CHAPTER- V

SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

A brief summary of the study is presented in this chapter. The findings, recommendations, future directions for research, followed by conclusion of the study are presented in the following pages.

5.2 SUMMARY

The First chapter is introductory in nature and deals with the overview of Indian IT industry, NASSCOM and it role in IT industry, Software export scenario and major IT companies and these services rendered.

The primary goal of Second chapter is to review and summarize literature that is relevant to the understanding of job satisfaction and the factors influencing job satisfaction and to fill up the gap between present study and previous study.

The Third chapter describes the Research Design and Methodology such as Statement of the Problem, Research Questions, Objectives of the Study, Hypotheses, Sampling Design, Tools for Collection and Analysis of Data, Limitations of the Study and Chapter Scheme.

The Fourth chapter analysed the level of job satisfaction of employees in the IT sector by considering 16 factors such as location, age, gender, marital status, education level, monthly salary, designation, length of service, domain of responsibility, family pattern, number of dependents in the family, nature of accommodation, distance travelled, total employee strength and team size. It also examined the factors influencing the job satisfaction of employee in the study area.

The fifth and final chapter discusses the summary of findings, problems and suggestions, further scope for research and the meaningful conclusion.
5.3 FINDINGS

5.3.1 MEASUREMENT OF JOB SATISFACTION

(1) Location

It is clear that 50 percent of the respondents are from Bengaluru and the level of job satisfaction of Bengaluru software employees ranged between 47 and 168 with an average of 74.12 and remaining 50 percent of the respondents are from Kochi city ranged between 47 and 168 with an average of 85.35. Thus the analysis vividly reveals that Kochi software employees have higher job satisfaction than the Bengaluru city employees.

The ANOVA shows that there is a significant association between location of industry and level of job satisfaction of software employees.

(2) Gender

It is identified that 62 percent of the respondents are male and the level of job satisfaction of the males ranged between 47 and 168 with an average of 87.3799 and remaining 38 percent of the respondents are female and the level of job satisfaction of the females between 47 and 168 with an average of 75.5537.

The ANOVA implies that there is a significant association between gender and level of job satisfaction.

(3) Age

It is found that 17.25 percent of the respondents belong to age group Above 50 years and that level of job satisfaction on this age group ranged between 47 and 168 with an average of 83.6129, 40 percent of the respondents are from up to 30 years age group and the level of job satisfaction on this age group ranged between 47 and 168 with an average of 77.00, 28.5% of the respondents belong to 31 - 40 years of age and the level of job satisfaction on this age group ranged between 47 and 168 with an average of 92.57, 24.25% of the respondents belong to 41 – 50 years of age and the level of job satisfaction on this age group ranged between 47 and 168 with an average of 78.0324.
The ANOVA shows that there is an association between age and level of job satisfaction among software employees.

(4) Education

It is perceived that the Education and level of job satisfaction among Engg-UG degree holder was ranged between 47 and 168 with a percentage and an average of 38.5 and 83.95 respectively. The level of job satisfaction among the Engg-Post graduate degree holders ranged between 47 and 168 with the percentage and an average of 20.5 and 71.2879 respectively. The level of job satisfaction among Arts and Science –UG holders ranged between 47 and 168 with the percentage and an average of 11.5 and 89.44 respectively. The level of job satisfaction among the Arts and Science – PG holders ranged between 47 and 168 with the percentage and an average of 16.25 and 79.7825 respectively. The level of job satisfaction among other degree holders ranged between 47 and 168 with the percentage and an average of 13.25 and 86.1532 respectively.

The ANOVA discloses that there is an association between education and level of job satisfaction among software employees.

(5) Marital Status

It is clear that 72 percent of the respondents are married employees and the level of job satisfaction of them ranged between 47 and 168 with an average of 80.88 and remaining 28 percent of the respondents are single and the level of job satisfaction on them ranged between 47 and 168 with an average of 75.02. Thus the analysis vividly reveals that married employees have higher level of job satisfaction than unmarried persons.

The ANOVA proved that there is a significant association between marital status and level of job satisfaction of software employees.

