CHAPTER - 3

RESEARCH METHODOLOGY

In today’s hyperactive and fiercely competitive workforce market, it is a challenge for the IT Companies to find talented employees. And after finding those talented people, inevitably, the key concern for the employers is how to retain them when multiple offers from other organizations are available. Hence through the present study, the researcher tries to find out the answer of aforesaid question with the help of talent management practices. Certain objectives were formulated and for the achievement of those objectives, a well directed and interiorized plan of action was followed. Here this plan of action is termed as research methodology, which was started with the inception of the idea of selection of the topic for research to implementation of research findings. Thus, this chapter is devoted to give a detailed statement of the certain steps taken in conducting the study. This study started with the formulation of the objectives.

3.1 Objectives of the Study

The present study sought to attain the following objectives:

1. To identify and evaluate the existing status of talent management practices in selected IT companies.

2. To identify and evaluate the factors affecting talent management practices.

3. To find out the relationship between talent management practices and employees effectiveness.

4. To identify and evaluate the obstacles faced in effective implementation of talent management practices.

5. To recommend practical suggestions to improve upon effectiveness of talent management practices.

3.2 Research Hypotheses

On the basis of the objectives, various hypotheses have been developed in the present study. These individual hypotheses have been discussed and tested in chapter 5, 6 and 7.
3.3 Research Design

For any type of research, research design always works as the heart and soul. It outlines that how the research will be conducted, how it will guide data collection, data analysis and reporting of the findings. Research design for the present study was exploratory cum descriptive. The researcher describes the present conditions and explored the different dimensions of talent management.

3.4 Research Method

In the present study, quantitative as well qualitative, both type of the research methods were applied as the study was exploratory as well as descriptive. First of all the researcher explored the factors with the help of literature review and exploratory factor analysis technique and further validate them by using confirmatory factor analysis technique.

3.5 Scope of the Study

The study was confined to the workforce of the six IT multinational companies working in National Capital Resign in India. However, the study was restrained with a sample size of 600 employees working in above mentioned companies. The study identified and evaluated the factors affecting the talent management practices and their relationship with employee’s effectiveness. It also identified and evaluated the problems faced by the IT Companies in effective implementation of the talent management practices.

3.6 Significance of the Study

The present study contributes in the identification and evaluation of factors affecting talent management practices in IT Sector and their relationship with employee effectiveness. Furthermore, it also finds major problem faced in the effective implementation of TM in IT Sector. From the results of this study, it will be of great benefit to the IT Sector as well as to the academician. By taking the help of this study, IT Sector can improve their talent management in a better way and the target of reduction in talent attrition may be achieved. This study might contribute to a better understanding in attraction of talent, identification of talent, development of talent, engagement of talent and retention of talent. The findings of this study are not bound to benefit the employers only, but also to the employees as well. Finally, academicians can understand the conceptual texture of talent management in a more
readily way and it may work as an input for the future researchers who would like to pursue the research further on given particular topic.

3.7 Sample Design

Every research or study based on universe is taken up by the researcher through sampling mechanism because it is a tedious job for a single researcher to study the whole universe. So the only way is to take recourse of sampling. A sample is representative of the universe.

3.7.1 Universe of the Study

The universe for the present study included all IT Companies working in India.

3.7.2 Population of the Study

The population for the present study consisted all IT Companies working in National Capital Region of India.

3.7.3 Sample Unit

Sample unit for the present study was the employees of six selected IT Multinational Companies working in NCR in India. The companies were chosen on the basis of the highest number of employees among the top ten IT MNC’s in India.

Table 3.1 List of Sampled Companies

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Name of Company</th>
<th>No. of Employees (Worldwide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IBM</td>
<td>379,592 (Dec, 2014)</td>
</tr>
<tr>
<td>2</td>
<td>Accenture</td>
<td>358,000 (Aug, 2015)</td>
</tr>
<tr>
<td>3</td>
<td>TCS</td>
<td>335,620 (Aug, 2015)</td>
</tr>
<tr>
<td>4</td>
<td>Wipro</td>
<td>168,396 (April, 2015)</td>
</tr>
<tr>
<td>5</td>
<td>Microsoft</td>
<td>118,554 (March, 2015)</td>
</tr>
<tr>
<td>6</td>
<td>HCL Technologies</td>
<td>106,107 (Sep, 2015)</td>
</tr>
</tbody>
</table>

NCR is the largest urban agglomeration by population and largest by the area. The resign of NCR has turned in the area of e-commerce. Gurgaon, Delhi and Noida are the primary cities with numerous companies operating IT sector. IT sector is a heterogeneous and increasingly
growing offshore market. As the Indian IT industry is on a momentum, there is need to attract and retain the talent to achieve the desired goals of the organization.

3.7.4 Sample Size

For the fulfillment of the objectives of study, primary data was collected from a total sample size of 600 respondents from six IT companies of NCR.

3.7.5 Sampling Techniques

For the present study convenience sampling technique was followed for collection of data.

