. 7.1* in the form of average levels relating to the prescribed parameters making cumulatively for the job embeddedness. For a quick comprehension these quantified results have been presented in the form of a *Bar chart No. 7.1*.

Table No. 7.1
Comparative analysis of level of embeddedness in the
Manufacturing Sector and Service Sector

S. N.	Designation	Average level of			
		Organizational 'FIT'	'LINK'	Feeling of SACRIFICE	Job Embeddedness
I	II	III	IV	V	VI
Manufacturing Sector					
1	Present Work Place	3.75	4.14	3.65	3.85
2	Previous Workplace	3.33	3.89	3.15	3.46
Services Sector					
1	Present Work Place	3.67	3.69	3.76	3.71
2	Previous Workplace	3.36	3.25	3.18	3.26

Source: Field Investigation

It will be seen that all the three parameters, namely, FIT, LINK, and SACRIFICE which go on to constitute cumulatively, the job embeddedness have been on the positive side. It will also be seen that the quantified values of these parameters in the present workplace in the manufacturing sector as also in the service sector have been of a higher value. This would mean that the workers have made a right choice from in shifting from the previous workplace to the

present workplace both in the manufacturing and service sector. If these criteria are to be considered then any further attrition would come about only if a higher level of FIT, LINK and SACRIFICE cumulatively making for embeddedness is visualized in the corporate activity to which the workers would eventually shift.

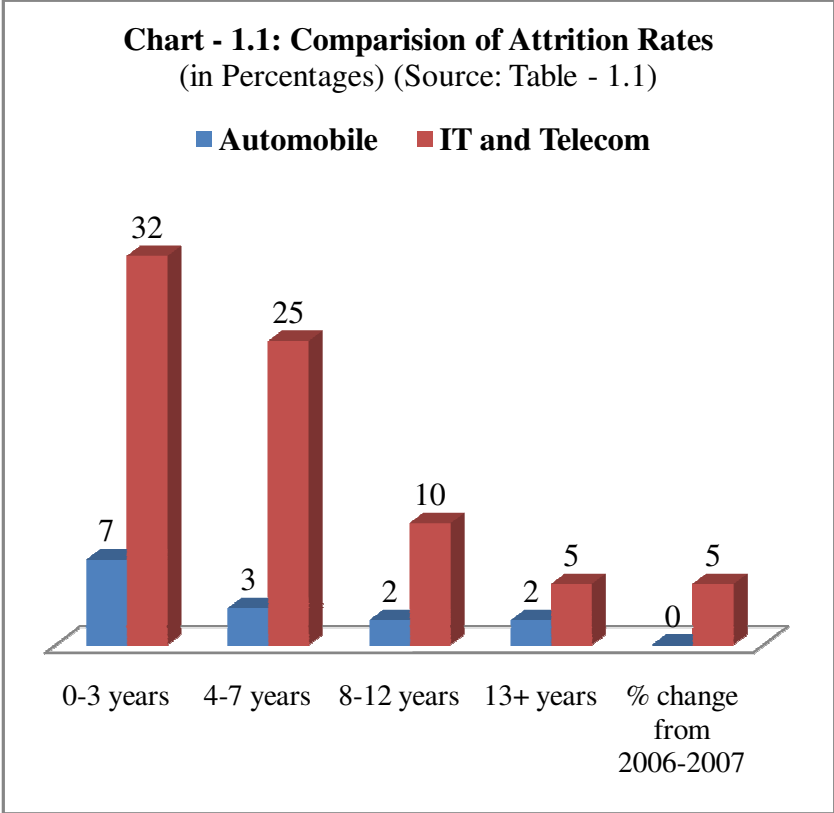
It must be pointed out that the data relating to job embeddedness, quantified as it has been, by putting the responses obtained during the course of field investigation on a five point scale, should, at best, be treated as of indicative nature only. And therefore, the inference that the job embeddedness would reduce the impact of attrition phenomena would have to consider in that way only.

It would be seen from the presented data that in the manufacturing sector the value for average level of job embeddedness at the present level of workplace works out to 3.85 as against 3.71 in the service sector. They should be indicative of that, the fact that, on the count of job embeddedness, in the manufacturing sectors the attrition phenomena would be of a weaker order than in the service sector. This inference would appear to substantiate the inference drawn earlier regarding the attrition rate being of a lower order in the manufacturing sector than in the service sector. One may like to look at the prospect of attrition in the manufacturing and service sector in Pune region from a slightly different context.