(6) Monthly Income

It is found out that 42 percent of the respondents earn up to Rs.25,000 income per month and level of job satisfaction ranged between 47 and 168 with an average of 93.667, 23.7% of the respondents earn between up to Rs. 25,001 – 35,000 income per month and level of job satisfaction ranged between 47 and 168 with an average of 65.07,
19.75 percent of the respondents earn between Rs. 35,001 – 40,000 income per month and level of job satisfaction ranged between 47 and 168 with an average of 87.95, 24.5% of the respondents earn above Rs. 40,001 income per month and level of job satisfaction ranged between 47 and 168 with an average of 79.06.

The ANOVA shows that there is an association between monthly income and level of job satisfaction of software employees.

(7) Designation

It is found that 12 percent of the respondents are Project Managers and level of job satisfaction ranged between 47 and 168 with an average of 98.13 and 14.75 percent of the respondents are Technical Leaders and level of job satisfaction ranged between 47 and 168 with an average of 55.2041, 14.25 percent of the respondents are Managers and level of job satisfaction ranged between 47 and 168 with an average of 100.4805 and 24.5 percent of the respondents are Programmer/Testing Engineer and level of job satisfaction ranged between 47 and 168 with an average of 61.3705 and 11 percent of the respondents are Trainers and the level of job satisfaction ranged between 47 and 168 with an average of 93.85. The remaining 23.5 percent of the respondents are in ITES department and the level of job satisfaction ranged between 47 and 168 with an average of 77.

The analysis revealed that there is an association between the designation and the level of job satisfaction of software employees.

(8) Length of Service

It is found that 24 percent of the respondents having experience up to 5 years and level of job satisfaction ranged between 47 and 168 with an average of 89.093 and 30.25 percent of the respondents are with 6-11 years of experience and the level of job satisfaction ranged between 47 and 168 with an average of 68.1256, 23.75% of the respondents are having experience between 11 to 15 years and the level of job satisfaction ranged between 47 and 168 with an average of 84.2500 and 21 percent of the respondents have more than 15 year experience and level of job satisfaction ranged between 47 and 168 with an average of 76.3311 per-cent.
The ANOVA shows that there is an association between length of the service and its level of job satisfaction on software employees.

(9) Domain of Responsibility

It is found that 21.25 percent of the respondents are in software services and level of job satisfaction ranged between 47 and 168 with an average of 80.2712 and 14.5 percent of the respondents are in web development domain and the level of job satisfaction ranged between 47 and 168 with an average of 61.4706. The 13 percent of the employees involved in content management domain and the level of job satisfaction ranged between 47 and 168 with an average of 58.4483. 06% of the respondents are in Telecom domain and level of job satisfaction ranged between 47 and 168 with an average of 84.7429 per-cent.

The analysis also reveals that 22 percent of the employees involved in Database and warehousing domain and the level of job satisfaction ranged between 47 and 168 with an average of 85.4793. The 23.25% are working in other domains with an average of 98.456.

The ANOVA shows that there is a significant association between domain of responsibility of the employees and the level of job satisfaction.

(10) Family Pattern

It is found that 59.5 percent of the respondents belong to nuclear family and level of job satisfaction ranged between 47 and 168 with an average of 78.6827 and 31.75 percent of the respondents are from joint family with an average of 77.4286, 8.75 percent of the respondents are from extended family and level of job satisfaction ranged between 47 and 168 with an average of 95.6000.

The ANOVA shows that there is a difference between family type of the respondents and level of job satisfaction.
(11) No. of dependants

It is found that 46.25 percent of the respondent’s family have 1-2 dependants and the level of job satisfaction ranged between 47 and 168 with an average of 69.2000 and 44.0 percent of the respondents have 3-4 dependant family members with an average of 89.0323, finally 9.75 percent of the software employees have 5-6 total dependents and the level of job satisfaction ranged between 47 and 168 with an average of 62.3472.

The ANOVA results proved that there is an association between the number of dependents of a family and the level of job satisfaction.

(12) Nature of Employment

It is found that 70.5 percent of the respondents are permanent employees and level of job satisfaction ranged between 47 and 168 with an average of 83.6827 and 29.5 percent of the respondents are from Temporary/Contract employees and with an average of 79.4286.

