

## CHAPTER 5

### DATA ANALYSIS AND INTERPRETATION OF THREE PHASES DELPHI APPROACH

#### 5.1 INTRODUCTION

As a preliminary research method, this first stage used the Delphi technique, which consists of three rounds of questionnaires integrating the judgment and comments of a panel of twenty selected experts. They included academics, Human Resource Practitioners and Industrial Psychologists. They were asked to identify the key Human Resource factors that convince the retention of employees in Information Technology in Bangalore. Final views of the experts' opinion were recorded and analysed by open ended questionnaire.

##### 5.1.1 Demographic Characteristics of Delphi Panelists

Rowe and Wright (1999) as this study is a preliminary investigation, the small number of participants was deemed by the researcher to be acceptable for determining a meaningful outcome. The panel size of twenty fits within the guidelines recommended for Delphi studies.

Table 5.1 reports the demographic factors of Delphi Panelists in section B explains the majority of expert's descriptions include the technical specialist, software architect and Project managers of Information Technology Industry had taken to determine the factors for retention in their sector.

#### **Table 5.1 Demographic characteristics of Delphi panelists**

<b>Characteristic</b>	<b>Experts</b>	<b>Percentage</b>
Academics	2	10
Human Resource Practitioners	4	20
Industrial Psychologists	1	5
Technology specialist	4	20
Software Architect	4	20
Project Manager	4	20
Vice president	1	5
Type of Industry		
professional	8	40
Technician and Associated professional	12	60
Qualification		
PhD	1	5
B.E,	15	75
M.B.A	3	15
Others	1	5
Age		
30-40	6	30
41-50	9	45
51-60	3	15
61-70	2	10
Gender		
Male	18	90
Female	2	10

Source: Primary data

Around 40 percent were included of experts to judge the environmental and organizational factors of Informational Technology. Around sixty percent of technicians and associated professionals belong to computer programmer, product designers, special inspects and Testers of electronic products and Technicians. About 75 percent of the experts belong

to engineering background; there is majority of male employees as compared to female employees both in this study and their working organisation. It means that there is a wide gender gap between male and female employees. Experts working in organisation have an average of 30 to 100 employee's strength in their organisation.

### **5.1.2 Discussions and Implications of Phase I Experts Opinion Study**

Effective managing employees of Information Technology indicate the need of identifying their needs for their benefits and services. The entire panel members agree the benefits and services are commuting services, medical and health insurance, training and development packages, flexi – timing, International travel, statutory benefits, bonus, flexible loans, Laptops, phone, work from home option, wedding/birthday allowance instead of job security.

Findings from the Delphi study revealed that the needs of Information Technology employees differ with age. Young employees focused on remuneration, training and development, career advancement, challenging job, growth opportunities of their capabilities and acquisition of new skills. But, older employee's salary and carrier advancement is not so important.

Since salary and incentives are more investment increase with age and tenure, all Information Technology employees tends to become more committed to the employing organisation.

The relationship between the employees from top management to bottom level employees is a need to examine the Human Resource system. This result indicated that all the descriptions seem to have a focus on knowledge, skills and attributes that are of strategic value to the organisation.

Major respondent's feedback to the kind of training opportunities to retain the employees in the same organisation, they have training like Orientation, Functional and Domain Expertise, Cross – functional, knowledge of global practices like Behavioral, Managerial, Leadership, and Project Management, help their career development and growth to both employee and employer.

The findings of this study experts indicate that the shape of retain employees in the organisation by salary hikes, benefits and services, Interesting and challenge work, growth opportunities like on - site experience, work – from – home option and global opportunities.

### **5.1.3 Phase I Delphi Study Conclusion**

The findings from the Delphi study imply a relationship between retention of employees and Human Resource Management factors. The panel identifies some key of Human Resource factors influencing retention. They are selection, reward and recognition, training and career development, challenging job opportunities, equity of communication and consultation, effective working relationship and satisfactory work environment. The finding of the Delphi study was discussed and the implications outlined. The purpose of the Delphi study was to obtain information from a carefully selected group of expert respondents. The findings would help to assist in the development of a suitable instrument for the next phase II of the study.

## **5.2 PHASE II DELPHI STUDY**

In these days, organisations are accepting that human beings are their most important asset. The success of any organisation depends upon that how much they are utilizing and satisfying their existing Human Resource according to its desirable goals. In a knowledge economy, optimizing human and intellectual capital is the biggest challenge, which an organisation has to

face. Human Resource Management is a continuous process, by which employees' capabilities are sharpened, their full potential is realized and life-long training is provided to them, to prepare them to play a vital role in present and future jobs. To achieve these objectives there is need to conduct in-depth interviews with Human Resource Managers of 50 Information Technology professionals. The Questionnaire was designed based on objective.

### **5.2.1 Introduction**

This chapter provides the result of Phase II Delphi study. A detailed structured schedule designed from the result of Phase I, was used to conduct in – depth interviews with Human Resource Managers of 50 Information Technology Industry executives. The new set of questionnaire was designed to study the entire population of Information Technology of Bangalore city Karnataka State. The experts in the participating organisations were summarised and reported. The results of expert's discussions are summarised and prepared a new set of questionnaire.

### **5.2.2 Demographic Characteristics of Phase II Delphi Panelists**

Table 5.2 reports the demographic factors of Delphi panelists' of Phase II. About 44 percent of Technical specialist, 40 percent of Software architect and 16 percent of the Project Managers of IT industry presented their views.

**Table 5.2 Demographic characteristics of Phase II Delphi panelists**

<b>Characteristic</b>	<b>Experts</b>	<b>Percentage</b>
Technology specialist	22	44
Software Architect	20	40
Project Manager/ Vice president /CEO	8	16
Type of Industry		
Software Industries	50	100
Qualification		
BE/ME	39	78
MBA	11	22
Age		
30-45	43	86
46-60	7	14
Gender		
Male	47	94
Female	3	6

Source: Primary data

There are 78 percent of the experts' were from professional qualified. About 94 percent of the Male reports represented Interview Schedule as compared to Female experts.

### **5.2.3 Career Development Practice on Employees of IT Industry**

The primary aim of the study is to explore the factors that affect the IT sector. The first part of the questionnaire asked responds to rate the relative importance of sixteen career development factors on their retention using a five point Linkert types ranging from strongly disagree to strongly agree.

The Table 5.3 shows the first round survey considered of the open – ended questions designed to elicit expert opinions on HR factor that it will influence retention of IT employees in section A of the questionnaire. The Table 5.3 indicated the view of Technical and Professional experts' that in all the sixteen characteristics of Information Technology Sector, employees are

differ from other service sector and Multi National Company's categories. Professional experts agree the opinion of above sl. No.(1,3,5,6,7,8, 9,11, 13, 15, 16). Academician expert's specified the opinion of above sl. No (2, 4, 12, 14, 16).

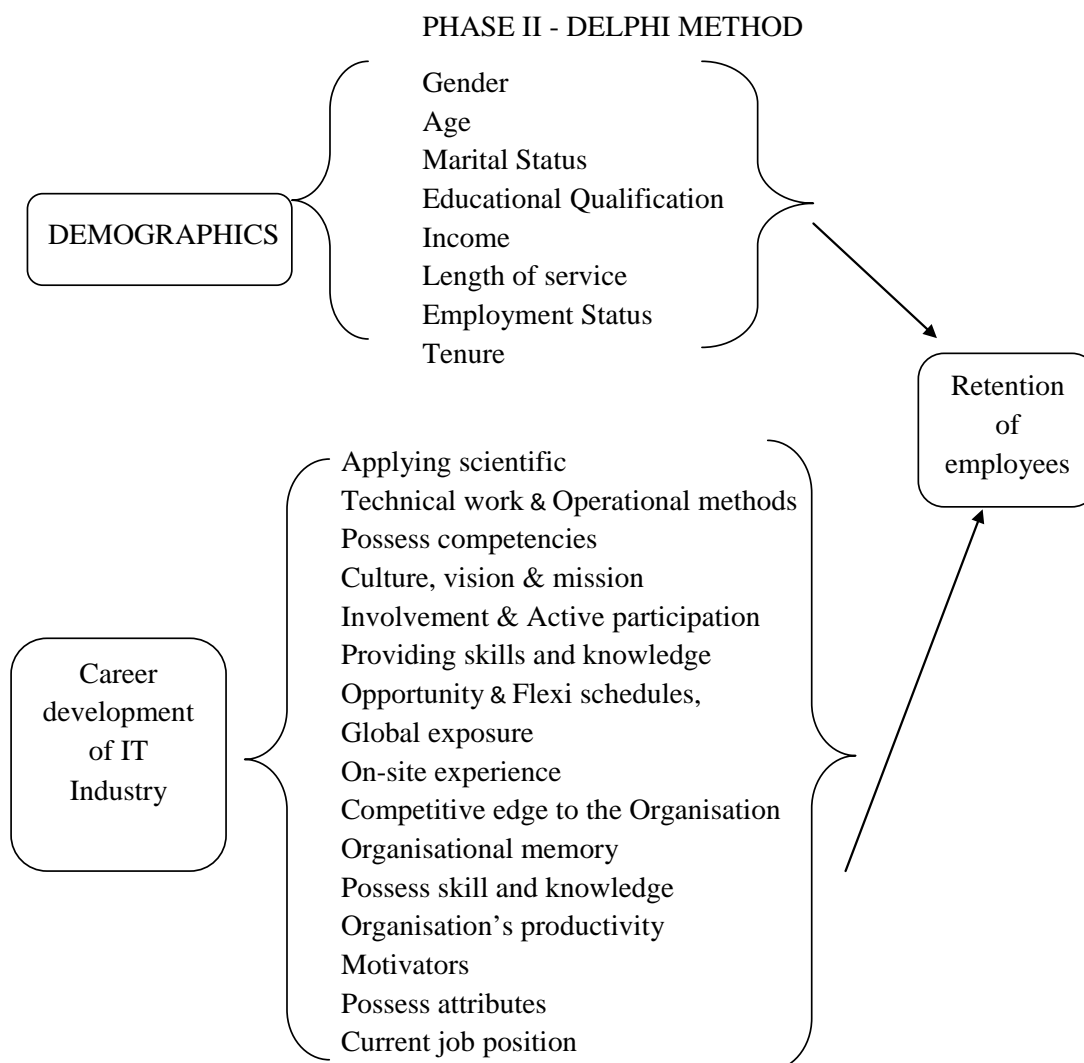
**Table 5.3 Career development practice on employees of IT industry**

Sl.no	Career development practice on IT Industry employees
1	Applying scientific concepts and theories to the solution of Problems
2	Tasks consist of carrying out technical work connected with the application of concepts and operational methods.
3	Possess competencies that are exclusive
4	Supportive to the organisational demands , culture , vision & mission for getting success
5	Involvement and Active participation in the essential Tasks,
6	Provide skills and/or knowledge to ensure the success of the organisation, sequence plan.
7	Attractive attitude, friendly relationship, 24X7 support, Flexi schedules, Night shifts, work from home.
8	Global exposure and practice while working from India
9	On site experience, Innovative talent, professional satisfaction
10	Fulfil the resources to a competitive edge to the organisation.
11	Contribute to the organisational memory – their departure would drain the organisation's knowledge and skill bank.
12	Possess skills, knowledge and abilities that are relatively rare or irreplaceable.
13	Essential to an organisation's productivity and wellbeing
14	Act as key motivators, mentors or role models to other staff.
15	Possess knowledge, skills and attributes that are closely aligned with the existing or possible future operational direction of the business.
16	Display an identification commitment, to the Organisation.

Source: Primary data

The basic model of Delphi method is to identify the retention of employees in career development practices were identified. The Figure 5.1

clearly explains the personal demographic characteristics as gender, age, marital status etc., which is essential to judge the IT sector.



**Figure 5.1 Career development practice on employees of IT industry**

The Figure 5.1 indicated that, of software expert's suggested that in all the sixteen characteristics of Information Technology sector employees are differ from other service sector and Multi National Company's categories. Applying those career development practices will give good outcome to retain the employees. The Figure 5.1 enlists all these factors that were translated into objects in the questionnaire.



#### 5.2.4 Human Resource Factor Retaining Valuable Employees in IT Sector

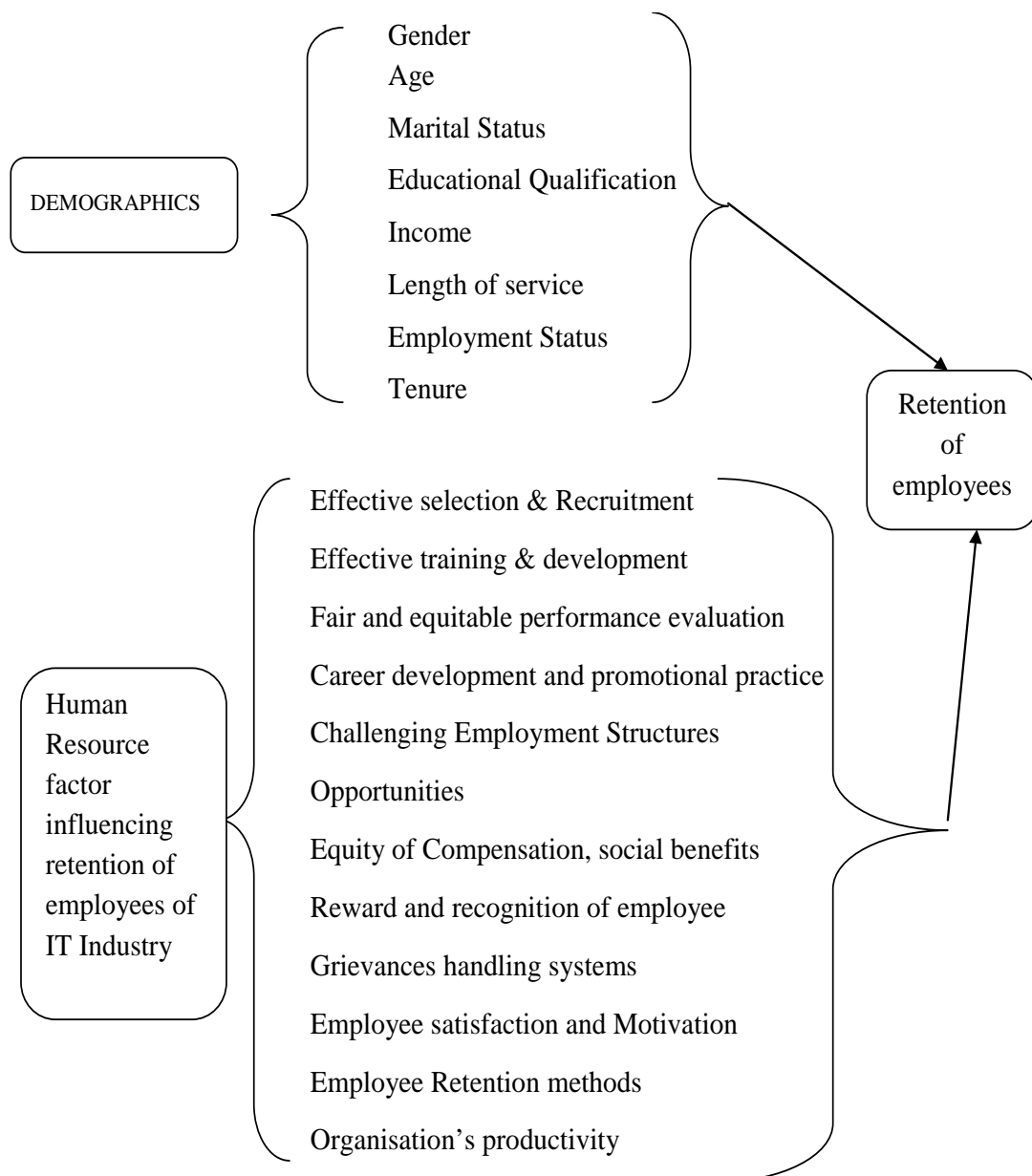
The second part elicited Human Resource strategies factors in IT sector respondents were asked to rate the relative importance of ten factors by using a five point Linkert type scale rating from strongly disagree to strongly agree. The Table 5.4 enlists all these factors that were translated into objects in the questionnaire

**Table 5.4 Human Resource Factors in IT Industry employees**

Sl.no	Human Resource Factors in IT Industry employees
1	Effective selection & recruitment process, job design
2	Provision of effective training & development practices
3	Innovative Fair and equitable performance evaluation practices
4	Career Development, and promotional practices, Employee Assistance Programs
5	Challenging Employment Structures and Opportunities
6	Equity of Compensation, social benefits and Security of tenure
7	Reward and recognition of employee value performance education.
8	Grievances handling systems
9	Employee satisfaction and Motivation
10	Employee Retention methods and employee commitment

Source: Primary data

The Table 5.4 outlines the major important factors affecting the Information Technology Industry in the retention of employees. The above ten factors are selected by the panel members in order of importance included in the Human Resource Factors are; effective selection, recruitment process, job design, challenging opportunities, reward by performance appraisal and grievance handling system place very important role in the IT employees.