Subsection-(b): Summary of findings

Without going into the detailed discussion on sector specific findings, it has been proposed to present comparative aspect of the attrition phenomena with justification to the objectives of the present study.

With the reference made to the introductory chapter discussion has been presented on the *first objective*, namely, present status of the attrition phenomena and for the purpose of comprehensive understanding on attrition rates across industries, *Chart No.- 1.1* titled as the comparison of attrition rates in automobile sector and IT sector enterprises has been reproduced in this section.



The depicted chart has been furnishing the comparative aspect of the attrition rates in the automobile sector and IT sector enterprises. It would be seen from the chart that, in the initial period of service attrition rate observed to be higher in service sector. The reason for this phenomenon, at the very outset, may be attributed to the parameter of irrelevant job fit. It may be pointed out further, as the employee settle down in the workplace, may results in the higher level of job embeddedness and could contribute to the reduction in attrition rate. As obvious, the chart supports this conclusion for the service sector on the basis of observed downward sloping trend-line of the attrition rates. Irrespective of the magnitude of the attrition trend observed in the manufacturing sector, it has to be noted that, the attrition rate witnessed to be lower extent as the service of the employees become mature. Significantly needs to be pointed out that there may be a concrete relationship between the years of service of employees and the probability to quit the assignment. Ultimately, it may be mentioned, with the due care, that the length of the service and the probability of job embeddedness are quite obvious. Thus, all the said and done in the ultimate interpretation, it needs to be pointed out that, the length of service could contribute to the increase in job embeddedness, may results into lower level of attrition rate.

The *second objective* of the present study is to analyze the causes of attrition phenomena. In this context an effort has been made to present the concluding observations upon the causative factors in the sectors belongs to manufacturing and service. This aspect of investigating causative factors in a comparative fashion has been processed, tabulated and interpreted in section-(c) of part two of Chapter-6. It would be seen from the ultimate analysis that, the attrition phenomenon is not a single variable driven process. In fact, it is a joint function of various parameters which leads to make decision of giving up the present assignment. Although, parameters of improving experience, career growth and compensation are stood equally significant and has been observed at higher priority while making decision of joining the present assignment irrespective of the sector. Bearable work tress, parental mobility, observing no role tress and the feelings of never desire to work in one organization has been ranked at the level of negligible significance while making the decision of joining a new assignment. This aspect stood at equal position in both of the sectors, namely, manufacturing and service. Interestingly, it has to be noted that compensation is high priority parameter attributed to the decision of living an assignment in the context of service sector. Better designation, better work profile and lack of career growth have been considered immediately after the compensation for making the decision of quit in the service sector. Little bit contradictory to this priorities of service sector, better designation, better work profile and lack of career growth are the parameters considered as high priority reasons to lead the attrition phenomena in manufacturing activity. Surprisingly, the compensation has not been considered as high priority parameter while living the assignment in manufacturing sector, which is the case, observed in service sector.

The *third objective* of the present study is to compare remedial measures of attrition phenomena in manufacturing sector and service sector enterprises. In this context, it needs to be call upon, the discussion of the aspect of place specificity, time specificity and activity specificity presented in the introductory observations of section-(i) of chapter-3, namely, research methodology. This aspect of place specificity, time specificity and activity specificity would need to be considered while offering remedial measures to the attrition phenomena. Again, as has been discussed in the previous concluding sections, the attrition phenomena is not the single parameter driven process and, thus, while offering remedial measures, micro and macro perspective approach should also needs to be considered in any sector.

Quite apart from the consideration of the **MICRO** level parameters, a generalized view (**MACRO** level) will also substantiate the inference being drawn in the context of Pune region. The Pune region was already developed into an automobile hub and since it forms a part of the golden triangle – Pune-Mumbai-Nashik- in the progressive industrialized state of Maharashtra (India). In recent times, the automobile hub has been experiencing some kind of recession as a result of which the job opportunities are not increasing at the rate in which the skill personnel are getting supplied. And therefore, there will always be a tendency witnessed in the automobile sector to stick on to the present job rather than be adventurous and go around for fresh assignment. As against this in the service sector the IT sector activities have been comparatively of a more recent origin and being linked with the international IT sector, the job opportunities are quite in abundance. This may result in a higher degree of attrition in the service sector in relation to the manufacturing sector.