The ANOVA revealed that there is a difference between nature of employment of the respondents and level of job satisfaction.

(13) Nature of Accommodation

It is found from that 24.5 percent of the respondents are having own house and level of job satisfaction ranged between 47 and 168 with an average of 78.6827 and 35.5 percent of the respondents are staying in rental house and level of job satisfaction with an average of 77.4286, 28.75 percent of the respondents are staying in hostel and level of job satisfaction ranged between 47 and 168 with an average of 74.4502. Finally 11.75 percent of the respondents are paying guests and level of job satisfaction ranged between 47 and 168 with an average of 81.634.

The ANOVA proved that there is an association between nature of accommodation of respondents and level of job satisfaction.
(14) Distance Travelled Everyday

It is found that 61.25 percent of the respondents are traveling Up to 25 km and level of job satisfaction ranged between 47 and 168 with an average of 93.6667 and 28 percent of the respondents are traveling from 26-75 km with the average of 77.4286, 10.75 percent of the respondents are traveling above 75km and the level of job satisfaction ranged between 35 and 146 with an average of 95.6000.

The ANOVA showed that there is an association between the distance traveled by the respondents and level of job satisfaction of software employees.

(15) Total Employee Strength

It is found that 42 percent of the respondents belongs to organization with less than 500 employees and level of job satisfaction ranged between 47 and 168 with an average of 78.6827 and 28.7 percent of the respondents are from the organization with 500-1000 employees with an average of 77.4286, 39.5 percent of the respondents are from the organization with above 1000 employees and the level of job satisfaction ranged between 47 and 168 with an average of 95.6000.

The ANOVA proved that there is an association between total employee strength of the organization and level of job satisfaction of employees.

(16) Team Size

It is found that 13.5 percent of the respondents working as individuals and level of job satisfaction ranged between 47 and 168 with an average of 98.1352 and 64 percent of the respondents are from teams having up to 10 members with an average of 85.2041, 11.5 percent of the respondents are from team size of 11 to 20 members and 11 percent of the respondents are from team size of above 21 members and the level of job satisfaction ranged between 47 and 168 with an average of 98.3750.

The ANOVA revealed that there is an association between team size of the respondents and level of job satisfaction.
5.4 DIFFERENT CAUSES AND JOB SATISFACTION OF EMPLOYEES

(i) Job Related Causes and Job Satisfaction of Employees

It is observed from the above analysis that the job related causes and location has the highest value of 15.5% from agree category of Bengaluru employees followed by 15% a from agree category of Kochi employees and the lowest is 3% who are neutral.

In order to identify the relationship between the job related causes and the job satisfaction of employees, Chi-Square test was employed and it is found that the calculated Chi-Square value is greater than the table value at 5% percent level. Hence null hypothesis is disproved. This shows that there is an association between the job related causes and the job satisfaction of employees.

(ii) Social Related Causes and Job Satisfaction of Employees

It is inferred from the above analysis that the social causes has the highest value of 17% from agree category of Kochi employees followed by 15.75% from strongly agree category of Bengaluru employees and the lowest is 2.25% who are neutral.

In order to find out the relationship between the social causes and the job satisfaction of employees, Chi-Square test was employed and it is found that the calculated Chi-Square values is greater than the table value at 5% percent level. Hence, the null hypothesis does not hold good. This shows that there is an association between the Social causes and the job satisfaction of employees.

(iii) Technical Related Causes and Job Satisfaction of Employees

It is observed from the above analysis that the technical causes has the highest value of 19.5% from agree category of Kochi employees followed by 18% from strongly agree category of Bengaluru employees and the lowest is 2.75% who are neutral.

In order to identify the relationship between the location and technical causes for the job satisfaction of employees, Chi-Square test was employed and it is found that the calculated Chi-Square value is greater than the table value at 5% percent level. Hence, the null hypothesis is not true. This shows that there is relationship between the technical causes and the job satisfaction of employees.
(iv) Domestic related causes and Job Satisfaction of Employees

It is observed from the above analysis that the domestic causes has the highest value of 21.25% from agree category of Bengaluru employees followed by 19.5% from agree category of Kochi employees and the lowest is 1.25% who are neutral.