**Figure 5.2 Human Resource Factors in IT Industry employees**

The Figure 5.2 indicated that Human Resource Factors in IT Industry employees of Software Professionals and Technicians suggested that all the ten Human Resource factors of Information Technology sector influencing the retention of employees. Those factors are explained the Figure 5.2.

### 5.2.5 Organisational Impact on Human Resource Management

The third part of the survey addresses the organisational factors, respondents were asked to rate the relative importance of ten organisational cultural factors on their retention of Information Technology sector by using a five point scale type ranging from strongly disagree to strongly agree.

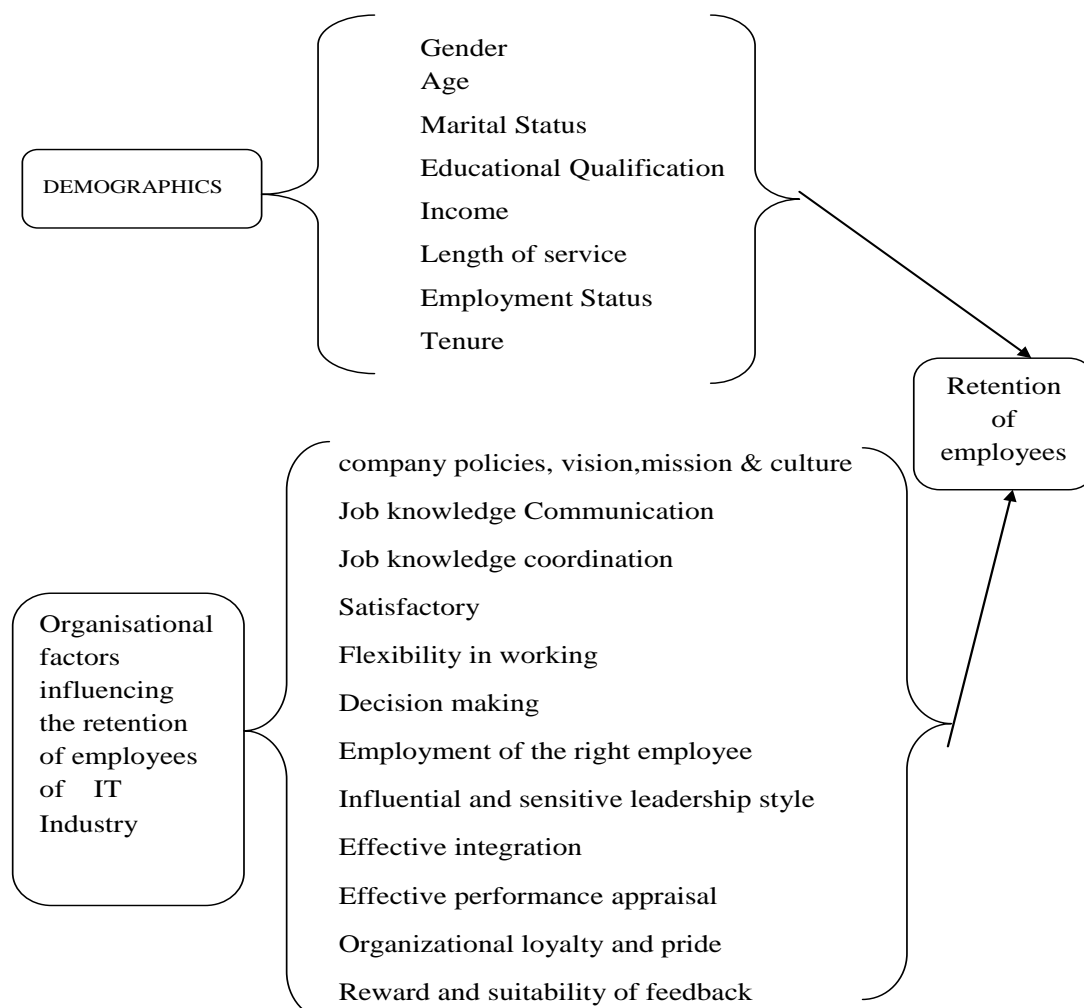
**Table 5.5 Organisational Factors in IT Industry employees**

Sl.no	Organisational Factors in IT Industry employees
1	Company policies, vision, mission and culture.
2	Job knowledge, Communication and coordination
3	Satisfactory and flexibility in working environment
4	Decision making and employment of right employee
5	Provision of high-tech performance equipment
6	Influential and sensitive leadership style
7	Effective integration: working relationships.
8	Effective performance appraisal announcement
9	Organizational loyalty and pride
10	The reward and suitability of feedback to the employee

Source: Primary data

The Table 5.5 explains the majority of the panel members considered organisational structure and ten other factors were very important in shaping of the Human Resource Management practices. However different categories of employees like Chief Executive Officer, Vice President, Senior Project Manager / Senior Product Manager / Senior Software Architect, Project Manager / Product Manager / Software Architect, Project Leader / Senior Team Leader / Senior Technical Leader, Module Leader / Team Leader / Technical Leader, Senior Software Engineer are responsible for the motivation and retention of employees in Information Technology Industry.

The Figure 5.3 explains the organisational impact on retention of employees with various factors which gives a shape to the Information sector to stop the attrition rate.



**Figure 5.3 Organisational impact on Human Resource Management**

From Figure 5.3 majority of the expert's view that factors of organisation explained in the questionnaire has given outline to retention of employees. In order to identify and evaluate the factors for retention of employees based on primary data, the respondents were asked to rate the factors that would make them stay longer in the same organization. These factors were identified after exhaustive exploratory review and focused group interviews with the employees and were put on a 5 point Likert scale ranging

from 1 as least important to 5 as most important. There were all total 16 objects in this part of the instrument Table 5.3 enlists all these factors that were translated into objects in the questionnaire and were used for factor analysis.

### **5.3 RELIABILITY ANALYSIS FOR DEFINING IT INDUSTRY EMPLOYEES**

To evaluate the questions in the first and second phase questionnaires containing nominal, ordinal and interval-type data descriptive statistics have been used. The techniques like factor analysis used. It was therefore considered most appropriate to use descriptive statistics. Descriptive statistics were calculated and the values (means and standard deviations) of the variables helped to examine the objects individually.

A pilot study has been conducted for a sample of 50 respondents and reliability analysis. Three measures of reliability are given. The scale consists of 17 objects, which measures the attitude of the respondents on a Likert type five point scale. The respondents were asked to rate the factors from scaling 1- Strongly disagree to 5 – strongly agree and 50 respondents were selected for reliability analysis.

The Table 5.6 scale objects were containing 17 objects selected randomly. The correlation between two forms was found to be 0.74, indicating that the objects between the two parts correlates well. Spearman-Brown and Guttman split-half reliabilities are used to find reliability coefficients of the scale by dividing the scale objects into two halves in some random manner.

**Table 5.6 Reliability Statistics of Career Development Practice of IT industry**

<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Objects</b>	<b>N of Objects</b>
.517	.530	17

Source: Primary data

**Table 5.7 Defining a Information Technology industry Employee Statistics**

<b>Career Development Practice of IT industry</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
11.1 Applying scientific concepts and theories to the solution of Problems	2.76	1.238	50
11.2 Tasks consist of carrying out technical work connected with the application of concepts and operational methods.	3.14	1.088	50
11.3 Possess competencies that are exclusive	3.08	.986	50
11.4 Supportive to the organisation demands , culture , vision & mission for getting success	3.22	1.112	50
11.5 Involvement and Active participation in carry out the essential Tasks,	3.12	1.043	50
11.6 Provide skills and/or knowledge to ensure the success of the organisation, sequence plan.	3.30	1.093	50
11.7 Attractive attitude, friendly relationship, 24X7 support, Flexi schedules, Night shifts, work from home.	3.26	1.157	50

**Table 5.7 (Continued)**

<b>Career Development Practice of IT industry</b>		<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
11.8	Global exposure and practice while working from India	3.20	1.069	50
11.9	Experience	3.32	1.269	50
11.10	On site experience, Innovative talent, professional satisfaction	3.26	1.046	50
11.11	Fulfil the resources to a competitive edge to the organisation.	3.32	1.406	50
11.12	Contribute to the organisational memory – their departure would drain the organization’s knowledge and skill bank.	3.28	1.246	50
11.13	Possess skills, knowledge and abilities that are relatively rare or irreplaceable.	3.12	1.319	50
11.14	Essential to an organization’s productivity and wellbeing	3.20	1.325	50
11.15	Act as key motivators, mentors or role models to other staff.	3.18	1.207	50
11.16	Possess knowledge, skills and attributes that are closely aligned with the existing or possible future operational Direction of the business.	3.22	1.183	50
11.17	Display an identification and commitment to the Organisation.	3.30	1.129	50

Source: Primary data

**Table 5.8 Statistics of Information Technology industry**

<b>Information Technology industry Employee</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Range</b>	<b>Maximum / Minimum</b>	<b>Variance</b>
Item Means	3.193	2.760	3.320	.560	1.203	.018
Item Variances	1.385	.973	1.977	1.004	2.032	.077
Inter-Item Correlations	.74	-.527	.746	1.274	-1.416	.049

Source: Primary data

The above Table (5.6, 5.7, 5.8) the correlation between forms is used to find the Spearman Brown reliability and the variances of sum scale and forms are used to find Guttman reliability. Cronbach's coefficient alpha ( $\alpha$ ) uses variances for the k individual objects 17 and the variance for the sum of all objects. If there is no true score but only error in the objects then the variance of the sum will be the same as the sum of variances of the individual objects.

If all objects are perfectly reliable and measure the same thing (true score), then coefficient alpha is equal to 1. In all, the reliability of the three statistics namely, Spearman-Brown, Guttman and Cronbach's alpha show that the reliability of scale constructed for the General Assessment is between 0.70 and 0.87, which makes the constructed scale fairly reliable. Therefore the scale reliability is good. Since it was found that the reliability of the scale was good, factor analysis was performed on all the 500 valid responses for Third Phase.

#### **5.4 RELIABILITY ANALYSIS OF RETENTION OF EMPLOYEES IN IT/ITES INDUSTRY**

**Table 5.9 Statistics of Reliability**

<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Objects</b>	<b>N of Objects</b>
.558	.577	10
Source: Primary data		



**Table 5.10 Factors Influencing Retention of employees in Information Technology**

<b>Factors Influencing Retention of employees in Information Technology</b>		<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
2.1	Effective selection & recruitment process, job design	2.80	1.278	50
2.2	Provision of effective training & development practices	3.18	1.044	50
2.3	Innovative Fair and equitable performance evaluation practices	3.12	1.023	50
2.4	Career Development, and promotional practices, Employee assistance Programs	3.20	1.107	50
2.5	Challenging Employment Structures and Opportunities	3.20	1.050	50
2.6	Equity of Compensation, social benefits and Security of tenure	3.52	1.035	50
2.7	Reward and recognition of employee value performance education.	3.42	1.144	50
2.8	Grievances handling systems	3.24	1.098	50
2.9	Employee satisfaction and Motivation	3.44	1.264	50
2.10	Employee Retention methods and employee commitment	3.26	1.046	50

Source: Primary data

**Table 5.11 Factors Influencing Retention of employees in Information Technology Statistics**

	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Range</b>	<b>Maximum / Minimum</b>	<b>Variance</b>
Item Means	3.238	2.800	3.520	.720	1.257	.041
Item Variances	1.238	1.047	1.633	.586	1.560	.046
Inter-Item Correlations	.80	-.350	.591	.941	-1.689	.044

Source: Primary data

A Pilot Study has been conducted for a sample of 50 respondents and Reliability Analysis. Three measures of Reliability are given. The scale consists of 10 objects, which measures the attitude of the respondents in Likert type five point scale. 50 respondents were selected for reliability analysis.

The Table 5.9, 5.10, 5.11 scale objects were containing 10 objects selected randomly. The correlation between data was found to be 0.80, indicating that the objects between the two parts correlates well. Spearman-Brown and Guttman split-half reliabilities are used to find reliability coefficients of the scale by dividing the scale objects into two halves in some random manner.

The correlation between forms is used to find the Spearman Brown reliability and the variances of sum scale and forms are used to find Guttman reliability. Cronbach's coefficient alpha ( $\alpha$ ) uses variances for the k individual objects 17 and the variance for the sum of all objects. If there is no true score but only error in the objects then the variance of the sum will be the same as the sum of variances of the individual objects. Therefore, coefficient alpha will be equal to zero. If all objects are perfectly reliable and measure the same thing (true score), then coefficient alpha is equal to 1. In all, the reliability of the three statistics namely, Spearman-Brown, Guttman and Cronbach's alpha show that the reliability of scale constructed for the General Assessment is between 0.70 and 0.87, which makes the constructed scale fairly reliable. Therefore the scale reliability is good. Since it was found that the reliability of the scale was good, factor analysis was performed on all the 500 valid responses.