Section-(iii): Suggestions

All said and done, in the ultimate analysis, one may pause to think as to what precisely is the significance of the present study and what are the types of limitations which can get attracted, while, practically implementing the inferences emerging in the context of such a study and what kind of suggestions which can be made. It has already been pointed out but it still begs repetition, that the studies of the present type are time specific, space specific and activity specific. This would mean that researches in the context of attrition phenomena can never be a one-time proposition but will have to be carried on continuously if the output of such researches have to constitute meaningful inputs into the decision making process of the corporate houses. In the same way the space specificity of the study would mean that the inferences drawn on the basis of a study in one area cannot be utilized for policy making process without appropriate modifications for another area. Exactly in the same way it has to be appreciated that, the attrition phenomena is also activity specific. It means that, the attrition phenomena pertaining to manufacturing sector activity would be quite different from such a phenomena pertaining to another type of activity, may be service sector activity.

These limitations arising out of the time specificity, space specificity and the activity specificity of the attrition phenomena will have to be borne in mind by the decision makers in the corporate houses, while, formulating appropriate policies and chalking out suitable measures to

mitigate the impact of the attrition phenomena. Although, taking all of the above considerations on beforehand, generalized solutions to prevent attrition phenomena may be offered despite of the sector of activities as below:

- i. Policy makers of both the sectors may implement the strategies which could contribute to increasing the level of job embeddedness of the employees.
- ii. Despite of the fact that attrition can cause a huge cost, though, implementing the corrective and preventive measures for minimizing the impact of attrition, could also born some cost. Thus, accordingly, cost efficiency of the measures should have to be considered while formulating the suitable policy.
- iii. In spite of an approach of multiple solutions, it may be suggested to the corporate policy makers, that developing a strategic accountability approach may be certainly contribute to lower down the attrition rate.

Finally, it needs to be mentioned specifically that, this research was undertaken with the intension of contributing to the understanding of the intensity, causative factors and probable solutions in the light of findings. This study has added to the current body of knowledge relating to the comparative aspect of the attrition phenomena and has provided insight into areas that warrant further exploration.

Bibliography

List of Books:

- 1 Buckingham, M., and Coffman, C. *First, Break all the Rules*. New York: Simon and Schuster, 1999
- 2 C. R. Kothari, *Research Methodology: Methods and Techniques*, New Age Publication, 2007
- 3 Cascio, W. F. (2000). *Costing human resources*. Cincinnati, OH: Southwestern
- 4 Davenport, Tom, *Human Capital: What It Is and Why People Invest in It*. San Francisco, California: Jossey-Bass Publishers, 1999
- 5 Department of Human Resources, University of Colorado Boulder, "Guide to Motivating Employees", July 2012, pp. 9-14.
- 6 Donald R. Cooper et al, *Business Research Methods-9th Edition*, Tata McGraw-Hill, 2006
- 7 Heskett, J. L., Sasser, E., Jr., and Schlessinger, L. A., *Service Profit Chain*. Boston, Mass: Harvard Business School, 1997
- 8 Hom, P.W., & Griffeth, R.(1995), *Employees turnover*. Cincinnati, OH: South-Western
- 9 Hom, P.W.,& Griffeth, R.(1995). *Employees turnover*. Cincinnati, OH: South-Western
- 10 Jack J Phillips and Adele O Connel, "Managing Employee Retention: A Strategic Accountability Approach", HR SOCIETY, USA, 2003
- 11 Kaye, B., and Jordan-Evans, S. *Love' Em or Loe' Em: Getting Good People to Stay*. San Francisco, Calif.: Berrett-Koehler Publishers, 1999
- 12 Longman Dictionary of Contemporary English, Longman Group Ltd., 1995, p-71.
- 13 Marie Jahoda, Morton Deutsch and Stuart W. Cook, *Research Methods in Social Relations*, p-4
- 14 Mollie Lombardi, Jayson Saba, "Talent Assessment Strategies: A Decision guide for organizational Performance", Aberdeen Group, March 2010, p-6
- 15 Phillips, P., *Retaining Your Best Employees*, Alexandria., Va.: American society for Training and Development, 2000
- 16 R. L. Ackoff, *The Design of Social Research*, Chicago University Press, Chicago, 1961
- 17 Wellins, Richards *Empowered Teams: Creating Self-Directed Work Groups that improve Quality, Productivity, and participation*. San Francisco: Jossey Bass, January 1991

List of Thesis and Articles:

- 1 PhD Thesis of Dr. Mrs. Bharatikumar on Attrition: Study on Services Sector In Pune, submitted to University of Pune, pp-155-156
- 2 Abelson, M.A.(1987). Examination of avoidable and unavoidable turnover. *Journal of Applied Psychology*,72.382-386.
- 3 American Society of Safety Engineer's Economic Downturn Survey Finds Employer Increase in Realizing Value of Workplace Safety." US Newswire, January 24, 2002
- 4 Ashford, S.J., Lee, C., and Bobko, P." Content, Causes, and Consequences of Job Insecurity: A Theory-Based Measure and Substantive Test." *Academy of Management Journal*, 1989; 32: 803-829
- 5 Bennett, N., Blum, T.C., Long, R.G., & Roman, P. M. (1993). A firm- level analysis of employee attrition. *Group and Organization Management*, i8, 482-499
- 6 Blau, G.J., and Boal, K.B. "Using Job Involvement and Organizational Commitment Interactively to Predict Turnover." *Journal of Management*, September 2000; 11(1); 115-127
- 7 Boshoff, C., and Mels, G. "The Impact of Multiple Commitments on Intentions to Resign: An Empirical Assessment." *British Journal of Management*, September 2000; 11(3);255-272
- 8 Bowen, D.E., & Schneider, B. (1988). Services Marketing and Management : Implications for organizational behavior. In B. Stew & L. Cummings 9Eds.0, research in organizational behavior (vol.10,pp.43-80) Greenwich, CT: JAI
- 9 Bowen, D.E., & Schneider, b. (1988), Services marketing and management: Implications for organizational behavior. In B. Stew & L. Cummings 9Eds.0, research in organizational behavior (vol.10,pp.43-80) Greenwich, CT : JAI
- 10 By Brooks Holton, Bonnie O'Neill, Originally published in *The journal of nursing administration*, Volume 34, No. 5 (May 2004)
- 11 Campion, M. (1991). Meaning and measurement of Turnover: comparison of alternative measures and recommendations for research. *Journal of applied psychology*, 76, 199-212
- 12 Campion, M. (1991). Meaning and measurement of Turnover: comparison of alternative measures and recommendations for research. *Journal of applied psychology*, 76, 199-212
- 13 Cappeli, P. "A Market-Driven Approach to Retaining Talent." *Harvard Business Review*, January/February 2000; 79(1):103
- 14 Cappelli, P. (2000), January/February).A market-driven approach to retaining talent. *Harvard business review*. 78-103-111

- 15 Chan, D. "Cognitive Misfit of Problem-Solving Style at work: A Facet of Person Organization Fit." *Organizational Behavior and Human Decision Processes*, 1996: 68; 194-207
- 16 Corzo, C. "Boca Raton, Fla.-Based Medical Staffing Firm Puts Brakes on High Turnover Rate." *The Miami Herald*, Sept. 11, 2000
- 17 Dennison, D.R. "Bringing Corporate Culture to the Bottom Line." *Organizational Dynamics*, 1984:13(2):5-22
- 18 Deshpande, S., A., Research Article Published in Daily- *Tarun Bharat*, Nagpur, Dated 6 July 1990.
- 19 Edwards, R.L.R. "The Morale and Satisfaction of Midlevel on Intent to Leave." *Dissertation Abstracts International Section A: Humanities and Social Sciences*, August 2001; 62(2-A): 482
- 20 Eqbal, Naila, "ANALYZING CAUSES OF ATTRITION RATE AND GIVING THE SOLUTION THROUGH MASLOW's HIERARCHY OF NEED IN BPO INDUSTRY", *RGC Research Journal*, Vol.-I, issues-IV, October-December 2012, p-1.
- 21 Ethics Plans Pay off in Staff Retention and Profits." *HR Briefing (Aspen)*, June 15, 2001:7
- 22 Ettorre, B. (1997, May). How are companies keeping the employees they want. *Management Review*, 49-53
- 23 Glassop, L.I. "The Organizational Benefits of Teams." *Human Relations*, February 2002;55(2): 225-249.
- 24 Glassop, L.I. "The Organizational Benefits of Teams." *Human Relations*, February 2002; 55(2): 225-249.
- 25 Guest, D., "ENOP Symposium on work-life-balance: an Introduction", *Social Science Information*", Vol. 41, 2., pp-253-254.
- 26 Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior*, 37, 60-78
- 27 Hewitt's Attrition and Retention Study, Asia Pacific, 2006
- 28 *JACK ZIGON, How To Measure EMPLOYEE PERFORMANCE*, Published by-Zigon Performance Group, 604 Crum Creek Road. Media, PA 19063-1646, USA, 2002
- 29 Jahn, E.W. "The Impact of Perceived Organizational and Supervisory Family Support on Affective and Continuance Commitment: A Longitudinal and Multi-Level Analysis." *Dissertation Abstracts International: Section A: Humanities and Social Sciences*, July 1998: 59(1-A):0237