In order to identify the relationship between the location and domestic causes for the job satisfaction of employees, Chi-Square test was employed and it is found that the calculated Chi-Square value is greater than the table value at 5% percent level. Hence, the null hypothesis is rejected. This shows that there is relationship between the domestic causes and the job satisfaction of employees.

(v) Human Related Causes and Job Satisfaction of Employees

It is observed that the human related causes has the highest value of 22.25% from agree category of Bengaluru employees followed by 21.25% from agree category of Kochi employees and the lowest is 1.75% who are strongly disagree.

In order to identify the relationship between the location and human related causes for the job satisfaction of employees, Chi-Square test was employed and it is found that the calculated Chi-Square value is greater than the table value at 5% percent level. Hence, the null hypothesis does not hold good. This shows that there is relationship between the human related causes and the job satisfaction of employees.

5.5 RELIABILITY ANALYSIS

(1) Reliability of Factors Related to Job Satisfaction and Working Conditions of Software Employees

The reliability of scales used in this study was calculated by Cronbach’s coefficient alpha. Cronbach’s alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach’s alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. Based upon the formula $\alpha = rk / [1 + (k -1) r]$ where $k$ is the number of items considered and $r$ is the mean of the inter-item correlations, the size of alpha is determined by both the number of items in the scale and the mean inter-item correlations. The coefficient alpha
values exceeded the minimum standard of .70. It’s provided good estimates of internal consistency reliability. As shown in Analysis 1, all constructs obtained an accepted analysis level of a coefficient alpha above .70, indicating that the scales used in this study were reliable. It provides the following **rules of thumb**: “$\geq .9$ – Excellent, $\geq .8$ – Good, $\geq .7$ – Acceptable, $\geq .6$ – Questionable, $\geq .5$ – Poor and $\leq .5$ – Unacceptable”. While increasing the value of alpha is partially dependent upon the number of items in the scale, it should be noted that this has diminishing returns. It should also be noted that an alpha of 0.972 is probably a reasonable goal. It should also be noted that while a high value for Cronbach’s alpha indicates good internal consistency of the items in the scale, it does not mean that the scale is uni-dimensional. Factor analysis is a method to determine the dimensionality of a scale.

(2) **Reliability of Factors Related to Causes that Affects the Level of Job Satisfaction**

It reveals that all the thirty four measurement scale items are reliable as the Cronbach alpha coefficient of 0.984. It is greater than the threshold level of 0.70. It’s provided good estimates of internal consistency reliability and also coefficient alpha values ranged from 0.983 to 0.986 for all the constructs. It is indicating that the scales used in this study were reliable. It clearly indicates that above scale items are consistent with each other and they are reliable measure of causes that affects the job satisfaction of employees.

(3) **Reliability of Factors for Improving Job Satisfaction**

It found that all the fifteen measurement scale items are reliable as the Cronbach alpha coefficient of 0.845. It is greater than the threshold level of 0.70. It’s provided good estimates of internal consistency reliability and also coefficient alpha values ranged from 0.821 to 0.879 for all the constructs. It is indicating that the scales used in this study were reliable. It clearly indicates that above scale items are consistent with each other and they are reliable.
5.6 FACTOR ANALYSIS

(i) Eigen Values and Proportion of Total Variance of Each Underlying Factors Related to Strategies Adopted to Improve Job Satisfaction of Software Employees

The results of the factor analysis regarding factors influencing the level of job satisfaction of software employees, have revealed that there are fifteen factors that had Eigen value exceeding “one”. Among those factors, the first factor accounted for 26.49 percent of the variance, the second 15.1 percent, the third factor 9.01 percent and the fourth factor 7.63 percent of the variance in the data set. The first four factors are the final factors solution and they all together represent 58.23 percent of the total variance in the scale items measuring the factors level of job satisfaction of software employees.