## 5.5 ORGANIZATIONAL IMPACTS ON HUMAN RESOURCE MANAGEMENT IN INFORMATION TECHNOLOGY

**Table 5.12 Reliability of Organizational Impacts on Human Resource Management**

<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha Based on Standardized Objects</b>	<b>N of Objects</b>
.126	.239	10

Source: Primary data

**Table 5.13 Organizational Impacts on Human Resource Management Item**

<b>Organizational Impacts on Human Resource Management</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>N</b>
3.1 Company policies, vision, mission and culture	2.58	1.527	50
3.2 Job knowledge Communication and coordination	2.56	1.248	50
3.3 Satisfactory and flexibility working environment	2.40	1.278	50
3.4 Decision making and employment of right employee	2.92	1.936	50
3.5 Provision of high-tech performance equipment	2.34	1.287	50
3.6 Influential and sensitive leadership style	2.66	1.222	50
3.7 Effective integration: working relationships.	2.46	1.249	50
3.8 Effective performance appraisal announcement	2.28	1.107	50
3.9 Organizational loyalty and pride	2.28	1.196	50
3.10 The Reward and suitability of feedback of the employee	2.82	4.507	50

Source: Primary data

**Table 5.14 Organizational Impacts on Human Resource Management Summary Item**

<b>Organizational Impacts on Human Resource Management</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Range</b>	<b>Maximum / Minimum</b>	<b>Variance</b>
Item Means	2.530	2.280	2.920	.640	1.281	.049
Item Variances	3.695	1.226	20.314	19.088	16.568	34.628
Inter-Item Correlations	.030	-.417	.439	.856	-1.051	.026

Source: Primary data

**Table 5.15 Scale Statistics**

<b>Mean</b>	<b>Variance</b>	<b>Std. Deviation</b>	<b>N of Objects</b>
25.30	41.684	6.456	10

Source: Primary data

A Pilot Study has been conducted for a sample of 50 respondents and reliability analysis. Three measures of reliability are given. The scale consists of 10 objects, which measures the attitude of the respondents in Likert type five point scale. 50 respondents were selected for Reliability Analysis.

The Table 5.12, 5.13, 5.14, 5.15 scale objects were containing 10 objects selected randomly. The correlation between two forms was found to be 0.30, indicating that the objects between the two parts correlates well. Spearman-Brown and Guttman split-half reliabilities are used to find Reliability Coefficients of the scale by dividing the scale objects into two halves in some random manner.

The correlation between forms is used to find the Spearman Brown reliability and the variances of sum scale and forms are used to find Guttman reliability. Cronbach's coefficient alpha ( $\alpha$ ) uses variances for the k individual objects 17 and the variance for the sum of all objects. If there is no true score but only error in the objects then the variance of the sum will be the same as the sum of variances of the individual objects. Therefore, coefficient alpha will be equal to zero. If all objects are perfectly reliable and measure the same thing (true score), then coefficient alpha is equal to 1. In all, the reliability of the three statistics namely, Spearman-Brown, Guttman and Cronbach's alpha shows that the reliability of scale constructed for the General Assessment is between 0.70 and 0.87, which makes the constructed scale fairly reliable. Therefore the scale reliability is good. Since it was found that the Reliability of the scale was good, factor analysis was performed on all the 500 valid responses.

## **5.6 PRE-TESTING OF QUESTIONNAIRE**

Pre-testing enables a researcher to check the validity, Reliability and accuracy of the questionnaire. It ensures that the data is collected by researcher without any bias. In our study, questionnaire was pre-tested on 50 respondents. After pre-testing, questionnaire was revised. Then revised questionnaire was used to attain the information about Human Resource Management practices in popular Information Technology Industries. The Interviewers were asked to identify additional characteristics not acknowledged in the results of phase I & II discussions. The Participating Organisational Representatives were given a new set of additional descriptions were provided the clearer picture of how Information Technology organisation categories the employees in Bangalore city.

**Table 5.16 Categories of Information Technology Industry employees**

<b>Sl.no</b>	<b>Categories of Information Technology Industry employees</b>
1	Opportunity for personal growth and development, Applying scientific concepts and theories to the solution of Problems.
2	Opportunity in my job position for participation in the determination of methods and procedures.
3	Tasks consist of carrying out technical work connected with the application of concepts and operational methods and find Sense of accountability for a person at my job position.
4	Possess competencies that are exclusive, feeling of meaningful achievement in my job position
5	Supportive to the organisation demands, culture, vision & mission for getting success in my job position
6	Involvement and Active participation in carry out the essential Tasks, Opportunity by which one gets to move ahead in life and become fairly well-known and well-off.
7	Provide skills and/or knowledge to ensure the success of the organisation, sequence plan for the security of my job position.
8	Opportunity for independent thought and action, Attractive attitude, friendly relationship, 24X7 supports Flexi schedules, Night shifts, and work from home.
9	Global exposure and practice while working from India, overall involvement in the work.
10	On site experience, Innovative talent, professional satisfaction and Feeling of self-esteem.
11	Fulfil the resources to a competitive edge to the organisation Amenities like housing, conveyance, medical benefits provided.
12	Contribution to the organisational memory – their departure would drain the organisation's knowledge and skill bank.
13	Possess skills, knowledge and abilities that are relatively rare or unique friendship in my job position.
14	Salary offered for my job position is essential to an organisation's productivity and wellbeing for effective working.
15	Prestige of my job position inside and outside of the organization act as key of motivators, mentors or role models to other staff.
16	Possess knowledge, skills and attributes that are closely aligned with the existing or possible future operational Direction of the business.
17	My role at the current job position display an identification with, and commitment, to the Organisation.

The Table 5.16 shows the review by the interviewer comments on Information Technology employees was characteristics by seventeen important factors specified.

**Table 5.17 Dimension wise distribution of objects of Human Resource influencing the retention of employees in IT sector**

<b>Dimensions</b>	<b>Item No's</b>	<b>Total objects</b>
Effective selection & recruitment process, job design	1-5	5
Provision of effective training & development practice	6-11	6
Innovative Fair and equitable performance evaluation practice	12-16	5
Career Development, and promotional practice and Employee Assistance Programs	17-22	6
Challenging Employment Structures and Opportunities	23-27	5
Equity of Compensation, social benefits and Security of tenure	28-32	5
Reward and recognition of employee value performance education	33-37	5
Grievances handling systems	38-42	5
Employee satisfaction and Motivation	43-47	5
Employee Retention methods and employee commitment	48-52	5

The objects are scored as 12345

The Table 5.17 explains the twenty five organisations that participated in the interview process were asked to explain in detail about ten identified Human Resource Factors for retaining the employees by using the scale from 1- strongly Disagree to 5 – Strongly Agree. Results of this

qualitative study suggest the Information Technology Industries that managed their Human Resource effectively may have higher retention of their employees. More specifically they have higher retention of their employees. The findings provide relatively strong supports for the existence of a positive relationship between HRM practice and its influence on the retention of IT employees.

The Phase II study verified the retention management practices of Information Technology industries, it also reaffirmed that HR retention factor and organisational factor identified in phase I were adopted by participating organisations as factors of retention of IT Industry sector.

Findings of the Phase II imply an association between retention and the level of importance placed on the identified HRM factors. The sample size is too small to verify this link and this relationship should be further examined with large sample size. However the qualitative approach provided a preliminary examination of the association between retention rates and the application of the identified HRM factors. The findings of this phase provided the researcher's sufficient data to develop an HRM retention model.

## **5.7 PHASE II CONCLUSION**

This chapter presented the result of the in depth interviews with 25 Human Resource Managers and professionals. The interviews explored the relationship between identified HRM factors and the retention rates of participating organisations. Furthermore, it examined the effective management of HRM factors by the participating organisation in Phase II results are valuable as it provides the comprehensive account of the current HRM practices of Information Technology Industries in Bangalore. This information would be utilized to create the employee survey for the third and Final Phase of Delphi method.



## **5.8 PHASE III INTRODUCTION**

Analysis is the key element of any research as it is the reliable way to test the hypotheses framed by the investigator. This Phase III Delphi study chapter deals with the analysis of the primary data collected through the administration of the questionnaire. The collected data has been codified, tabulated and analysis has been conducted using the different statistical tools such as Reliability Analysis, Factor Analysis, Multiple Regression analysis, and Testing of the Hypotheses focusing on Analysis of Variance (One-way ANOVA), Chi-Square test, t-test, averages, percentages and bar diagrams.

## **5.9 PHASE III DELPHI METHOD**

The questionnaire has been divided into three parts,

PART A includes detailed information of personal and demographic data of employees, about age, sex, educational qualification, nature of job, marital status, background work experience, monthly income and nature of appointment of employees in Information Technology Sector.

PART B includes various factors of Human Resource in Information Technology like effective selection, and recruitment process, job design, provision of effective training and development practice, Innovative fair and equitable performance evaluation practice, career development, and promotional practices, employee assistance programs, challenging employment structures and opportunities, equity of compensation, social benefits and security of tenure, reward and recognition of employee value performance education , grievances handling system, employee satisfaction and motivation and employee retention methods and employee commitment .

It includes identifying and evaluating the factors for retention of employees based on primary data, the respondents were asked to rate the factors that would make them to sustain in the same organization. These factors were identified after exhaustive exploratory literature review and focused group interviews with the employees and were put on a 5 point Likert scale ranging from 1 as least Strongly Disagree to 5 as Strongly Agree. There were all total 500 objects in this part of the instrument Table 5.17 enlists all these factors that were translated into objects in the questionnaire and were used for factor analysis.

The five major analyses conducted in the study focusing on the employee's perspective are listed as:

- a. Reliability Analysis
- b. Factor analysis
- c. Analysis of personal and other factors
- d. Data Analysis based on Objectives
- e. Multiple Regression Analysis

The above five analysis are conducted and the results of the different statistical procedures are discussed below.

The table 5.17 in output is a correlation matrix showing how each of the 52 objects is associated with each other. Note that some of the correlations are high (e.g. + or - .60 or greater) and some are low (i.e. near zero). The high correlation indicates that two objects are associated and will probably be grouped by the factor analysis.

Next, several assumptions are tested. The determinant (located under the correlation matrix) should be more than .00001. Here it is 3.224E-

023. So this assumption is met. If the determinant is zero, than a factor analytic solution cannot be obtained, because this would require dividing by zero. This would mean that at least one of the objects can be understood as a linear combination of some sets of the other objects. The Kaiser –Meyer-Olkin (KMO) measure should be greater than .70 and is inadequate if less than .50. The KMO test shows whether enough objects are predicted by each factor. The Bartlett test should be significant (i.e., a significant value of less than .05). This means that the variables are correlated highly enough to provide a reasonable basis for Factor Analysis.

The Total Variance explained table shows how the variance is divided among the 52 possible factors. Note the 10 factors have Eigenvalues (a measure of explained variance) greater than 1.0, which is a common criterion for a factor to be useful. When the Eigenvalues is less than 1.0, this means that the factor explains that less information than a single item would have explained. The above research would not consider the information gained from such a factor to be sufficient to justify. Keeping that factor for this, we will use an orthogonal rotation (Varimax). This means that the final factors will be as uncorrelated as possible with each other. As a result, we can assume that the information explained by one factor is independent of the information in the other factors. We rotate the factors so that they are easier to interpret. Rotation makes it so that, as much as possible different objects are explained or predicted by different underlying factors, and each factor explains more than one item.

This is a condition called simple structure. Although this is the goal of rotation, in reality, this is not always achieved. One thing to look for in the Rotated matrix of factor loadings is the extent to which sample structure is achieved.

The Rotated Factor matrix table which contains these loadings is a Key for understanding the results of the analysis. Note that the computer has sorted the 52 math attitude questions (objects 01 to item 52) into three overlapping groups of objects. Each item which has a loading of .30 or higher than .30 means the absolute value, or value without considering the sign is greater than .30. Actually, each item has some loading from every factor, but there are blanks in the matrix where weights were less than .30. Within each factor (to the extent possible), the objects are in the sorted format. The highest factor weight or loading for the Cronbach alpha was calculated to measure the internal consistency reliability of the instrument. The Kaiser-Meyer-Olkin test was done to measure the homogeneity of variables and Bartlett's test of sphericity was done to test for the correlation among the variables used. Table 5.18 summarizes the cronbach and KMO test values of this part of the instrument.

**Table 5.18 Analysis of Reliability**

Reliability Statistics		
Cronbach's Alpha		No. of Objects
.517		17
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.539
Bartlett's Test of Sphericity	Approx. Chi-Square	24901.844
	df	1326
	Sig.	.000

One test is Bartlett's test of sphericity. This is used to test whether the correlation matrix is an identity matrix. i.e., all the diagonal terms in the matrix are 1 and the off-diagonal terms in the matrix are 0. In short, it is used to test whether the correlations between all the variables is 0. The Bartlett's test test value (24901.844) and the significance level ( $P < .01$ ) are given in Table 5.18. With the value of test statistics and the associated significance

level is so small, it appears that the correlation matrix is not an identity matrix, i.e., there exists correlations between the variables.

Another test is Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. This test is based on the correlations and partial correlations of the variables. If the test value, or KMO measure is closer to 1, then it is good to use Factor Analysis. If KMO is closer to 0, then the factor analysis is not a good idea for the variables and data. The value of test statistics is given above as 0.630 which means the Factor Analysis for the selected variables is found to be appropriate to the data.

## **5.10 ANALYSIS OF RELIABILITY**

### **Step 1**

The research study has been conducted for the sample of 500 respondents and reliability analysis (Scale – split) is done. Three measures of reliability are given. The scale consists of 17 objects, which measures the attitude of the respondents in a Likert type five point scale, 500 respondents were selected for Reliability Analysis. The table represents the .517 under “Cronbach’s Alpha”, this is the most common statistics used to describe the internal consistency reliability of a set of objects. The third column is the correlation between a particular item and the sum of the rest of the objects, the best item appears to be 11.9. Experience the correlation of  $r = .525$ . The item with the lowest item – total correlation is 11.2 technical works. Correlation is  $r = .476$ . If this number is close to zero, then you should consider removing the item from your scale because it is not measuring the same thing as the rest of the objects. At the top of this column, the number is  $r = .525$  to  $r = .476$ . Because a higher the Cronbach’s alpha indicates more reliability.

## Step 2

Next step is to determine the method of factor extraction, number of initial factors and the estimates of factors. Here Principal Components Analysis (PCA) is used to extract reliability factors. PCA is a method used to transform a set of correlated variables into a set of uncorrelated variables (here factors) so that the factors are unrelated and the variables selected for each factor are related. Next PCA is used to extract the number of factors required to represent the data.

The results from Principal Components Analysis are given below. In the correlation matrix, the variances of all variables are verified that equal to 1.0. Therefore, the total variance in that matrix is equal to the number of variables. In this study, there are 52 variables (objects) each with a variance of 1 then the total variability that can potentially be extracted is equal to 52 times.

Since the factors of retention were large in number and were inter-related, Factor Analysis was done to extract and club the factors responsible for attrition. Principal Component Analysis was the method of extraction. Varimax was the rotation method. The Kaiser criterion, only factors with Eigen values are greater than 1. Ten factors in the initial solution had Eigen values greater than 1. Together, they accounted for almost 80% of the variability in the original variables. The objects falling under each of these factors were then dealt with quite judiciously. Objects of the same nature were understandingly clubbed into factors. After much of thoughtful permutations and combinations, 4 factors were finally extracted. Table 5.19 shows the communality and Eigen values of the factors.