- 30 James Dean Brown, **Likert items and scales of measurement**, *SHIKEN: JALT Testing & Evaluation SIG Newsletter*. March 2011. 15(1) 10-14, <http://jalt.org/test/PDF/Brown34.pdf>
- 31 Joyner, J. "Corporate Culture Defines Success", *Computing Canada*, May 18, 2001; 27 (11): p. 26.
- 32 Joyner, J."Corporate Culture Defines Success." *Computing Canada*, May 18, 2001; 27 (11):26
- 33 Keith K and McWilliams A, "The Wage Effects of Cumulative Job Mobility", *Industrial and Labour Relations Review*, Vol. 49, pp-121-137
- 34 Konana, Prabhudev, and Balasubramanian, Sridhar, '*India as a Knowledge Economy: Aspirations versus Reality*', McCombs School of Business, UT-Austin, p-1
- 35 Kurulkar, R., P. *The Problem of Regional Disparities in Maharashtra State and The Role of Regional Development Boards*, *Journal of Indian School of Political Economy*, Jan-Dec. 2009.
- 36 Labelle C D. Shaw K and Hellenack L J (1980), "Solving the Turnover Problem", *Datamation*, Vol 15, pp. 21-32.
- 37 LaBelle, C D., Shaw, K. and Hellenack L J, "Solving the Turnover Problem", *Datamation*, Vol. 15, 1980, pp. 21-32
- 38 Mandel, M. J., & Farrell, C. (1992, July, 13). The immigrants, *Business Week*, 114
- 39 Mitchell, T.R., Holtom, B.C., Lee, T.W., Sablinski, C.J., and Erez, M. "Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover." *Academy of Management Journal*, 2001;44(6): 1102-1121
- 40 Mueller, C. W., & Price, J. L. (1989).Some consequences of turnover: A work unit analysis. *Human Relations*, 42, 389-402
- 41 O'Reilly, C.W. Chatman. J., and Caldwell, D. F. "People and Organizational Culture: A Profile Comparison Approach to Person Organization Fit." *Academy Journal*, 1991: 34: 487-516
- 42 Ong Tze San and Yip Mei Theen, "The Reward Strategy and Performance Measurement (Evidence from Malaysian Insurance Companies)", *International Journal of Business, Humanities and Technology*, Vol. 2 No. 1; January 2012
- 43 Ronald Fischer, "REWARDING EMPLOYEE LOYALTY: AN ORGANIZATIONAL JUSTICE APPROACH", *International Journal of Organizational Behavior*, Volume 8 (3), 486-503
- 44 Salancik, G.R., & Pfeffer, J. (1978), A social information processing approach to job attitude task design. *Administrative Science Quarterly*, 23, 224-253

- 45 Schlesinger, L.A., & Hesklett, J.L.(1991, September-October). The service-driven service company. *Harvard Business Review*, 69, 71-81
- 46 SHAFaq ZAREEN and SUREKHA RANA, “Job Satisfaction and Attrition-A Study of Selected Call Centers in NCR”, *Indian Journal of Applied Research*, Volume : 4 | Issue : 4 | Special Apr Issue 2014, pp. 85-86
- 47 Shaw, J.D., Delery, .E., Jenkins, G.D., and Gupta, N. “ An Organization Level Analysis of voluntary and Involuntary Turnover.” *Academy of Management Journal*, 1998; 41(5): 511-525
- 48 Shoemaker, C., and Lantos, G.P., “Marketing Corporate Image”, *Journal of Consumer Marketing*, 2000, 17(4/5), p.459
- 49 Stein, N. “Winning the War to keep Top Talent.” *Fortune Magazine*, May 2000; 132-137
- 50 Story, M. “Winning the Battle for Talent,” *New Zealand Management*, March 2002; 49(2):39
- 51 Sundstrom, E., DeMeuse, K.P., & Futrll,D. (1990). Work teams: Applications and effectiveness. *American Psychologist*, 45 (2), 120-33
- 52 Tamosaitia. W., and Schwenker, M. “Recruiting and Retaining Technical Personnel at a Contractor-Operated Government Site.” *Engineering Management Journal*, March 2002; 14(1)29
- 53 Tan, H.H. and Tan, C.S.F. “Toward the Differentiation of Trust in Supervisor and Trust in Organization.” *Genetic, Social and General Psychology Monographs*, 2000; 126(2):241-260
- 54 Terence R. Mitchell, Brooks C. Holtom, Thomas W. Lee, Chris J. Sablynski, Miriam Erez, “WHY PEOPLE STAY: USING JOB EMBEDDEDNESS TO PREDICT VOLUNTARY TURNOVER”, *Academy of Management Journal*, 2001, 44, 1102-1122
- 55 Vassilis Kelessidis, “Benchmarking: INNOREGIO: dissemination of innovation management and knowledge techniques”, *Thessaloniki Technology Park*, 2000, pp:2-6
- 56 Walsch, M.W. “Luring the Best in an Unsettled Time: Money Isn’t Everything.” *New York Times*, January 30, 2001; 150(516);G-1
- 57 World Class Advice from Three Market Leaders” *HR Focus*, August 2000; 77(8):1