(ii) Communalities for Factors Related to the Strategies for Improving Job Satisfaction

The Factor Extraction Process was performed by Principal Component Analysis to identify the number of factors to be extracted from the data and by specifying the most commonly used Varimax rotation method. In the principal component analysis, total variance in the data is considered. The proportion of the variance is explained by the fifteen factors in each variable. The proportion of variance is explained by the common factors called communalities of the variance. Principal Component Analysis works on initial assumption that all the variance is common. Therefore, before extraction the communalities are all 1.000. Then the most common approach for determining the number of factors to retain i.e., examining Eigen values was done.

(iii) Rotated Component Matrix for Factors Related to the Strategies for Improving Job Satisfaction

The Rotated Component Matrix is an important output of principal component analysis. The coefficients are the factor loadings which represents the correlation between the factors and the fifteen variables (X1 to X15). From the above factor matrix it is found that coefficients for factor-I have high absolute correlations with variable X5 (Getting counseling from psychiatrist), X1 (Sharing problems with family members, friends and others), X4 (Practicing of mediation for improving work performance), X13 (Leave The Office Early) that is, 0.867, 0.859, 0.797, 0.629 respectively.
Similarly factor-II has high absolute correlation with variable $X_6$ (Conduct of knowledge up gradation and training programmes), $X_3$ (Going to temple, park, shopping, and native place for relaxation), $X_7$ (Management of job boredom by job rotation), $X_{14}$ (Emotional Outburst) that is, 0.760, 0.758, 0.712, 0.679

Next, factor III has high absolute correlation with variable $X_{11}$ (Setting priorities for professional and personal works), $X_2$ (Consulting with well-wishers) that is, 0.879 and 0.512 respectively. Factor-IV has high absolute correlation with variable $X_8$ (Management of job boredom by transfer) that is 0.812.

Factor-V has high absolute correlation with variable $X_{12}$ (Practicing physical exercises), that is, 0.928. Next Factor-VI has high absolute correlation with variable $X_{10}$ (Encouraging mutual consultation between individuals for purposes of redefining the job), $X_6$ (Participating wellness programmes like exercise, mediation, relaxation techniques as a group) that is, 0.964 .0.953.

Finally, Factor-VII has high absolute correlation with $X_{15}$ (Superiors Support) that is, 0.920 and so on.

### 5.7 DISCRIMINANT FUNCTION ANALYSIS

(i) Classification Results

The function using the variables selected in the analysis classified 80 percent of the cases correctly in the respective groups. It is found that the Discriminant function analysis was applied to the respondents on low user and high user. The following factors significantly discriminate the two users. They are Gender, Age, Monthly salary, Designation, Area of responsibility, Location, and Number of dependents.

### 5.8 OTHER FINDINGS

(i) The level of organizational commitment was moderate, with relatively higher variability in affective commitment. Mean value was highest for Continuance commitment indicating employees are staying back with the organization because of the cost of leaving the organization or it’s too much trouble to go somewhere else.
(ii) The IT employees were showing only a moderate level of job satisfaction. Amongst the items comprising the scale for job satisfaction, the items with highest satisfaction levels were related to the social aspects of the job, working conditions (excluding working hours), interest (from intrinsic aspects of the job), job security, communication, and ease of the job. On the other hand, employees had lowest satisfaction levels for working hours, supervision, appreciation from management, and salary. It shows that IT employees are dissatisfied with the working hours, supervision, appreciation from management and the salary they are getting.

(iii) To increase the Job satisfaction and commitment, it is very important to identify the motivational factors. The most important motivational factors for IT employees were high salaries and wages, promotion/growth, job security, interesting work, and appreciation and recognition of work.

5.9 RECOMMENDATIONS
The following are the recommendations for enhancing the level of job satisfaction of employees in the software industry:

(i) **Job Security**: In the current economic climate, with widespread job losses across industries and talk of more layoffs, it is noteworthy that employees ranked job security, benefits and compensation among their top contributors to job satisfaction. These aspects might be considered the primary reason for employees show up for work every day. As economic indicators change from one year to the next, there are also fluctuations in the aspects of job satisfaction that employees and software employee professionals view as most important to overall employee job satisfaction.