**Table 5.19 Eigen values of retention of employees of IT sector**

<b>Sl.no</b>	<b>Human Resource Factors in IT Industry employees</b>	
<b>I</b>	<b>Effective selection &amp; recruitment process, job design</b>	
1	Great importance on hiring the right person for the job	.827
2	Selection process ensures that competent people are recruited.	.819
3	More emphasis on hiring someone quickly than selecting the right person for the job.	.656
4	Effective interview and lengthy process to hire employee	.779
5	It takes more time to recruit new appropriate employee.	.780
<b>II</b>	<b>Provision of effective training &amp; development practice</b>	
1	Extensive training opportunities are provided for skill development of the individuals	.823
2	Job training which enables me for doing my job perfect and better	.699
3	Training program teaches new hires, opportunities to improve my skills what they need to perform their jobs	.714
4	Quality and number of job related training and development program	.741
5	More training functions emphasize managerial competencies to do job well as per priority.	.626
6	Some additional training program for investment, leadership, job evaluation and managerial skills.	.528
<b>III</b>	<b>Innovative Fair and equitable performance evaluation practice</b>	
1	Performance is measured on the basis of work, outcome, technique and excellence.	.817
2	Understand my performance in success of organisation	.522
3	Opportunity to express my views of the performance issue	.574
4	Opportunity to prove performance appraisal with the boss and discuss my goal and objective.	.711
5	Satisfied with the process of performance appraisal with the amount of Monetary and non Monetary recognition.	.720

**Table 5.19 (Continued)**

<b>Sl.no</b>	<b>Human Resource Factors in IT Industry employees</b>	
IV	Career Development, and promotional practice, Employee Assistance Programs	
1	Praiseworthy persons are rewarded with personal loyalty.	.644
2	Pay, benefit package, promotions are tied with performance	.547
3	There is a link between how well I perform my job are based on my career development and employee assistance.	.533
4	Development opportunities, skill development with the challenging job assignment provided.	.726
5	Promotional policies are transparent widely shared with employees.	.884
6	Helps to seek out career information and resources for career path	.827
V	Challenging Employment Structures and Opportunities	
1	Organisation really cares wellbeing, little concern, general satisfaction at work, goals and values of employees.	.890
2	Organisation is willing to help the best performers, pride in accomplishment at work, and fail to notice mistakes.	.836
3	Organisation works for the betterment , friendly, helps to solve problem, create environment to work peacefully	.633
4	Create opportunities for internal and external organisation of same worth.	.796
5	Feel proud to work with job satisfaction, self esteem. And with this leadership.	.788
VI	Equity of Compensation, social benefits and Security of tenure	
1	Organisation is a harmonious place to work, physical and mental working conditions are very pleasant.	.776
2	My work life balances with my family life, welfare of employees is its first priority.	.781
3	Organisation offers a lot of safety and security to life and family.	.767



**Table 5.19 (Continued)**

<b>Sl.no</b>	<b>Human Resource Factors in IT Industry employees</b>	
4	A spirit of cooperation and teamwork exists with secure job	.821
5	Mental stress and discomfort stemming from separation risks and uncertainty about new employment.	.808
<b>VII</b>	<b>Reward and recognition of employee value performance education.</b>	
1	Positive ambience to employees to expect a consistent performance.	.806
2	Employee expresses ideas and discusses issues on an open forum, do not crib among them.	.825
3	Strengthened organisation job scope, job challenge, occupational commitment, job involvement and job satisfaction	.722
4	Retention strategies revolve around creating a competitive compensation and benefits package.	.776
5	Identifying new career horizons within the industry.	.808
<b>VIII</b>	<b>Grievances handling systems</b>	
1	Freedom of expression is of almost importance at the workplace, and exit interview.	.827
2	Performers made to participate in the decision making process.	.806
3	Sexual harassments like stay back late, Leg pulling, back stablbing, lewd remarks avoided at the organisation.	.828
4	Manipulation of truth, Misunderstanding and conflicts will be avoided and taken care.	.836
5	Team managers Irritate discussions, Deadline assignment within the desired timeframe, Team members sitting at advancement desks and superiors interfere in each other's work.	.819
<b>IX</b>	<b>Employee satisfaction and Motivation</b>	
1	Monetary satisfaction is one of the major reasons why an employee sticks to an organisation.	.760

**Table 5.19 (Continued)**

<b>Sl.no</b>	<b>Human Resource Factors in IT Industry employees</b>	
2	Simple hierarchy and the functional areas of each team will be well defined and motivated.	.843
3	Encourage employees to celebrate major festivals, party, wedding anniversary etc.,	.734
4	Incentives, cash prizes, trophies, perks given to deserving employees to motivate.	.811
5	Discipline in workplace like timing, decorum of the office.	.783
X	Employee Retention methods and employee commitment	
1	Unrealistic expectations lead the employees looking for a change.	.779
2	Room for negotiation of pay scale, Provide rewarding opportunities, appointing right person in the right profile, employees made centre of attraction at every workplace.	.889
3	Organisation plans to avoid boredom and monotonous in the job profile.	.879
4	Organisation challenges for retaining valuable and talented employees rather than cowards, fun makers, blamers.	.807
5	Employee prioritizes cordial relationship with colleagues and expects stress free environment from nasty policies and backstabbing.	.856

**Table 5.20 Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.196	15.761	15.761	8.196	15.761	15.761	5.766	11.088	11.088
2	6.485	12.471	28.232	6.485	12.471	28.232	4.273	8.217	19.305
3	5.021	9.656	37.888	5.021	9.656	37.888	3.095	5.952	25.257
4	2.802	5.388	43.276	2.802	5.388	43.276	2.998	5.766	31.023
5	2.342	4.504	47.780	2.342	4.504	47.780	2.968	5.708	36.731
6	2.165	4.164	51.944	2.165	4.164	51.944	2.906	5.589	42.320
7	2.077	3.995	55.938	2.077	3.995	55.938	2.788	5.361	47.681
8	1.776	3.416	59.354	1.776	3.416	59.354	2.517	4.841	52.522
9	1.501	2.886	62.241	1.501	2.886	62.241	2.367	4.552	57.074
10	1.367	2.629	64.870	1.367	2.629	64.870	2.074	3.988	61.062
11	1.310	2.520	67.390	1.310	2.520	67.390	1.897	3.648	64.710
12	1.226	2.358	69.748	1.226	2.358	69.748	1.616	3.108	67.818
13	1.175	2.260	72.007	1.175	2.260	72.007	1.604	3.084	70.901
14	1.090	2.096	74.103	1.090	2.096	74.103	1.423	2.736	73.637
15	1.055	2.029	76.132	1.055	2.029	76.132	1.297	2.495	76.132
16	.929	1.787	77.919						
17	.885	1.702	79.620						

**Table 5.20 (Continued)**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
18	.822	1.581	81.201						
19	.776	1.492	82.694						
20	.760	1.461	84.155						
21	.680	1.308	85.462						
22	.641	1.232	86.694						
23	.605	1.163	87.857						
24	.549	1.055	88.912						
25	.504	.970	89.882						
26	.464	.892	90.774						
27	.460	.885	91.659						
28	.424	.816	92.475						
29	.373	.717	93.193						
30	.351	.676	93.868						
31	.330	.635	94.503						
32	.299	.575	95.078						
33	.268	.516	95.594						
34	.246	.472	96.066						
35	.233	.449	96.515						

**Table 5.20 (Continued)**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
36	.225	.432	96.947						
37	.195	.375	97.322						
38	.177	.339	97.661						
39	.170	.328	97.989						
40	.141	.272	98.260						
41	.130	.250	98.511						
42	.129	.249	98.760						
43	.114	.219	98.979						
44	.106	.203	99.182						
45	.095	.182	99.364						
46	.073	.140	99.503						
47	.069	.132	99.636						
48	.060	.115	99.751						
49	.051	.099	99.849						
50	.037	.070	99.920						
51	.026	.051	99.971						
52	.015	.029	100.000						

Extraction Method: Principal Component Analysis.

Spss:21softwaretable

In the second column (Initial Eigen values) the column titled 'Variance, we find the variance on the new factors that were successively extracted. In the third column, these values are expressed as a percent of the total variance. As we can see, factor 1 account for about 15.761 percent of the total variance, factor 2 about 12.471 percent, and so on.

As expected, the sum of the Eigen values is equal to the number of variables. The third column contains the cumulative variance extracted. The variances extracted by the factors are called the Eigen values. From the measure of how much variance each successive factor extracts we can decide about the number of factors to retain. Retain only factors with Eigen values greater than 1. In essence, this is like saying that, unless a factor extracts at least as much as the equivalent of one original variable, we drop it. This criterion is probably the one most widely used and is followed in this study also. In this study, using the above criterion, 15 factors (Principal Components) have been retained.

The above Table 5.21 shown below gives the Component Matrix or Factor Matrix where Principal Components Analysis extracted 15 factors. These are all coefficients used to express a standardized variable in terms of the factors. These coefficients are called factor loadings, since they indicate how much weight is assigned to each factor. Factors with large coefficients (in absolute value) for a variable are closely related to that variable. For example, Factor 1 is the factor with largest loading 15.761 for the variable, Statement 8.1. These are all the correlations between the factors and the variables, thus the factor matrix is obtained. These are the initially obtained estimates of factors.

**Table 5.21 Component Matrix**

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8.1 Grievance handling system	.830	-.094	.127	.016	-.031	-.029	-.143	.074	-.121	.059	.006	-.077	-.209	-.134	.004
7.5 Reward and recognition	.738	.147	.178	-.071	.154	-.084	-.186	-.012	-.018	.190	-.259	.049	.118	.141	.024
8.2 Grievance handling system	.686	-.379	.270	.007	.278	-.106	-.056	.004	.130	.076	.016	-.029	-.022	.000	-.046
6.1 Social benefit and Tenure	.678	.235	-.307	.161	-.079	-.030	.187	-.213	-.037	-.091	.007	.106	.027	-.084	.157
6.2 Social benefit and Tenure	-.640	-.043	.309	.051	.192	-.049	.338	.063	.126	.215	.197	-.008	-.014	-.100	.058
9.2 satisfaction and Motivation	.627	-.378	-.372	-.183	-.224	-.064	-.010	.086	.125	.069	-.079	-.122	-.071	.111	.119
9.3 satisfaction and Motivation	.580	.275	.134	.283	.128	-.127	-.276	-.043	.104	.085	-.214	.048	-.047	-.007	.212
7.4 Reward and recognition	.579	.039	-.006	-.076	.155	-.291	.035	-.142	-.315	.306	-.057	.005	.284	-.100	-.132
8.5 Grievance handling system	.562	.176	-.284	.413	-.200	.064	.036	.210	-.022	-.274	.039	.212	-.017	.006	-.094
6.3 Social benefit and Tenure	.551	.170	-.096	.229	-.473	.062	.329	.113	.003	.052	.008	-.075	-.015	-.116	-.050
7.3 Reward and recognition	.545	.268	-.015	.071	.060	-.318	.309	-.057	-.176	-.144	.222	-.136	.067	.111	-.092
10.3 Retention methods	.540	.429	-.488	-.122	-.030	.233	.073	-.150	.198	-.010	-.070	-.007	.108	-.022	-.108
8.4 Grievance handling system	.523	.005	-.426	.020	.139	.260	.301	-.097	.315	-.143	-.046	.004	.146	-.060	-.214
4.2 career development & practice	.523	-.208	.231	-.154	-.049	-.122	.061	.010	.218	-.023	.204	-.008	-.074	.056	.184
3.2 performance evaluation	.518	-.337	.100	-.044	.220	-.055	.025	-.015	.185	.068	.063	-.084	-.137	.084	-.007
4.3 career development & practice	.508	.225	.149	-.028	.208	.161	-.201	.072	-.034	-.148	.050	.022	.056	-.237	.028
2.6 Training and development	.453	.191	.179	-.101	.306	.172	-.109	.030	-.081	.023	-.168	.067	.048	.257	.015
5.1 Employment structure & opportunities	-.235	.861	.216	-.102	-.109	.022	.076	-.022	-.100	-.032	-.021	-.029	-.021	-.064	-.028
4.5 career development & practice	-.033	.810	.328	-.273	-.063	.080	-.051	-.067	.033	-.050	-.076	-.093	.070	-.059	.034

**Table 5.21 (Continued)**

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
9.5 satisfaction and Motivation	.034	.698	-.218	-.037	-.373	.058	-.182	-.134	-.046	.044	-.096	.033	.038	.128	.140
4.4 career development & practice	-.144	.663	.049	-.164	.151	.201	.052	-.135	-.017	.041	.359	.067	-.100	.015	-.078
10.1 Retention methods	-.188	.609	.345	.224	.190	.090	.238	.024	-.011	-.028	-.132	-.011	-.208	.177	.097
9.4 satisfaction and Motivation	.132	.586	-.299	.080	-.048	.018	-.041	-.265	-.019	.230	.355	.031	-.019	.299	.105
3.4 performance evaluation	.408	-.573	.177	-.292	.106	.040	.036	-.076	.209	.047	.165	-.016	.014	.067	-.047
10.2 Retention methods	.200	.558	-.397	-.339	-.079	.090	.337	.142	-.122	.238	-.107	.020	-.165	.059	-.050
4.6 career development & practice	.064	.484	.436	.141	.342	.311	-.170	.043	-.220	.153	-.165	.141	-.098	.070	-.002
3.3 performance evaluation	.316	-.396	-.021	.039	.116	.263	.106	.020	-.065	.091	.319	.242	.026	.110	.187
6.5 Social benefit and Tenure	-.036	.125	.696	.193	.197	.105	.399	-.120	.132	-.134	-.008	.018	.010	-.097	-.041
6.4 Social benefit and Tenure	-.128	-.143	.597	-.022	.011	.184	.480	.034	.051	-.124	-.288	-.033	-.224	.009	.094
3.1 performance evaluation	.475	-.200	.596	-.138	-.033	-.114	-.242	.096	-.074	-.075	.090	-.044	-.196	-.188	-.013
2.3 Training and development	.033	.381	.504	-.114	-.424	-.099	.001	.151	-.043	-.004	.163	.081	-.164	-.159	-.035
10.5 Retention methods	.019	.261	.460	.174	-.130	-.294	.119	.099	.334	.323	.015	.300	.244	.130	-.189
1.5 Job Design & recruitment	.308	-.395	.424	.236	-.210	.298	.083	-.100	-.235	.148	-.210	.016	.032	.131	.067
5.2 Employment structure & opportunities	.213	.416	.265	-.547	.029	.101	-.143	-.251	.231	-.092	-.037	-.226	.074	-.184	-.032
7.1 Reward and recognition	.183	.207	.383	.533	.025	-.298	.013	-.329	.104	-.012	.073	-.266	-.109	.043	.020
4.1 career development & practice	.311	.093	.259	-.527	-.169	-.212	-.001	.132	.165	-.112	.042	-.147	.025	.055	.187
7.2 Reward and recognition	.393	.028	-.040	-.443	-.171	.083	.084	.341	-.189	.349	.069	.113	-.347	-.094	.085
10.4 Retention methods	.424	.289	-.361	.439	-.007	.242	-.193	.070	.237	.059	.184	.000	-.156	-.032	-.019