3.8 Data Collection

Both types of data i.e. primary and secondary were used. The primary data was collected to know the present status of talent management practices in IT Sector, to identify and evaluate the factors affecting talent management practices and their relationship with employee's effectiveness and for the identification and evaluation of the problems faced in effective implementation of talent management practices. Published books, journals and periodicals along with manuals and reports of different companies constitute the secondary source of information which was used at different stages of the study. Primary data was collected through survey method by using a structured questionnaire which was administrated to elicit the required information from the sampled respondents. Prior to the commencement of the data collection procedure, a brief introduction about the study was given to the respondents so that they can fill up the questionnaire more precisely. The participants were assured that all the information collected through was solely for the attainment of the objectives of the study and their identities would stay confidential. Questionnaires were filled through personally as well as through on-line mode by preparing questionnaire on Google Doc. (On-line survey). The questionnaire used to elicit information from the respondents, comprised of five parts i.e. Part A to Part E. Part A consisted demographic profile of the respondents i.e. age, annual income, gender, education etc. Part B contained ten talent management practices related questions which were extracted from the literature review. These questions were asked by using nominal scale i.e. yes and no. Part C deals with the questions related with the factors affecting talent management practices. 35 statements were derived with the help of thorough literature review. These items were further put on a five-point scale ranging 1 to 5. In the scale 1 stands for strongly agree, 2 for agree, 3 for neutral, 4 for disagree and 5 for strongly disagree. Respondents were asked to assign number to these items from 1 to 5. 13 variables related to employee effectiveness were extracted from the extensive literature review which was included in Part D of the questionnaire. These items were further put on a
five-point interval scale anchored from 1 to 5 (strongly agree to strongly disagree). Respondents were asked to assign number to these items ranging 1 to 5. Under Part E of the questionnaire, there were seven variables which describe the problems in the effective implementation of talent management practices in IT Sector. These problems were identified with the help of thorough literature review. Further, these problems were put on an ordinal scale (ranking order) and the respondents were asked to assign ranks to these seven problems faced by them ranging from least likely to be faced (1) to most likely to be faced (7). After the development of the survey instrument (questionnaire), pilot survey has been done. 70 respondents were participated in the survey. At the time of pilot survey, reliability of scale was checked with the help of Cronbach’s alpha coefficient. Basically, Cronbach's alpha is a test to measure the internal consistency of the developed scale, that is, how closely related a set of variables are as a group. The value of Cronbach’s alpha was found more than .6 which is considered as good Malhotra and Dash (2011). Few modifications have been done after the pilot survey to finalize the questionnaire. After the completion of pilot survey, the data collection procedure was further preceded. 600 targeted respondents were participated in the survey but after the elimination of the partially filled questionnaires, 510 were the usable questionnaires. Hence the response rate was 85 percent. The demographic profile of the participants is given below:

3.8.1 Demographic Profile of the Respondents

This profile of the participants is looked upon in terms of their age, gender, marital status, education, designation and annual salary which are clearly represented with the help of tables.

Table 3.2 Age of Respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upto 34 Years</td>
<td>346</td>
<td>67.8</td>
<td>67.8</td>
<td>67.8</td>
</tr>
<tr>
<td>35-54 Years</td>
<td>145</td>
<td>28.4</td>
<td>28.4</td>
<td>96.3</td>
</tr>
<tr>
<td>Above 54 Years</td>
<td>19</td>
<td>3.7</td>
<td>3.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey and Calculations through IBM SPSS Statistics 21
Figure 3.1 Age of Respondents

The table 3.2 and figure 3.1 depicts the various age groups of respondents, who participated in survey and with the help of different generation of workforce working in IT Companies, the researcher tries to describe it in a better way as different workforce generation have different expectations. On the basis of literature review the researcher has found that basically in IT Sector there are three age groups or generations of workforce i.e. Baby Boomers, Gen X and Gen Y.

- **Baby Boomers (born between 1946-1960)**

  Baby boomers are those employees in the workforce of IT Companies who born between 1946 and the mid 60’s or who’s age is above 54 years approximately in 2015. These employees are considered as the hard-working and productive employees. In the present study 3.7 percent of the employees belonged to baby boomers generation which was least among all generations.

- **Generation X (born between 1961-1980)**

  Generation X employees are those employees who born between 1961 to 1980’s or the employees who’s age lies between 35-54 years approximately category as in 2015. These employees find stuck themselves in between the aged workforce who do not want to get retired and the Gen Y employees but these employees are viewed as the best team players. In the present study, 28.4 percent of the respondents were of Generation X.
• **Generation Y (born between 1981-2000)**

These employees are also known as the Millennials. The employees born between 1981 and 2000 are considered as Gen Y employees or up to 34 years approximately as in 2015. This age group of workforce is totally comfortable with the technological advancements. This generation is creative, smart, work-oriented, career-oriented and achievement oriented. In this study, largest (67.8 percent) number of employees were of Generation Y.