Job security as an aspect of job satisfaction was more important to male employees than to female employees. Employees from medium- and large-staff-sized organizations, compared with those from small staff-sized organizations, were more likely to cite job security as a very important contributor to their job satisfaction. So the software companies are expected provide job security to maximum extent and they should stop sudden lay-offs of long term serving employees.
(ii) Work/ Life Balance: Organizations have different definitions of work/ life balance, but the organizational objective is to ensure that employees feel successful both at work and at home. Flexibility to balance work and life, also referred to as work/life balance, is very much important for software professionals. When employees find their work to be meaningful and fulfilling, they are more likely to be satisfied and do their work well. Some people derive meaning through giving back to society. So it is very much important to disseminate between the goal and social responsibilities of the organization to software employees at all level.

(iii) The organization’s reputation: work ethics, values and working conditions—as it relates to job satisfaction. The definition of corporate culture varies, but culture also consists of the collective attitudes and behavior of individuals within the organization the explicit and implicit expectations, norms of behavior and standards of performance. So it should be well defined by the top level of management.

(iv) Rotation of job nature: It is difficult for employees to remain motivated and satisfied with their jobs when their work is not interesting, challenging or exciting. So the nature of job assigned to them should not only be based on business needs but also on their area of excellence.

(v) Employee benefits: Employee benefits are used by organizations to recruit and retain top talent. In times of economic uncertainty, when organizations might not be able to offer their employees pay raises and bonuses, benefits become one of the many tools employers use to increase loyalty, productivity and job satisfaction. Benefits have remained among the top two most important contributors of job satisfaction to employees in general. So the software firms should also provide additional employee benefits like free accommodation, food at cafeteria and periodical tours for retaining top talented employees.

(vi) Compensation: Compensation has consistently remained one of the top job satisfaction aspects most important to most software employees. However, during a period of economic uncertainty, software employees continue to perceive the relationship
with immediate supervisor, communication between employees and senior management and job-specific training as more important to employees than compensation. So the software employers should provide adequate on the job professional improvement training based on project needs. The software concerns should provide the opportunities for variable pay (bonuses, commissions, other variable pay, and monetary rewards for ideas of suggestions). These will ultimately improve job satisfaction.

**Autonomy and independence:** Autonomy and independence refer to the degree to which a job provides an employee with freedom and discretion to make decisions, such as scheduling work and determining how it is to be done. Increased autonomy can give employees a greater sense of responsibility for the outcomes of their work and, in turn, may increase their satisfaction. So the software employers should consider about giving autonomy and independence for improving job satisfaction.

**Relationship with the superior:** The relationship an employee has with his or her supervisor is a central element to the employee’s affiliation to the organization, and it has been argued that employee behavior is largely a function of the supervisor. Similar to senior management, when there are open lines of communication (e.g., encouraging an open-door policy), supervisors can respond more effectively to the needs and problems of their employees. Employees who have a positive relationship with their supervisor, where they feel safe and supported, may be more likely to share with their supervisor job related problems or even personal problems, which can be barriers to employee productivity. It is also important that supervisors set clear expectations and provide feedback about work performance so as to avoid any potential frustrations. So the supervisors in the software industry should help their juniors and team mates.

### 5.10 Future Directions of Research

1. A comparative study of job satisfaction could be made between Bengaluru and Kochi employees
2. A study on the relationship between human resources management practices and organizational commitment of IT employees.
iii. A study on the relationship between job satisfaction, organizational commitment and turnover intention among IT professionals can be undertaken.

iv. A comparative study could be made between Indian and foreign software employees of IT sector.

5.11 CONCLUSIONS

It is the HR job alone to champion and sphere head day today affairs. That is to be effective; HRM practices must be grounded into two ways. First, they must reflect company-wise commitments as to how it will manage and relate to its employees.

Secondly, HR must implement these commitments so that the ideals of the enterprise and deeds of its agents are congruent. In order to ensure a consistent flow of manpower in the future, the IT industry needs to work with the Government to introduce courses at school level and at college level, which are in line with the requirements of the software professionals.

India has one of the largest pools of English speaking graduate work force. The challenge of the software industry is not employment but employability. If all the suggestions given in the study are carried out by the stake holders of the IT sector, then it will reach its new heights in the near future.