**Table 5.21 (Continued)**

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.3 Job Design & recruitment	-.339	-.115	-.141	.408	-.041	-.223	.089	.017	.060	.404	.139	.042	-.095	-.224	.185
5.4 Employment structure & opportunities	-.284	-.104	.338	-.388	-.070	.300	-.081	.104	.259	.227	.126	.308	.241	.100	-.173
1.4 Job Design & recruitment	.177	-.077	.385	.106	-.645	.269	.084	-.068	-.038	-.015	.156	-.113	.149	-.140	-.053
5.3 Employment structure & opportunities	.077	.299	.095	.221	.363	.287	-.278	.157	.250	.077	.193	-.019	-.163	-.178	.015
2.1 Training and development	.301	-.470	.359	.154	-.265	.472	.040	-.177	-.094	.081	.032	-.004	.126	.013	.028
9.1 satisfaction and Motivation	.339	.326	.411	.114	-.156	-.468	.144	.039	.202	.093	-.084	.061	.151	.091	-.014
2.2 Training and development	.143	-.274	.274	.122	-.094	.355	-.072	-.313	-.217	.167	.065	-.257	-.063	.112	-.339
8.3 Grievance handling system	.297	-.044	-.325	-.137	.306	.117	.675	.105	.060	.053	-.110	-.057	-.129	.006	-.036
1.1 Job Design & recruitment	-.161	.011	.080	.118	-.016	.195	.043	.509	-.040	.103	.004	-.429	.336	.229	.347
3.5 performance evaluation	.301	-.002	.195	.182	-.064	-.052	-.050	.494	-.094	-.322	-.061	.390	.042	.027	-.184
5.5 Employment structure & opportunities	.201	.341	.018	.172	.224	.222	.038	.452	-.025	-.038	.176	-.250	.392	-.186	.112
2.4 Training and development	.179	.064	.212	-.139	.188	-.201	.079	.088	-.389	-.277	.431	-.050	-.009	.346	-.119
2.5 Training and development	.163	-.005	-.060	-.077	.291	-.166	.162	-.089	-.403	.192	.009	.055	.243	-.426	-.019
1.2 Job Design & recruitment	.133	-.094	.119	-.149	.027	.112	.150	-.413	-.073	-.236	.091	.410	.144	-.076	.534

Extraction Method: Principal Component Analysis

a. 15 Components extracted

**Table 5.22 Rotated Component Matrix**

	Rescaled													
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
8.2	.765													
5.1	-.750													
3.4	.737													
3.2	.644													
9.5	-.643													
9.2	.573													
4.2	.550													
3.1	.517													
8.1	.503													
4.4														
3.3														
9.4														
8.4		.804												
10.3		.773												
8.3		.656												
6.1		.656												
6.3		.583												
8.5		.538												

**Table 5.22 (Continued)**

	Rescaled													
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
5.2			.833											
4.5	-.539		.702											
4.1			.604											
1.4				.829										
2.1				.796										
1.5				.692										
2.2														
6.4					.836									
6.5					.728									
10.1	-.508				.511									
10.5						.919								
9.1						.789								
2.3														
5.4							-.801							
7.1							.564							
2.6								.742						
7.5								.617						

**Table 5.22 (Continued)**

	Rescaled													
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
4.6								.553						
9.3								.516						
5.3									.841					
10.4									.610					
4.3														
7.2										.906				
10.2		.538								.588				
1.3											-.688			
3.5											.570			
6.2											-.553			
2.4												.793		
7.3														
1.2													.503	
1.1														
5.5														
2.5														.902
7.4														.552
Extraction Method: Principal Component Analysis.														
Rotation Method: Varimax with Kaiser Normalization.														
a. Rotation converged in 23 iterations.														

**Table 5.22 (Continued)**

	Rescaled													
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
5.2			.833											
4.5	-.539		.702											
4.1			.604											
1.4				.829										
2.1				.796										
1.5				.692										
2.2														
6.4					.836									
6.5					.728									
10.1	-.508				.511									
10.5						.919								
9.1						.789								
2.3														
5.4							-.801							
7.1							.564							
2.6								.742						
7.5								.617						

**Table 5.22 (Continued)**

	Rescaled													
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
4.6								.553						
9.3								.516						
5.3									.841					
10.4									.610					
4.3														
7.2										.906				
10.2		.538								.588				
1.3											-.688			
3.5											.570			
6.2											-.553			
2.4												.793		
7.3														
1.2													.503	
1.1														
5.5														
2.5														.902
7.4														.552

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 23 iterations.

Source:SPSS21

**Step 3**

Although the factor matrix above table obtained in the extraction phase indicates the relationship between the factors and the individual variables, it is usually, difficult to identify meaningful factors based on this matrix. Since the idea of factor analysis is to identify the factors that meaningfully summarize the sets of closely related variables, the Rotation phase of the factor analysis attempts to transfer initial matrix into one that is easier to interpret. It is called the rotation of the factor matrix (Linstone H).

The Rotated Factor Matrix (Table titled Rotated Component Matrix) using Oblique rotation is given in above table 5.22 where each factor identifies itself with a few set of variables. The variables which identify with each of the factors were sorted in the decreasing order and are highlighted against each column and row.

**Step 4**

Normally, from the factor results arrived above, factor score coefficients can be calculated for all variables (since each factor is a linear combination of all variables) which are then used to calculate the factor scores for each individual. Since Principal Component Analysis was used in extraction of initial factors, all methods will result in estimating same factor score Coefficients. However, original values of the variables were retained for further analysis and factor scores were thus obtained by adding the values (ratings given by the respondents) of the respective variables for that particular factor, for each respondent.

**Result**

Thus the 52 variables considered in the primary data were reduced to 10 factors (Table 5.2) model and each factor was given a name which associated with the corresponding variables. The factor names and descriptions of the factors are given in the following Table 5.22

### 5.22 Rotated Component Matrix

Item	No.	Statement Factor Name
8.2	Performers made to participate in the decision making process	Performance appraisal , evaluation practice and exit interview
5.1	Organization really cares wellbeing, little concern	
3.4	Opportunity to performance appraisal with boss and discuss my goals	
3.2	Understand my performance role in success of organization	
9.5	Discipline in workplace like timing, decorum of the office	
9.2	Simple hierarchy and the functional areas of each team will be well defined and motivated.	
4.2	Pay, benefit package ,promotion are tied with performance	
3.1	Performance is measured on the basis of work outcome technique and excellence	
8.1	Freedom of expression is of utmost importance at the workplace and exit interview	
8.4	Manipulation of truth, Misunderstanding and conflicts will be avoided and taken care	
10.3	Organization plan to avoid boredom and monotonous in the job profile	
8.3	Sexual harassments like stay back late, leg pulling, back stablign ,lewd remarks avoided at the organization	
6.1	Organization is a harmonious place to work, physical and mental working conditions are very pleasant.	
6.3	Organizations offers a lot of safety and security to life and family	
8.5	Team managers irritate discussions, deadline assignment with in the desired time frame, team members sitting at advancement desks and superiors interfere in each other's work	
5.2	Organization willing to help best performers, pride in accomplishment at work, fail to notice mistakes	Performance s rewarded by promotional policies
4.5	Promotional policies are transparent widely shared with employees.	
4.1	Praiseworthy persons are rewarded with personal loyalty	
1.4	Effective interview and lengthy process to hire employee	



2.1	Extensive training opportunities are provided skill development for the individuals	Recruitment and training the individuals
1.5	It takes more time to recruit new appropriate employee.	
6.4	A spirit of cooperation and teamwork exists with secure job	Unrealistic discomfort from team work and job cooperation
6.5	Mental stress and discomfort stemming from separation risks and uncertainty about new employment	
10.1	Unrealistic expectations lead the employees looking for a change	
10.5	Employee prioritizes coordinational relationship with colleagues and expects free environment from nasty policies, backstabbing	prioritizes coordinational relationship and monetary satisfaction
9.1	Monetary satisfaction is one of the major reasons why an employee sticks to an organization	
5.4	Create opportunities for internal and external organization of same worth.	Opportunity to prove performance
7.1	Positive ambience to employees to expect a consistent performance	
2.6	Some additional training program for investment, leadership, job evaluation and managerial skills.	Career information to improve the path of goal
7.5	Identifying new career horizons within the industry	
4.6	Helps to seek out career information and resources for career path	
9.3	Encourage employees to celebrate major festivals, party	
5.3	Organization work for the betterment, friendly, helps to solve problem, create environment to work peacefully	Organization work for betterment
10.4	Organization challenge for retaining valuable and talented employees rather than cowards, fun makers	
7.2	Employee express ideas and discuss issues on an open forum, do not crib among themselves	Employees appointing right person in right profile.
10.2	Room for negotiation of pay scale, provide rewarding opportunities, appointing right person in right profile, employees made center of attraction at every workplace	
1.3	More emphasis on hiring someone quickly than selecting the right person for the job.	Performance appraisal with monetary and non
3.5	Satisfied with the process of performance appraisal with the amount of Monetary and non Monetary recognition.	

6.2	My work life balance with my family life, welfare of employees is its first priority	monetary
2.4	Quality and number of job related training and development program	Training and development program
1.2	Selection process ensures that competent people are recruited.	Effective selection process
2.5	It takes more time to recruit new appropriate employee	Retention strategies
7.4	Retention strategies revolve around creating a competitive compensation and benefits package.	

In highly skilled intensive and knowledge intensive industries like Information Technology Industry, Human Resource plays a vital role. This industry is highly competitive, dynamic and technical industry, whose growth and development depends upon its Human Resource much more strongly than other resources. This industry needs highly skilled, talented and well-learned Human Resource. The quality of products and services both depend upon the quality of Human Resource, which needs continuous and multiple-skill training. Thus, to attain such Human Resource, there must be emphasis on developing and nurturing a strategy-based on Human Resource development practices in the Information Technology organisations.

Human Resource development comprises of many components like selection procedures, training policy, performance and promotion policy, transfer policy, wages, compensation, social-security policy, worker's welfare policy, recreational policy, employee- employee/employer/management relations, trade union, health policy, etc. All these components help to develop highly skilled, efficient, effective and dynamic Human Resource in these organisations. For the success of Information Technology organisations, it is necessary that right person must be placed at right job and his potential must be enhanced through multiple and continuous training. Thus, this sector

must give more emphasis on the development of Human Resources by prevailing upon different aspects of Human Resource development practices in their organisations.

All the components of Human Resource development practices must be integrated with the Human Resource Policy of the organisation. The success of IT Industries sector is basically due to skilled, efficient and energetic Human Resource in Indian Information Technology sector. The present study attempts to explore the practices of Human Resource development in various Information Technology organisations in Bangalore. Through detail questionnaire the implementation of Human Resource development practices in Information Technology organisations, have been estimated. An effort has also been made to measure the Human Resource development climate in Information Technology organisations.

The sample-size of five hundred employees has been taken in this study. The questionnaire has been divided into two parts.

Part A includes detailed information of personal and demographic data of the employees, about age, sex, educational qualification, nature of job, marital status, background, work-experience, monthly income and nature of appointment of employees in Information Technology industry.

Part B includes various aspects of Human Resource development – selection, training, performance and promotion, transfer, wages and compensation, relation among employees, health and welfare policies, which are practiced in Information Technology Industry.

In Information Technology Sector Industry there is majority of male employees as compared to female employees. There is a wide gender gap between male and female employees. The Table 5.23 reveals that near about

78 percent male employees are employed in Information Technology Industry, where as 22 percent female employees are employed much lower as compared to male employees. Female employees are less participants.

**Table 5.23 Sex of employees**

<b>Sex</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
No. of employees	391	109	500
percentage	78	22	100

Source: Primary survey

Ho: No. of employees of different sex groups are equal

H1: No. of employees of different sex groups are not equal

Chi –square ( $\chi^2$  test) (Calculated value) = 159.048

( $\chi^2$ ) (Tabulated value) = 6.63490

d.f = 1

$\chi^2$  is significant at 1% level

Table 5.23 reveals that participation of female employees is lower as compared to male employees in this industry in Bangalore. Due to economic factors as well as other factors like cultural, social and ideological factors, they also play a role in the determination of participation of female employees in Information Technology Industry. Long working hours, 24X7 working timings, night shifts made low participation of female employees.

The Survey shows that ( $\chi^2$  test = 159.048) > ( $\chi^2$  = 6.63490) the H1 is accepted and chi –square is significant at 1% level. It means that number of employees of different sex groups is not equal. There is low involvement and participation of female employees as compared to male employees in Information Technology Industries in India.

India is rich in knowledge management of youth and majority of Indians belong to this group. Table 5.24 explains India is nearly about 59 percent people in the age group of 20 – 30 years. They are also known as working population. Higher proportion of working young population is a good indicator for the growth of Indian economy. Young population has good and excellent efficiency to adjust with new environment and also dynamic by nature by adjusting with new organisation often.

**Table 5.24 Age of Employees**

<b>Age of employees</b>	<b>Below 20 yrs</b>	<b>20yrs – 30yrs</b>	<b>30 yrs - 40yrs</b>	<b>Above 40 yrs</b>	<b>Total</b>
No. of employees	10	359	130	1	500
Percentage	2	71	26	1	100

Source: primary survey

Ho: No. of employees in various age groups are equal

H1: No. of employees in various age groups are not equal

Chi square ( $\chi^2$ Test) (calculated value) = 667.056

$\chi^2$ Test (Tabulated value) = 11.3449

d.f = 3

$\chi^2$  is significant at 1% level.

The Table 5.24 depicts that in Indian Information Technology Industry nearly about 71 percent employees are in the age group of 20 – 30 years, whereas 26 percent employees are in the age group of 30 -40 years. It means that in Indian Information Technology Industry majority of employees are that is 97 percent are in the age group of 20 - 40 years. In our survey ( $\chi^2$  Test = 667.056) > ( $\chi^2 = 11.3449$ ) means calculated value is greater than

tabulated value, so null hypothesis is rejected and it is significant at 1 % level. It shows that the number of employees in various age groups is not equal.

Marriage is an important custom of Indian society. In Traditional Indian society people used to get married at early age. But now the trend has been changed. At present people don't believe in early marriage. They are career conscious now. With the spread of education particularly among females, the trend of early marriage is declining and the same is reflected in male employees.

**Table 5.25 Marital status of employees**

<b>Marital status</b>	<b>Married</b>	<b>Unmarried</b>	<b>Total</b>
No of employees	199	301	500
Percentage	40	60	100

Source: Primary survey

Ho: No. of employees of having different marital status is equal

H1: No. of employees having different marital status is not equal

Chi – square ( $\chi^2$  Test) (Calculated value) = 20.808

$\chi^2$  (tabulated value) = 6.63490

d.f = 1

$\chi^2$  is significant at 1% level

The Table 5.25 shows that just 40 percent of employees are married and 60 percent employees are unmarried. It means that majority of employees are unmarried. In marital status, calculated  $\chi^2$  Test = 20.808 > Tabulated  $\chi^2$  is = 6.63490, so it is significant at 1% level. From this H0 is rejected and H1 is accepted. It means that the number of employees having different marital status is not equal because of late marriages.

By considering educational qualification of Employees Education, training and skill acquisition is one of the key features of employees in the Information Technology Industry. The Information Technology Industry being a knowledge-based industry, entry to the labour market in this sector is restricted to the employable people with at least minimum level of education in general or technical education.