Lists of Reports:

- 1 Annual report of the TATA Motors Ltd for the year 2010-11
- 2 Dell, D., and Hickey, J. *Attracting and Keeping Top Employees*. New York: the Conference Board, 2002

- 3 Dell, D., and Hickey, J. *Attracting and Keeping Top Employees*. New York: the Conference Board, 2002
- 4 Dell, D., and Hicky, J. *Attracting and Keeping Top Employees*. New York: The Conference Board, 2002.
- 5 Directorate of economics and statistics, 2001, District Domestic Product of Maharashtra, 1993-94 to 1998-99, Government of Maharashtra, Mumbai
- 6 *Employee Satisfaction Survey Report, Prepared for: ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES, April 2008*
- 7 Galvin T. "Birds of a Feather." *Training*, March 2001; 38 (30:58)
- 8 Phillips, P. (2002) (Ed.). *Retaining Your Best Employees*. Alexandria., Va.: American society for Training and Development
- 9 The Report on District Social and Economic Indicators, by Directorate of Statistics and Economics, Govt. of Maharashtra, 2010, p-XII-2
- 10 Vera Bitsch and Michael Hogberg, *Employee Retention: Components of Job Satisfaction of Green Industry Employees*, Selected Papers prepared for presentation at the American Agricultural Economics Association Annual Meeting, Denver, Colorado, August 1-4, 2004

3.2) please write the number in the blank beside each statement to show how accurate is the statement describing your job-

1	2	3	4	5
Strongly accurate	Slightly Accurate	Uncertain	Slightly Inaccurate	Strongly Inaccurate

No.	Job Characteristics	Present Job	Previous Job
3.2.1	This job required to use a number of complex or high-level skills.	.....	.....
3.2.2	This job requires a lot of cooperative work with other people.	.....	.....
3.2.3	Present job is quite simple and repetitive.	.....	.....
3.2.4	In this job supervisors or seniors never give any 'feedback' about how work is being performed	.....	.....
3.2.5	This job denies any chance to use personal initiative or judgment in carrying out the work	.....	.....
3.2.6	This job provide a chance to completely finish the piece of work that began our self	.....	.....
3.2.7	Generally speaking, I am very pleased with my job	.....	.....

3.3) please indicate how satisfied you are with each aspects of your job by placing the number in the blank side

1	2	3	4	5
Strongly Agree	Slightly Agree	Uncertain	Slightly Disagree	Strongly Disagree

No.	Aspects of your previous job	Present Job	Previous Job
3.3.1	The amount of job security, pay and fringe benefits	.....	.....
3.3.2	The amount of personal growth and development	.....	.....
3.3.3	Colleagues and coworkers	.....	.....
3.3.4	The degree of respect, fair treatment, support and guidance you are receiving from your superiors	.....	.....
3.3.5	The feeling of worthwhile accomplishment for doing this job	.....	.....
3.3.6	The overall quality, amount of challenge	.....	.....
3.3.7	Your role clearly communicated to you	.....	.....
3.3.8	Ample opportunity available for career growth	.....	.....
3.3.9	Sufficient trainings are giving when required	.....	.....
3.3.10	Promotion policy and practices are fair	.....	.....
3.3.11	Targets are clearly defined & communicated	.....	.....

3.4) do you observed following problems in your job?

Write suitable number in front of factor				
1	2	3	4	5
Never	Rarely	Sometime	Frequently	Always

Sr. No.	Factors	Present Job	Previous Job
3.4.1	Headache?	.....	.....
3.4.2	Twinges?	.....	.....
3.4.3	Muscle trembling?	.....	.....
3.4.4	Lack of appetite?	.....	.....
3.4.5	Sickness?	.....	.....
3.4.6	Do you feel your errors are increased?	.....	.....
3.4.7	above factors have affect your efficiency?	.....	.....