**Table 5.26 General Educational Qualification**

<b>Educational qualification</b>	<b>Below UG</b>	<b>U.G</b>	<b>P.G</b>	<b>Total</b>
No. of employees	2	49	44	95
Percentage	2	52	46	100

Source: Primary Survey

Ho: No of employees having different general education are equal

H1: No of employees having different general education are not equal

Chi – square ( $\chi^2$  Test) (Calculated value) = 41.66

$\chi^2$  Tabulated value = 9.21034

d.f = 2

$\chi^2$  is significant at 1% level

In any type of industry there are non - technical employees needed. The nature of job can be as follows Managerial like administrators, allied services like accounts, maintenances, secretaries, Personal assistance and Clerks. Here majority of employees are engaged in Technical Department that is 75 percent.

**Table 5.27 Technical educational Qualification**

<b>Educational Qualification (tech)</b>	<b>BCA</b>	<b>MCA</b>	<b>B – Tech</b>	<b>M-Tech</b>	<b>MBA</b>	<b>Others</b>	<b>Total</b>
No. of employees	100	147	89	38	29	2	405
percentage	25	36	22	9	7	1	100

Source: primary Survey

Ho: No. of employees having different technical education are equal

H1: No. of employees having different technical education are not equal

Chi –square ( $\chi^2$  test) (calculated value  $\chi^2$ ) = 212.99

$\chi^2$  (tabulated value) = 15.0863

d.f = 5

$\chi^2$  is significant at 1% level

In this survey, Table 5.26, 5.27 employees have been categorized into two categories of education that is general and technical education. In Information Technology Industry most of the employees are technically qualified people. Out of five hundred sample-sizes of employees, ninety five employees are with general qualification, whereas 405 employees are with technical qualification.

General education includes arts, commerce and science faculty with B.A., M.A., B.Com, M.Com, B.Sc., M.Sc., etc., whereas technical education includes B.C.A, M.C.A, B-tech, M-tech, M.B.A, PGDCA, M.Sc. (IT) etc., In general education 52 percent, 46 percent and 2 percent employees are graduate, post- graduate and under-graduate, whereas in technical education 36 percent employees are MCA, 25 percent are BCA, 22 percent are B-Tech, 9 percent are M-tech, 7 percent are MBA and point forty nine percent are of



other qualification like Diploma in Computer Science or P.G. Diploma in Computer Applications etc. It proves that in Information Technology industry most of the employees are technically skilled employees.

General education depicts, ( $\chi^2_{\text{Test}} = 41.66$ ) > ( $\chi^2_{\alpha} = 9.21034$ ), so null hypothesis is rejected and alternative hypothesis is accepted. It means employees with different general education are not equal. This test is significant at 1% level. Again in technical education ( $\chi^2_{\text{Test}} = 212.99$ ) > ( $\chi^2_{\alpha} = 15.0863$ ), which means number of employees having different technical education are not equal. Alternative hypothesis is accepted and it is significant at 1% level.

Most of the Information Technology Industries are having skilled and knowledgeable employees.

**Table 5.28 Employment Status of employees**

<b>Employment Status</b>	<b>Permanent</b>	<b>Temporary</b>	<b>Total</b>
No. of employees	74	426	500
Percentage	15	85	100

Source: primary Survey

Ho: No of employees of Employment status are equal

H1: No. Of employees of employment status are not equal

Chi – square ( $\chi^2$  Test) (Calculated value) = 247.808

$\chi^2$  (tabulated value) = 6.63490

d.f = 1

$\chi^2$  is significant at 1% level

The Table 5.28 shows that most of the employees engaged in Information Technology Industry are having Permanent status. A majority of employees that is 85 percent are of employees are in Permanent status and on the other hand just 15 percent employees are in temporary status. The Calculated value of chi – square is 247.808 > tabulated value of 6.63490. It is significant at 1% level. Where H1 is accepted which means that employment status of employees is Permanent and Temporary are not equal. It shows that majority of employees are in temporary status.

In any type of organisations, there is need for various employees having different years of experience. Length of service can be classified as follows – 0-2 yrs, 2yrs- 4yrs, 4yrs - 6 yrs, 6yrs - 8 yrs, above 8 Yrs. In our study, we observed that maximum employees are below 2 yrs of service.

**Table 5.29 Length of service in industry**

<b>Service in industry</b>	<b>0 -2 yrs</b>	<b>2yrs - 4yrs</b>	<b>4yrs - 6yrs</b>	<b>6yrs – 8yrs</b>	<b>Above 8 yrs</b>	<b>Total</b>
No. of Employees	374	95	25	5	0	500
Percentage	75	19	5	1	0	100

Source: primary Survey

H<sub>0</sub>: No. of employees in length of service

H<sub>1</sub>: No. of employees in length of service are not equal

Chi-square ( $\chi^2$ Test ) (Calculated value) = 697.968

( $\chi^2\alpha$ ) (Tabulated value) = 11.3449

d.f. = 4

$\chi^2$  is significant at 1% level

Table 5.29 reveals that majority of employees have their service below 2 yrs of service that is near about 75 percent, whereas 19 percent are in 2 yrs to 4yrs of service. There are none of the employees are in the service of above 8 yrs. Information Technology Industry is a technical industry and hence needs more experience employees as compared to others. Here, ( $\chi^2$ Test = 697.968) > ( $\chi^2\alpha = 11.3449$ ), so  $H_1$  is accepted which means number of employees in different length of service are not equal. It is significant at 1% level.

In Information Technology Industry, a majority of young employees are employed. Many employees have just completed their graduation and post graduation at early age and also got job early. In IT industry most of employees have just experienced less than 1 year.

**Table 5.30 Tenure in the current organization**

Tenure in the current organization	Less than 1 year	1 yr – 2 yrs	2yrs – 3 yrs	3yrs – 4yrs	4yrs – 5yrs	Above 5 yrs	Total
No. of Employees	300	150	35	5	5	5	500
Percentage	60	30	7	1	1	1	100

Source: primary

$H_0$ : No. of employees having different experienced (tenure) are equal

$H_1$ : No. of employees having different experienced (tenure) are not equal

Chi-square ( $\chi^2$ Test) (Calculated value) = 694.16

( $\chi^2\alpha$ ) (Tabulated value) = 13.2767

d. f. = 4

$\chi^2$  is significant at 1% level

Table 5.30 shows that there is less number of employees having more experience than thirty years. On the other hand, a large number of employees that is 60 percent are having experience less than 1 year, 30 percent of employees are having experience between 1 to 2 years and 7 percent of employees are having experience of years to three years. Out of five hundred employees', five employees have experience between three to four years, four to five years, and above 5 years.

Our survey reveals that nearly about 97 percent employees are having experience between one to three years. There may be senior employees are having experience more than 5 years, but they did not participate in this survey. Some of them directly refused to take participation in our survey. Data reveals that, ( $\chi^2_{\text{Test}} = 694.16$ )  $>$  ( $\chi^2_{\alpha} = 13.2767$ ) so, alternative hypothesis is accepted, whereas null hypothesis is rejected. It shows that number of employees in various work experience categories is different from each other. This test is significant at 1% level.

There is no fixed timing regarding the working hours in IT industry Flexible timing is made to the employees. Information Technology industry provides one of the highest salary levels in comparison to any other sector for the same level of skills. The salary level in this sector has ushered in a new class of young urban upwardly mobile group of Information Technology employees. The high rates of salary in the industry are attracting workers from other sectors.

**Table 5. 31 Hours of work per week**

<b>Hours of work per week</b>	<b>Less than 20 hrs</b>	<b>20hrs - 30 hrs</b>	<b>30 hrs – 40 hrs</b>	<b>40 hrs – 50 hrs</b>	<b>50 hrs and above</b>	<b>Total</b>
No. of Employees	50	40	60	75	275	500
Percentage	10	8	12	15	55	100

Source: primary Survey

H<sub>0</sub>: No. of employees having different monthly income are equal

H<sub>1</sub>: No. of employees having different monthly income are not equal

Chi-square ( $\chi^2$ Test) (Calculated value) = 350.78

( $\chi^2\alpha$ ) (Tabulated value) = 13.2767

d.f. = 4

$\chi^2$  is significant at 1% level

Table 5.31 depicts, it means that 55 percent of employees work more than 50 hrs. Around 15 percent of employees are working 40 to 50 hrs, per week. Approximately 12 percent and 8 per cent of employees are working between the ranges of 20 to 40 hrs, per week. Nearly about 10 percent employees are working less than 20hrs, per week. It shows that ( $\chi^2$ Test = 350.78) > ( $\chi^2\alpha$  = 13.2767), so null hypothesis is rejected and alternative hypothesis is accepted. All employees in Information Technology organisations, having different monthly income and chi-square are significant at 1% level.

Salary in the software industry is one of the most flexible feature and at the same time one of the most closely guarded secret in the industry. There are no fixed norms regarding the wage payment made to the employees. Information Technology Industry provides one of the highest salary levels in comparison to any other sector for the same level of skills. The salary level in this sector has ushered in a new class of young urban upwardly mobile group of Information Technology employees. The high rates of salary in the industry are attracting workers from other sectors.

**Table 5.32 Monthly Income of Employees**

<b>Monthly Income of Employees (per month in Rs.)</b>	<b>Rs. 15,000- Rs. 20,000</b>	<b>Rs. 20,000- Rs. 25,000</b>	<b>Rs. 25,000- Rs. 30,000</b>	<b>Rs. 30,000- Rs. 45,000</b>	<b>above Rs. 45,000</b>	<b>Total</b>
No. of Employees	10	20	90	335	45	500
Percentage	2	4	18	67	9	100

Source: Primary Survey

$H_0$ : No. of employees having different monthly income are equal

$H_1$ : No. of employees having different monthly income are not equal

Chi-square ( $\chi^2$ Test) (Calculated value) = 486.68

( $\chi^2\alpha$ ) (Tabulated value) = 11.3449

d.f. = 4

$\chi^2$  is significant at 1% level

Table 5.32 depicts that the large number of employees did not disclose their monthly salaries. It means 67 percent of employees are getting their monthly salaries as from Rs. 30-40 thousand per month. The 18 percent of employees are getting salary between the ranges of Rs. 25-30 thousand per month. Approximately 4 percent and 2 per cent of employees are getting their monthly salaries between the range of Rs. 15-25 thousand and 9 percent of the employees are getting more than Rs. 45 thousand per month. It shows that ( $\chi^2$ Test = 350.78) > ( $\chi^2\alpha = 13.2767$ ), so null hypothesis is rejected and alternative hypothesis is accepted. All employees in Information Technology organisations, having different monthly income and chi-square are significant at 1% level.

Employees in the IT sector are different hierarchies/levels. Anyone completed their graduation/post graduation and have knowledge on Software Programming. They are eligible for this position/level. Once the employees join as entry level/Fresher in IT industry, they are comfort to expertise in one technology like embedded systems, Java, .Net, Data base etc. At the same time this person has a basic knowledge in other related technologies too.

**Table 5.33 the job of Employees**

<b>The job of employees</b>	<b>Professional</b>	<b>Technician and Associated professional</b>	<b>Total</b>
No. of Employees	235	265	500
Percentage	47	53	100

Source: primary Survey

Ho: No of employees having different jobs are equal

H1: No. Of employees of having different jobs are not equal

Chi – square ( $\chi^2$  Test) (Calculated value) = 354.808

$\chi^2$  (tabulated value) = 12.63490

d.f = 1

$\chi^2$  is significant at 1% level

Table 5.33 shows that Professional (Applying scientific concepts and theories to the solution of problems, including engineers, system analysis etc.,) Technician and Associated professional (Application of concepts and operational methods including computer programmer, product designers, and technicians. Approximately 47 percent and 53 per cent of employees are classified by the same. It shows that ( $\chi^2_{\text{Test}} = 354.808$ ) > ( $\chi^2_{\alpha} = 12.63490$ ), so null hypothesis is rejected and alternative hypothesis is accepted. All

employees in Information Technology organisations are differentiated by Professional and Technician and Associated Professional and so chi-square are significant at 1% level.

## 5.11 INTRODUCTION TO FACTOR ANALYSIS

The purpose of Factor Analysis is to discover simple patterns of relationships among the variables. The variables seeks to discover if the observed variables KMO and Bartlett's Test for IT employees can be explained largely or entirely in terms of much smaller number of variables called factors. The factors are shown in the table 5.22.

Table 5.34 shows the Factor analysis of Characteristic features of IT industry employees

**Table 5.34 KMO and Bartlett's Test for IT employees**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.664
Bartlett's Test of Sphericity	Approx. Chi-Square	1017.847
	df	136
	Sig.	.000

### Interpretation

The Table 5.34 explains that KMO and Bartlett's Test value is 0.664, the value which falls in to the range of being superior. So we should be confident that Factor Analysis is appropriate for these data. Bartlett's test shows that there is some relationship between variables. The value is highly significant ( $p < 0.001$ ), and therefore Factor Analysis is appropriate.



**Table 5.35 Total Variance (Extraction Sums and Rotation Sums) Explained for IT Industry employees**

<b>Total Variance Explained</b>						
<b>Component</b>	<b>Initial Eigenvalues</b>			<b>Extraction Sums of Squared Loadings</b>		
	<b>Total</b>	<b>% of Variance</b>	<b>Cumulative %</b>	<b>Total</b>	<b>% of Variance</b>	<b>Cumulative %</b>
1	2.757	16.218	16.218	2.757	16.218	16.218
2	1.825	10.737	26.955	1.825	10.737	26.955
3	1.383	8.136	35.091	1.383	8.136	35.091
4	1.315	7.735	42.827	1.315	7.735	42.827
5	1.088	6.398	49.224	1.088	6.398	49.224
6	1.021	6.004	55.228	1.021	6.004	55.228
7	.931	5.479	60.707			
8	.882	5.191	65.898			
9	.860	5.057	70.954			
10	.825	4.852	75.806			
11	.719	4.231	80.037			
12	.676	3.976	84.013			
13	.670	3.939	87.952			
14	.594	3.496	91.448			
15	.571	3.361	94.809			
16	.477	2.805	97.614			
17	.406	2.386	100.000			

Source:SPSS21

**Table 5.36 Rotation of Sums of Squared the factor structure**

<b>Total Variance Explained</b>			
<b>Component</b>	<b>Rotation Sums of Squared Loadings</b>		
	<b>Total</b>	<b>% of Variance</b>	<b>Cumulative %</b>
1	2.110	12.411	12.411
2	1.727	10.156	22.568
3	1.570	9.233	31.801
4	1.451	8.536	40.337
5	1.275	7.500	47.837
6	1.256	7.391	55.228
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			

Extraction Method: Principal Component Analysis.

### **Interpretation**

The Table 5.35, 5.36 shows that Eigenvalues associated with each factor represents variance explained by that particular linear component and displays the Eigenvalues in terms of percentage of variance (so, factor 1 explains 16.218 % of total variance). It should be clear that the first few factors explain the relatively large amounts of variance (especially factor 1) whereas subsequent factors explain only small amount of variance as per the data input.

Rotation has the effect of optimizing the factor structure and consequence of these data is that the relative importance of the six factors is equalized. Before rotation factor 1 accounted for considerably more variance than the remaining five, however after extraction it accounts for only 12.411% of variance. Rotation has the effect of optimizing the factor structure and consequence for these data is that the relative importance of six factors are equalized.

**Table 5.37 Shows that Rotated Component Matrix for Characteristic features of IT Industry employees**

<b>Component Matrix</b>						
	<b>Component</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
11.13 Possess skill , knowledge and attributes	.594					
11.15 Prestige of job inside and outside of organisation	-.584					
11.6 Involvement and Activeness in Job	.532					
11.9 Involvement in global exposure and practice						
11.8. Opportunity for independent thought and action						
11.10 Getting experience, talent, satisfaction and self esteem						
11.16 Possess future operational direction of the business	-.513					
11.14 Salary offered for effective working	.511					

Table 5.37 (Continued)

<b>Component Matrix</b>						
	<b>Component</b>					
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
11.2 Opportunity in Job position						
11.5 Supportive to Organisational demand, vision & mission						
11.12 Contribution to organization's productivity			-.520			
11.17 Job is identified with commitment						
11.1 Personal growth and development in Job						
11.4 Possess meaningful achievement in Job						
11.3 Carrying technical work connected with Job				.608		
11.11 Fulfill amenities like housing, conveyance, medical benefits					-.508	
11.7 Skill and knowledge ensure the success in job						
Extraction Method: Principal Component Analysis						
a. 6 components extracted.						

Source:SPSS21

**Table 5.38 Rotated Component Matrix**

		Component					
		1	2	3	4	5	6
11.14	Salary offered for effective working	.740					
11.16	Possess future operational direction of the business	.706					
11.15	Prestige of the job inside and outside of organisation	-.617					
11.5	Supportive to Organisational demand, vision & mission						
11.10	Getting experience, talent, satisfaction and self esteem		.718				
11.12	Contribution to organization's productivity		.580				
11.8.	Opportunity for independent thought and action		.574				
11.13	Possess skill , knowledge and attributes		.505				
11.1	Personal growth and development in Job			.784			
11.7	Skill and knowledge ensure the success in job			.558			
11.9	Involvement in global exposure and practice			.525			
11.2	Opportunity in Job position						
11.4	Possess meaningful achievement in Job				.746		
11.6	Involvement and Activeness in Job				.574		
11.3	Carrying technical work connected with Job					.804	
11.17	Job is identified with commitment						.696
11.11	Fulfill amenities like housing, conveyance, medical benefits						.561

**Table 5.39 Hypothesis Test Summary of Retention of employees of MNC's of information Technology**

<b>Hypothesis Test Summary</b>				
	Null Hypothesis	Test	Sig.	Decision
1	The categories of 1.1 scientific concepts occur with equal probabilities.	One-Sample Chi-Square Test	.029	Reject the null hypothesis.
2	The categories of 1.2 technical work occur with equal probabilities.	One-Sample Chi-Square Test	.287	Retain the null hypothesis.
3	The categories of 1.3 possess competencies occur with equal probabilities.	One-Sample Chi-Square Test	.008	Reject the null hypothesis.
4	The categories of 1.4 Organisation demand occur with equal probabilities.	One-Sample Chi-Square Test	.004	Reject the null hypothesis.
5	The categories of 1.5 Involvement and participation occur with equal probabilities.	One-Sample Chi-Square Test	.004	Reject the null hypothesis.
6	The categories of 1.6 Provide skills occur with equal probabilities.	One-Sample Chi-Square Test	.016	Reject the null hypothesis.
7	The categories of 1.7 Attitude & 24X7 support occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
8	The categories of 1.8 Global exposure occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
9	The categories of 1.9 Onsite experience occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
10	The categories of 1.10 Fulfill the resources occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
11	The categories of 1.11 Organisational memory occur with equal probabilities.	One-Sample Chi-Square Test	.116	Retain the null hypothesis.
12	The categories of 1.12 Possess skills occur with equal probabilities.	One-Sample Chi-Square Test	.006	Reject the null hypothesis.
13	The categories of 1.13 Essential productivity occur with equal probabilities.	One-Sample Chi-Square Test	.022	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 5.39 (Continued)

## Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
14	The categories of 1.14Key motivators occur with equal probabilities.	One-Sample Chi-Square Test	.116	Retain the null hypothesis.
15	The categories of 1.15Possess knowledge ,skill occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
16	The categories of 1.16Display an identificatin occur with equal probabilities.	One-Sample Chi-Square Test	.001	Reject the null hypothesis.
17	The categories of 2.1Effective selection occur with equal probabilities.	One-Sample Chi-Square Test	.699	Retain the null hypothesis.
18	The categories of 2.2Provision of effective training occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
19	The categories of 2.3 innovative fact occur with equal probabilities.	One-Sample Chi-Square Test	.003	Reject the null hypothesis.
20	The categories of 2.4Career development occur with equal probabilities.	One-Sample Chi-Square Test	.099	Retain the null hypothesis.
21	The categories of 2.5Challenging employment structure occur with equal probabilities.	One-Sample Chi-Square Test	.002	Reject the null hypothesis.
22	The categories of 2.6 Equity of compensaion occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
23	The categories of 2.7Reward and regognition occur with equal probabilities.	One-Sample Chi-Square Test	.044	Reject the null hypothesis.
24	The categories of 2.8Grivances handling systems occur with equal probabilities.	One-Sample Chi-Square Test	.002	Reject the null hypothesis.
25	The categories of 2.9employee satisfaction and motivation occur with equal probabilities.	One-Sample Chi-Square Test	.009	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Table 5.39 (Continued)

## Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
26	The categories of 2.10 Employee retention methods occur with equal probabilities.	One-Sample Chi-Square Test	.001	Reject the null hypothesis.
27	The categories of 3.1 Company policies, vision occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
28	The categories of 3.2 job knowledge communication occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
29	The categories of 3.3 Satisfactory and flexibility occur with equal probabilities.	One-Sample Chi-Square Test	.006	Reject the null hypothesis.
30	The categories of 3.4 Decision making and employment occur with equal probabilities.	One-Sample Chi-Square Test	.018	Reject the null hypothesis.
31	The categories of 3.5 High tech performance occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
32	The categories of 3.6 Influential and sensitive leadership occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
33	The categories of 3.7 Effective integration working relationships occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
34	The categories of 3.8 Effective performance appraisal occur with equal probabilities.	One-Sample Chi-Square Test	.092	Retain the null hypothesis.
35	The categories of 3.9 Organisaional loyalty and pride occur with equal probabilities.	One-Sample Chi-Square Test	.079	Retain the null hypothesis.
36	The categories of 3.10 Reward and suitability of feed back occur with equal probabilities.	One-Sample Chi-Square Test	.033	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.



According to the data derived from the given table 5.39 it is understood that, the Chi- square for the first objective of Retention of employees in MNC of information Technology sector, According to the data derived from the given table 5.39 it is understood that, the Chi- square value of Male and Female is found to be more than the significance value ( $>0.05$ ) and hence the null hypothesis is rejected in Scientific concepts with equal probabilities, Competencies occur with probabilities, Organisation demand, Investment and Participation, skill occur with equal probabilities, attitude and 24&7 support occur, Global exposure, Onsite experience, Fulfill the Resources, Possess skills occur, Essential productivity, Possess knowledge , skill occur. Identification occurs with equal probabilities.

According to the data derived from the given table 5.39 it is understood that, the Chi- square for the objective of identify the factors of retention of employees in Information technology of Bangalore city understood that, the Chi- square value of Male and Female is found to be more than the significance value ( $>0.05$ ) and hence the null hypothesis is rejected in effective training occur, Innovative fair, challenging environment structure, Equity of compensation, Reward recognition, Reward handling system, Employee satisfaction and motivation, Employee retention methods.

According to the data derived from the given table 5.39 it is understood that, the Chi- square for the objective of analysis the perceptions of the employees with regard to the career development practices being adopted by Information technology that, the Chi- square value of Male and Female is found to be more than the significance value ( $>0.05$ ) and hence the null hypothesis is rejected in company policy, vision, Job knowledge and communication, Satisfactory and flexibility, Decision making and employment, High tech performance occur, Influential sensitive leadership,

Effective integration working relationship occur, reward and suitability of feed back occur.

According to the data derived from the given table 5.39 it is understood that, the Chi- square for the factors is retain in the Null Hypothesis are Technical work occur with equal probabilities, organizational memory occur with equal probabilities, effective selection , Career development, effective performance appraisal, organisational loyalty and pride occur.

## **5.12 STATISTICAL MODEL OF RETENTION OF EMPLOYEES IN IT INDUSTRIES**

The fourth objective of the research was to work out the regression model for predicting the employees' sustenance in an IT/ITES organization. This section considers the regression equation in the model and examines the strength of the independent variables in predicting the dependent variable.

However valid, reliable and adequate the data may be, it does not serve any useful purpose unless it is carefully processed, systematically classified and tabulated, scientifically analyzed, intelligently interpreted and rationally concluded. After the data had been collected, it was processed and tabulated using Microsoft Excel - 2007 Software. The data collected have been analyzed using SPSS 21.0 statistical software and the results obtained thereby have been interpreted. These have been done on each independent and dependent variables.

For the purpose of convenience, the different statistical model to explore and analysis the dimensions of retain employees in Information sectors. The sections of the study have been organized under the following validation model.

1. Chi-square analysis
2. Multiple Regression analysis
3. Descriptive statistics

### 5.13 CHI-SQUARE ANALYSIS

Using the results obtained from factor analysis, the factors of various HR practices are associated to Retention in the IT industry supported by means of Chi –square analysis.

From the p – value for Pearson’s chi –square is  $< .05$  This infers that there is an association between retention of employees of MNC’s of information Technology in general, perceptions of the employees with regard to the career development practices being adopted by Information technology and identify the factors of retention of employees of Information Technology sector of Bangalore city.

### 5.14 MULTIPLE REGRESSIONS ANALYSIS

Table 5.40 shows that R value and R square, Adjusted R square and Standard error of estimate were analyzed. The details of the influencing factors of retention are explained in the table.

**Table 5.40 Multiple Regression - Model summary of influencing HR practices in the Retention of employees in IT sector.**

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.350 <sup>a</sup>	.122	-.009	.399	.122	.931	65	434	.628	2.075

Source:spss21

a. Predictors: (Constant), 6.70 Stress free environment from policies and backstabbling , 6.66 Unrealistic expectations, 6.29 Measuring on work,outcome and technique , 6.26 Job

related program, 6.13 Possess skill , knowledge and attributes, 6.40 Satisfaction at work,goals and values, 6.57 Sexual harassment avoided, 6.18 Hiring the right person for the Job, 6.69 Challenging for retaining valuable and talented , 6.30 Understanding the success of the organisation , 6.8.opportunity for independent thought and action, 6.5 Supportive to Organisation demand,vision & mission, 6.12 Contribute to organisation's productivity, 6.60 Monetary satisfaction , 6.39 Seeking information,resources and path, 6.61 Hierachy and functional areas well defined, 6.4 Possessing meaningfull achivement in Job, 6.62 Encouraging festivals,party,anniversary,6.58 manipulation, Misunderstanding and conflict avoided, 6.11 Fulfil amenities like housing, conceyance,medical benafits, 6.7 Skill and knowledge ensure the success in job, 6.9 Involvement in global exposure and practice, 6.21 More time to recruit new one , 6.10 Geting experience, talent, satisfaction and self esteem, 6.27 Managerial competencies to do job , 6.63 Incentive cash prizes,trophies,perks, 6.23 Extensive training opportunities , 6.16 Possesing future operational direction of the business, 6.3 Carrying technical work connected with Job, 6.17 job is identified with commitment, 6.20 Hiring from third party , 6.59 Free from Irritate discussions,Deadline,Timeframe , 6.14 Salary offered for effective working, 6.19 Competent people required , 6.15 Prestige of job inside and outside of organisation, 6.43 Opinion about creating opportunities for internal and external , 6.51 Express ideas and discuss issues , 6.64 Discipline in workplace, 6.24 Perfect and Better job training , 6.2 Opportunity in Job position, 6.6 Involvement and Activeness in Job, 6.47 Safety and security of life, 6.22 Effective interview and lengthy process, 6.28 Provides job evaluation Leadership,Managerial skill , 6.25 teaching opportunities and skills, 6.55 Freedom in workplace and exit interview, 6.52 Strengthened scope,challengeand involvement, 6.45 Harmonious place to work pleasant , 6.54 Identifying new career horizons , 6.65 Timing Decorum of the office, 6.46 Work life balance with family life , 6.53 Competitive compensation and benefits, 6.56 Performance made in decision making, 6.67 Negotiation of pay, reward, opportunities, right profile, 6.50 Positive ambience, 6.49 Mental stress and discomfort from riskand uncertainty, 6.41 Willing to help best performers, 6.37 Providing skill development and assistance, 6.38 Policies are transparent and widly , 6.42 Working for betterment and work peacefully, 6.36 How well individual perform , 6.68 Avoid boredom and monotonous , 6.1 Personal growth and development in Job, 6.44 Working with self esteem and job satisfaction , 6.48 Sprit of cooperation and teamwork.

The table 5.41 explains the Human Resource Management practices on ten items were used to measure retention factors i.e Effective Selection& recruitment process, effective training & development practice, Innovative Fair and equitable performance evaluation practice, career Devvelopment & performance evaluation practice, Challenging employment structures and opportunities, Equity of compensation, social benefits ,Reward and recognition of employee value performance education, Grievances Handling systems, employee satisfaction and Motivaion, Employee Retention methods and employee commitment. The transformed total scale score of each HRM practices were used as the independent variable to conduct the analysis.

Multiple regression analysis was conducted on the data. The summary indicated that all independent variables together explained The R value is .350 and Change in R square value of 0.122, which is highly significant at  $p < 0.01$ . The Durbin Watson analysis are conducted and got result of 2.075.

A small percentage of the variance of the dependent variable has been explained by the independent variables, the significant F statistic  $p < 0.05$  indicates that the independent variables can adequately explain the variation in the dependent variable. The F change value of 0.931 and sig F change value is summerised in the Table 5. 40.