3.5) do you belong to any formal or informal group in your job?

3.5.1) Present Job a. Yes b. No **3.6.2) Previous Job** a. Yes b. No

3.6) if yes, do you think that, those groups you participated are helpful you to perform your job most effectively?

3.6.1) In Present Job

Type of Group	Self formed / Joined	Please check which suit you				
		1	2	3	4	5
		Never	Rarely	Sometime	Frequently	Always
a. Formal						
b. Informal						

3.6.2) In Previous Job

Type of Group	Self formed / Joined	Please check which suit you				
		1	2	3	4	5
		Never	Rarely	Sometime	Frequently	Always
a. Formal						
b. Informal						

3.7) do you joined any employees union in your job?

3.7.1) Present Job a. Yes b. No **3.7.2) Previous Job** a. Yes b. No

3.8) if no what are the reasons for not joining the union?

No.	Status	No union	Not registered	Not Interested	Not accepted
3.8.1	Present Job				
3.8.2	Previous Job				

3.8.3) if yes, do you think that, the union had great influence in management decisions?

- a. Never b. Rarely c. Sometime d. Frequently e. Always

3.9) what are the reasons for JOINING the PRESENT Company?

(Please write code 1 to 10 as per your priority to join present job)

1	2	3	4	5	6	7	8	9	10
Least Important	Factors for joining this job								Most Important

Sr.	Reasons for leaving job	Write above priority code
3.9.1	Better designation compared to previous job	
3.9.2	Better compensation	
3.9.3	For improving Experience	
3.9.4	Favorable work culture	
3.9.5	Potential good relationship with immediate superior	
3.9.6	Potentiality of career growth	
3.9.7	Parental / family mobility	
3.9.8	More challenging job	
3.9.9	Role is clearly communicated	
3.9.10	Bearable work pressure / Stress	
3.9.11	I never desire to work within one organization	
3.9.12	No learning in job	
3.9.13	No Role stress	
3.9.14	Independence while performing job	
3.9.15		
3.9.16		

3.10) what are the reasons for LEAVING your PREVIOUS Company?

(Please write code 1 to 10 as per your priority to leave previous job)

1	2	3	4	5	6	7	8	9	10
Least Important	Factors for joining this job								Most Important

Sr.	Reasons for leaving job	Write above priority code
3.10.1	Better designation at the next organization	
3.10.2	Better compensation at the next organization	
3.10.3	Better work profile at the next organization	
3.10.4	Higher studies	
3.10.5	Unfavorable work culture, lack of independence	
3.10.6	Could not get along with the immediate superior	
3.10.7	Lack of career growth	

Sr.	Reasons for leaving job	Write above priority code
3.10.8	Parental / family mobility, Distance	
3.10.9	No challenge in the job, No role clarity	
3.10.10	Unbearable work pressure / Stress, Lack of relaxation	
3.10.11	Unfavorable working environment	
3.10.12	I never desire to work within one organization	
3.10.13	No learning in job	
3.10.14	Role stress	
3.10.15		

3.11) As per your opinion do you feel that management with appropriate policy mix will avoid unusual leaving of employees? a. Yes b. No

3.11.1) if yes, then kindly rate your opinion on following scale by clicking appropriate option.

1	2	3	4	5
Strongly Disagree	Slightly Disagree	Neither Agree Nor Disagree	Slightly Agree	Strongly Agree

D. About your skills and other

4.1) which skills are required and you are using in this job?

1	2	3	4	5
Never Used	Using rarely	Using sometime	Frequently Using	Always Using

Sr.	Skills you posses	PRESENT Job		PREVIOUS Job	
		Used in your job Yes / No	If <u>Yes</u> write how you used it in your job Write code from (B)	Used in your job Yes / No	If <u>Yes</u> write how you used it in your job Write code from (B)
4.1.1	Machine Operation (Production)				
4.1.2	Machine Operation (Office)				
4.1.3	Clerical				
4.1.4	Managerial				
4.1.5	Leadership				
4.1.6	Functional				
4.1.7	Skill of motivating to other employees				
4.1.8	Presentation skill				
4.1.9	Problem solving skill				
4.1.10	Error handling				
4.1.11	Soft skills				
4.1.12	Programming knowledge				
4.1.13	Software knowledge				
4.1.14					

4. 2) In current scenario do you feel your skill has demand in industry / sector?