**Table 5.41 Multiple Regression – Coefficients’ of influencing HR practices in the Retention of employees in IT sector**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.021	.325		3.145	.002	.383	1.659
	6.1 Personal growth and development in Job	.155	.194	.362	.800	.424	-.227	.537
	6.2 Opportunity in Job position	-.033	.035	-.066	-.952	.342	-.102	.036
	6.3 Carrying technical work connected with Job	.003	.017	.012	.203	.839	-.030	.037
	6.4 Possessing meaningfull achivement in Job	.045	.018	.152	2.553	.011	.010	.079
	6.5 Supportive to Organisation demand,vision & mission	.002	.019	.004	.081	.935	-.036	.039
	6.6 Involvement and Activeness in Job	-.029	.018	-.109	-1.605	.109	-.064	.006
	6.7 Skill and knowledge ensure the success in job	.013	.017	.046	.783	.434	-.020	.046
	6.8. opportunity for independent thought and action	.001	.018	.002	.029	.977	-.036	.037
	6.9 Involvement in global exposure and practice	.001	.018	.004	.073	.942	-.034	.036
	6.10 Geting experience,talent,satisfaction and self esteem	.022	.023	.055	.965	.335	-.023	.067
	6.11 Fulfil amenities like housing, conceyance, medical benafits	-.016	.018	-.049	-.883	.378	-.052	.020
	6.12 Contribute to organisation's productivity	-.012	.016	-.041	-.767	.443	-.044	.019
	6.13 Possess skill , knowledge and attributes	.010	.019	.031	.531	.596	-.027	.047
	6.14 Salary offered for effective working	-.017	.017	-.066	-1.016	.310	-.050	.016
	6.15 Prestige of job inside and outside of organisation	.023	.020	.075	1.148	.252	-.016	.062

**Table 5.41 (Continued)**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
6.16 Possesing future operational direction of the business	.006	.020	.019	.282	.778	-.034	.045
6.17 job is identified with commitment	-.019	.019	-.063	-1.030	.304	-.057	.018
6.18 Hiring the right person for the Job	.006	.020	.019	.324	.746	-.032	.045
6.19 Competent people required	-.027	.024	-.079	-1.140	.255	-.073	.019
6.20 Hiring from third party	.014	.016	.055	.889	.374	-.017	.046
6.22 Effective interview and lengthy process	-.014	.025	-.040	-.557	.578	-.062	.035
6.21 More time to recruit new one	-.033	.022	-.089	-1.489	.137	-.076	.010
6.23 Extensive training opportunities	.006	.026	.014	.233	.815	-.046	.058
6.24 Perfect and Better job training	-.012	.020	-.041	-.591	.555	-.052	.028
6.25 teaching opportunities and skills	-.006	.025	-.018	-.259	.796	-.055	.042
6.26 Job related program	-.005	.024	-.015	-.228	.820	-.052	.041
6.27 Managerial competencies to do job	-.011	.021	-.030	-.508	.612	-.051	.030
6.28 Provides job evaluation Leadership,Managerial skill	.028	.024	.083	1.154	.249	-.019	.075
6.29 Measuring on work,outcome and technique	.024	.020	.064	1.238	.217	-.014	.063
6.30 Understanding the success of the organisation	-.004	.021	-.013	-.212	.832	-.046	.037
6.36 How well individual perform	-.097	.077	-.350	-1.250	.212	-.249	.055
6.37 Providing skill development and assistance	-.070	.042	-.234	-1.681	.093	-.153	.012
6.38 Policies are transparent and widly	-.021	.071	-.062	-.291	.771	-.159	.118

**Table 5.41 (Continued)**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
6.39 Seeking information,resources and path	-.058	.205	-.137	-.284	.776	-.461	.344
6.40 Satisfaction at work,goals and values	-.111	.249	-.206	-.448	.655	-.600	.378
6.41 Willing to help best performers	-.008	.033	-.031	-.238	.812	-.072	.056
6.42 Working for betterment and work peacefully	.011	.078	.031	.144	.885	-.142	.165
6.43 Opinion about creating opportunities for internal and external	-.009	.017	-.034	-.538	.591	-.042	.024
6.44 Working with self esteem and job satisfaction	.026	.149	.099	.176	.860	-.267	.319
6.45 Harmonious place to work pleasant	.016	.029	.054	.549	.584	-.042	.074
6.46 Work life balance with family life	.026	.032	.084	.814	.416	-.037	.090
6.47 Safety and security of life	-.034	.028	-.083	-1.228	.220	-.088	.020
6.48 Sprit of cooperation and teamwork	-.876	.446	-2.811	-1.965	.050	-1.752	.000
6.49 Mental stress and discomfort from riskand uncertainty	.042	.045	.124	.949	.343	-.046	.130
6.50 Positive ambience	.092	.063	.327	1.451	.147	-.033	.216
6.51 Express ideas and discuss issues	.029	.034	.091	.875	.382	-.037	.096
6.52 Strengthened scope,challengeand involvement	-.030	.046	-.084	-.653	.514	-.121	.060
6.53 Competitive compensation and benefits	-.097	.052	-.219	-1.871	.062	-.198	.005
6.54 Identifying new career horizons	-.111	.061	-.183	-1.836	.067	-.231	.008
6.55 Freedom in workplace and exit interview	.015	.026	.055	.572	.568	-.036	.065
6.56 Performance made in decision making	-.025	.069	-.069	-.367	.714	-.161	.110
6.57 Sexual harassment avoided	.019	.016	.076	1.198	.232	-.012	.050



**Table 5.41 (Continued)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
6.58	Manipulation,Misunderstanding and conflict avoided	-.004	.150	-.015	-.027	.979	-.299	.291
6.59	Free from Irritate discussions, Deadline, Time frame	-.017	.031	-.050	-.551	.582	-.078	.044
6.60	Monetary satisfaction	.000	.034	.001	.005	.996	-.066	.066
6.61	Hierachy and functional areas well defined	-.010	.031	-.022	-.329	.742	-.072	.052
6.62	Encouraging festivals,party,anniversary	.905	.445	2.900	2.032	.043	.030	1.780
6.63	Incentive cash prizes,trophies,perks	-.018	.046	-.049	-.392	.696	-.109	.073
6.64	Discipline in workplace	.011	.045	.039	.245	.807	-.078	.100
6.65	Timing Decorum of the office	.053	.047	.149	1.140	.255	-.038	.145
6.66	Unrealistic expectations	.047	.054	.141	.880	.379	-.058	.153
6.67	Negotiation of pay,reward,opportunities,right profile	-.037	.052	-.084	-.719	.472	-.139	.064
6.68	Avoid boredom and monotonous	.267	.242	.496	1.104	.270	-.209	.743
6.69	Challenging for tetaining valuable and talented	.001	.029	.004	.040	.968	-.055	.058
6.70	Stress free environment from policies and backstabbling	.012	.049	.031	.237	.813	-.085	.109

a. Dependent Variable: Gender

Source:SPSS21

Table 5.42 ANOVA explains the details of sum squares, df, F values and significance were explained.

**Table 5.42 ANOVA summaries the influencing HR practices in the Retention of employees in IT sector**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.646	65	.148	.931	.628 <sup>b</sup>
	Residual	69.146	434	.159		
	Total	78.792	499			

a. Dependent Variable: Gender

Source:SPSS21

b. Predictors: (Constant), 6.70 Stress free environment from policies and backstabbling , 6.66 Unrealistic expectations, 6.29 Measuring on work,outcome and technique , 6.26 Job related program, 6.13 Possess skill , knowledge and attributes, 6.40 Satisfaction at work,goals and values, 6.57 Sexual harassment avoided, 6.18 Hiring the right person for the Job, 6.69 Challenging for tetaining valuable and talented , 6.30 Understanding the success of the organisation , 6.8.opportunity for independent thought and action, 6.5 Supportive to Organisation demand,vision & mission, 6.12 Contribute to organisation's productivity, 6.60 Monetary satisfaction , 6.39 Seeking information,resources and path, 6.61 Hierachy and functional areas well defined , 6.4 Possessing meaningfull achivement in Job, 6.62 Encouraging festivals,party,anniversary , 6.58 Manipulation,Misunderstanding and conflict avoided, 6.11 Fulfil amenities like housing, conceyance,medical benafits, 6.7 Skill and knowledge ensure the success in job, 6.9 Involvement in global exposure and practice, 6.21 More time to recruit new one , 6.10 Geting experience,talent,satisfaction and self esteem, 6.27 Managerial competencies to do job , 6.63 Incentive cash prizes,trophies,perks, 6.23 Extensive training opportunities , 6.16 Possesing future operational direction of the business, 6.3 Carrying technical work connected with Job, 6.17 job is identified with commitment, 6.20 Hiring from third party , 6.59 Free from Irritate discussions,Deadline,Timeframe , 6.14 Salary offered for effective working, 6.19 Competent people required , 6.15 Prestige of job inside and outside of organisation, 6.43 Opinion about creating opportunities for internal and external , 6.51 Express ideas and discuss issues , 6.64 Discipline in

workplace, 6.24 Perfect and Better job training , 6.2 Opportunity in Job position, 6.6 Involvement and Activeness in Job, 6.47 Safety and security of life, 6.22 Effective interview and lengthy process, 6.28 Provides job evaluation Leadership, Managerial skill , 6.25 teaching opportunities and skills, 6.55 Freedom in workplace and exit interview, 6.52 Strengthened scope, challenge and involvement, 6.45 Harmonious place to work pleasant , 6.54 Identifying new career horizons , 6.65 Timing Decorum of the office, 6.46 Work life balance with family life , 6.53 Competitive compensation and benefits , 6.56 Performance made in decision making, 6.67 Negotiation of pay, reward, opportunities, right profile , 6.50 Positive ambience, 6.49 Mental stress and discomfort from risk and uncertainty , 6.41 Willing to help best performers, 6.37 Providing skill development and assistance, 6.38 Policies are transparent and widely , 6.42 Working for betterment and work peacefully, 6.36 How well individual perform , 6.68 Avoid boredom and monotonous , 6.1 Personal growth and development in Job, 6.44 Working with self esteem and job satisfaction , 6.48 Spirit of cooperation and teamwork.

## **5.15 DESCRIPTIVE STATISTICAL ANALYSIS**

The Table 5.42, 5.43 shows that HR practices in the retention of employees in IT sector explains the Mean and standard deviation values with respect to the respondents' opinion. The researcher identified 5 factors influences the retention above 4. A greater mean 4.08 score for Incentive cash prizes, trophies, perks, 4.06 score for Possesing future operational direction of the business, 4.02 score for Tied with Pay and benefit package, 4.02 score for Mental stress and discomfort from risk and uncertainty, 4.01 score for Hierarcy and functional areas well defined from the data collected by the respondent .

Finally, the results of one way ANOVA shows that mean effective of variables at 5 % level is shown in the Table 5.42 Where F –statistic for this ANOVA analysis was not statistically significant because the “sig” number of .628 was greater than .05. Therefore the anslysis stops here.

**Table 5.43 Descriptive statistics analysis influencing HR practices in the Retention of employees in IT sector**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
6.1 Personal growth and development in Job	500	3.20	.925	1	5
6.2 Opportunity in Job position	500	2.81	.787	1	5
6.3 Carrying technical work connected with Job	500	3.61	1.379	1	5
6.4 Possessing meaningful achievement in Job	500	2.25	1.352	1	5
6.5 Supportive to Organisation demand, vision & mission	500	3.86	1.061	1	5
6.6 Involvement and Activeness in Job	500	2.28	1.512	1	5
6.7 Skill and knowledge ensure the success in job	500	2.84	1.395	1	5
6.8 opportunity for independent thought and action	500	3.08	1.186	1	5
6.9 Involvement in global exposure and practice	500	2.77	1.278	1	5
6.10 Getting experience, talent, satisfaction and self esteem	500	2.81	.986	1	5
6.11 Fulfil amenities like housing, conveyance, medical benefits	500	2.86	1.218	1	5
6.12 Contribute to organisation's productivity	500	2.97	1.322	1	5
6.13 Possess skill, knowledge and attributes	500	2.98	1.221	1	5
6.14 Salary offered for effective working	500	3.76	1.520	1	5

**Table 5.43 (Continued)**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
6.15 Prestige of job inside and outside of organisation	500	3.14	1.317	1	5
6.16 Possesing future operational direction of the business	500	4.06	1.298	1	5
6.17 job is identified with commitment	500	3.26	1.283	1	5
6.18 Hiring the right person for the Job	500	3.12	1.197	1	5
6.19 Competent people required	500	3.12	1.173	1	5
6.20 Hiring from third party	500	3.53	1.517	1	5
6.22 Effective interview and lengthy process	500	2.85	1.155	1	5
6.21 More time to recruit new one	500	3.05	1.084	1	5
6.23 Extensive training opportunities	500	3.03	.916	1	5
6.24 Perfect and Better job training	500	3.13	1.355	1	5
6.25 teaching opportunities and skills	500	3.48	1.139	1	5
6.26 Job related program	500	3.86	1.128	1	5
6.27 Managerial competencies to do job	500	3.45	1.140	1	5
6.28 Provides job evaluation Leadership,Managerial skill	500	3.50	1.190	1	5
6.29 Measuring on work,outcome and technique	500	3.18	1.046	1	5

**Table 5.43 (Continued)**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
6.30 Understanding the success of the organisation	500	3.54	1.186	1	5
6.31 Opportunity to prove	500	3.44	1.323	1	5
6.32 Opportunity to express goal and objective	500	3.10	1.270	1	5
6.33 Monetary and non - Monetary recognition	500	3.83	.966	1	5
6.34 Rewarded with personal loyalty	500	3.56	1.275	1	5
6.35 Tied with Pay and benefit package	500	4.02	1.160	1	5
6.36 How well individual perform	500	3.07	1.441	1	5
6.37 Providing skill development and assistance	500	3.82	1.320	1	5
6.38 Policies are transparent and widely	500	3.64	1.201	1	5
6.39 Seeking information,resources and path	500	3.19	.933	1	5
6.40 Satisfaction at work,goals and values	500	3.00	.734	1	5
6.41 Willing to help best performers	500	3.31	1.614	1	5
6.42 Working for betterment and work peacefully	500	3.25	1.094	1	5
6.43 Opinion about creating opportunities for internal and external	500	3.09	1.516	1	5

**Table 5.43 (Continued)**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
6.44 Working with self esteem and job satisfaction	500	2.93	1.494	1	5
6.45 Harmonious place to work pleasant	500	3.44	1.323	1	5
6.46 Work life balance with family life	500	3.10	1.270	1	5
6.47 Safety and security of life	500	3.83	.966	1	5
6.48 Sprit of cooperation and teamwork	500	3.56	1.275	1	5
6.49 Mental stress and discomfort from riskand uncertainty	500	4.02	1.160	1	5
6.50 Positive ambience	500	3.12	1.415	1	5
6.51 Express ideas and discuss issues	500	3.94	1.226	1	5
6.52 Strengthened scope,challengeand involvement	500	3.74	1.114	1	5
6.53 Competitive compensation and benefits	500	3.24	.898	1	5
6.54 Identifying new career horizons	500	3.06	.654	1	5
6.55 Freedom in workplace and exit interview	500	3.55	1.497	1	5
6.56 Performance made in decision making	500	3.29	1.076	1	5
6.57 Sexual harassment avoided	500	2.69	1.603	1	5

**Table 5.43 (Continued)**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
6.58 Manipulation,Misunderstanding and conflict avoided	500	2.93	1.488	1	5
6.59 Free from Irritate discussions,Deadline,Timeframe	500	3.62	1.167	1	5
6.60 Monetary satisfaction	500	3.26	1.218	1	5
6.61 Hierachy and functional areas well defined	500	4.01	.828	1	5
6.62 Encouraging festivals,party,anniversary	500	3.56	1.273	1	5
6.63 Incentive cash prizes,trophies,perks	500	4.08	1.084	1	5
6.64 Discipline in workplace	500	3.16	1.400	1	5
6.65 Timing Decorum of the office	500	3.97	1.115	1	5
6.66 Unrealistic expectations	500	3.69	1.184	1	5
6.67 Negotiation of pay,reward,opportunities,right profile	500	3.25	.898	1	5
6.68 Avoid boredom and monotonous	500	2.99	.738	1	5
6.69 Challenging for tetaining valuable and talented	500	3.55	1.462	1	5
6.70 Stress free environment from policies and backstabbling	500	3.35	1.059	1	5

Source:SPSS21