- a. Yes b. No

Sr.	Statements	Present Company	Previous Company
7.3.19	I can decide on my own, how to go about doing my work.		
7.3.20	The work I do is meaningful to me.		
7.3.21	In my priorities my profession comes first.		
7.3.22	I am satisfied working in my organization.		
7.3.23	I should be working for my organization.		

H. Employees perception about job

8.1) Did you think about your dream job? a. Yes b. No

8.2) If yes, which is greater factor to call it dream job?

- a. Salary b. Relation with Boss c. Work Environment d. Other.....

I. Attitude of employees

II. Teamwork:

9.1) Please indicate how much you AGREE or DISAGREE with each statement.

1	2	3	4	5
Strongly Disagree	Slightly disagree	Uncertain	Slightly agree	Strongly agree

Sr. No.	Context	Present Job	Previous Job
9.1.1	In my department staff work together as a team.		
9.1.2	There is a “teamwork spirit” among those in my work group.		
9.1.3	Those in my work group are usually easy to approach with a work problem.		
9.1.4	The people I work with cooperate to get the job done.		
9.1.5	Around here, work groups or departments seem to work with each other.		
9.1.6	In my area, work groups or departments who depend on each other plan their work together.		
9.1.7	In my area, my work performance suffers from lack of teamwork between departments or other work groups.		

9.2) Do you have your team / group in your company?

No.	Company	Yes / No (a)	Formal / Informal (b)
9.2.1	At Present Job		
9.2.2	At Previous Job		

9.3) Do you feel helpless when your team member leaves the job? a. Yes b. No

9.4) Is there any effect on team work when team members leave the job? a. Yes b. No

9.5) Choose percentage of effect approximately that you feel?

- a. Less that 10% b. 10% - 15% c. 15 to 20% d. 20 to 30% e.

9.6) How much time required for tuning with new team member?

- a. Less Than a day b. 2 days c. 3 to 7 days
 d. 8 to 15 Days e. up to month e.

9.7) If the team member leaves, how much your productivity could comes down by ____ %.

9.8) Do you feel anything of following after leaving of team members?

Sr. No.	Feeling	Please check for which suit you				
		1	2	3	4	5
		Never	Rarely	Sometime	Frequently	Always
9.8.1	Nervousness, Sadness					
9.8.2	Loneliness					
9.8.3	Helplessly					
9.8.4	Unsecured					
9.8.5	Unmotivated					
9.8.6	Happy					
9.8.7	Lack of guidance					
9.8.8	Stress					
9.8.9	Lack of confidence					
9.8.10	Opportunity to take place of ex-employee					

9.8.15) do you observed effects on your efficiency for performing your job and role of above feelings? (Please check appropriate)

Never	Rarely	Sometime	Frequently	Always

I2. Contribution-Attitude:

10.1) Please write your opinions for following statements choosing below codes

1	2	3	4	5
Strongly Disagree	Slightly disagree	Uncertain	Slightly agree	Strongly agree

Sr.	Statements	Present Company	Previous Company
10.1.1	I am less productive than I used to be.		
10.1.2	My work group is very productive.		
10.1.3	My work group puts all of their effort into their job.		
10.1.4	From the list below, mark (O) only three conditions or factors which you feel would contribute the most to improving your productivity:		
a	O Improved supervisory relations		
b	O Changes in supplies, tools, equipment		
c	O More freedom		
d	O More authority		
e	O More and better information		
f	O Changes in work environment		
g	O Clearer responsibilities		
h	O Additional manpower		

Sr.	Statements	Present Company	Previous Company
i	O Better planning		
j	O More cooperation from other areas or departments		
k	O Other _____		
10.1.5	If the above changes were made, my productivity could be improved by _____%.		
10.1.6	My pay depends mostly upon how well I do my job.		

16. Supervisory Relationships:

11.1) Please write your opinions for following statements choosing below codes

1	2	3	4	5
Strongly Disagree	Slightly disagree	Uncertain	Slightly agree	Strongly agree

Sr.	Statements	Present Company	Previous Company
11.1.1.	I can honestly tell my boss what I really think.		
11.1.2	My boss accepts constructive criticism from his/her subordinates.		
11.1.3	When I make a serious mistake, I am not reluctant to go to my boss for help.		
11.1.4	My boss deals fairly with everyone.		
11.1.5	My boss stands up for his/her subordinates.		
11.1.6	My supervisor does a good job of building teamwork in his/her group.		
11.1.7	My boss maintains high standards of performance.		

- Thank you for your valuable time -