### Table 3.3 Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>315</td>
<td>61.8</td>
<td>61.8</td>
<td>61.8</td>
</tr>
<tr>
<td>Female</td>
<td>195</td>
<td>38.2</td>
<td>38.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey and Calculations through IBM SPSS Statistics 21

![Gender of Respondents](image)

Figure 3.2 Gender of Respondents

A total of 510 responses were used for the data analysis purpose. The table 3.3 and figure 3.2 shows that out of 510 participants, 315 (61.8 percent) were the male respondents which is much higher than the female respondents. The female respondents participated in the survey were 38.2 percent of the total respondents.
Table 3.4 Marital Status of Respondents

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>227</td>
<td>44.5</td>
<td>44.5</td>
<td>44.5</td>
</tr>
<tr>
<td>Unmarried</td>
<td>283</td>
<td>55.5</td>
<td>55.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey and Calculations through IBM SPSS Statistics 21

Figure 3.3 Marital Status of Respondents

With the help of percentage and frequency analysis the table 3.4 and figure 3.3, the study shows that 55.5 percent of the respondents were unmarried whereas 44.5 percent respondents were married.

Table 3.5 Education of Respondents

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>306</td>
<td>60.0</td>
<td>60.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>166</td>
<td>32.5</td>
<td>32.5</td>
<td>92.5</td>
</tr>
<tr>
<td>Others</td>
<td>38</td>
<td>7.5</td>
<td>7.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey and Calculations through IBM SPSS Statistics 21
Figure 3.4 Education of Respondents

The table 3.5 and figure 3.4 shows that the highest (60 percent) number of employees were from graduation group whereas 32.5 percent employees were post graduate and 7.5 percent of employees were from other courses.

### Table 3.6 Annual Salary of Respondents

<table>
<thead>
<tr>
<th>Annual Salary (In lakhs)</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,40,000 to 3,60,000</td>
<td>79</td>
<td>16.3</td>
<td>16.3</td>
<td>16.3</td>
</tr>
<tr>
<td>Above 3,60,000 to 4,80,000</td>
<td>164</td>
<td>32.2</td>
<td>32.2</td>
<td>48.4</td>
</tr>
<tr>
<td>Above 4,80,000 to 6,00,000</td>
<td>123</td>
<td>23.3</td>
<td>23.3</td>
<td>71.8</td>
</tr>
<tr>
<td>Above 6,00,000 to 7,20,000</td>
<td>30</td>
<td>5.9</td>
<td>5.9</td>
<td>77.6</td>
</tr>
<tr>
<td>Above 7,20,000</td>
<td>114</td>
<td>22.4</td>
<td>22.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey and Calculations through IBM SPSS Statistics 21
The table 3.6 and figure 3.5 is representing the annual salary package of the employees (sample respondents) working in sampled IT Companies in which highest (32.2 percent) number of employees were getting above 3, 60,000 to 4, 80,000 rupees per annum whereas 5.9 percent of employees were said that they belongs to above 6, 00,000 to 7,20,000 rupees annual salary range which is least percentage of all. Moreover, the above table also illustrated that 16.3 percent of employees revealed that their annual salary range is 2, 40,000 to 3, and 60,000. Additionally, out of 510, 123 respondents said that their annual salary lies between 4, 80,000 to 6, 00,000 while 22.4 percent of the respondents were getting above 7, 20,000 rupees of annual salary.

### Table 3.7 Designation of Respondents

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Level Employees</td>
<td>203</td>
<td>39.8</td>
<td>39.8</td>
<td>39.8</td>
</tr>
<tr>
<td>Entry Level Employees</td>
<td>307</td>
<td>60.2</td>
<td>60.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>510</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey and Calculations through IBM SPSS Statistics 21
Designation of Respondents

As we can see with the help of table 3.7 and figure 3.6 which shows a largest (60.2 percent) number of employees were from entry level whereas 39.8 percent of the employees were from the middle level in the company.

And once the data collection procedure has been completed from the targeted sample, data coding and feeding was done in IBM SPSS Statistics Version 21.

3.9 Data Analysis

The data collected by means of the questionnaire was further processed with the help of IBM SPSS Statistics version 21 and IBM SPSS AMOS (Analysis of Moment Structures) version 21 Software. The analysis of data was started with checking of reliability and validity of the scale. Validity of the scale was checked with the help of convergent validity and discriminant validity whereas Cronbach's alpha measured the reliability. Various univariate and multivariate techniques were used for the analysis of gathered data for the attainment of the objectives. Descriptive statistics, Factor Analysis, Pearson’s Correlation, Multiple Regression, Rank Correlation test for agreement in multiple judgments, Mann-Whitney test and Kruskal-Walis test were used.

3.9.1 Reliability and Validity Analysis

The validity and the reliability depend upon the results of model fit indices, Cronbach’s alpha value; construct validity, convergent validity and discriminant validity Malhotra and Dash (2011).
**Cronbach’s alpha**

Cronbach's alpha coefficient can be termed as a function of the number of test variables and average inter-correlation among the variables. The conceptual formula for the standardized Cronbach's alpha is given below:

\[
\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}
\]

Here ‘N’ represents the number of items/variables, \(\bar{c}\) is average inter-item/variable covariance among the items/variables and \(\bar{v}\) equals the average variance. If we increase in number of variables, increase will be in Cronbach's alpha value. Moreover, alpha value will be low, if the average inter-item correlation is low. Therefore, we can say that as there is increase in average inter-item correlation, the value of Cronbach's alpha will increase as well. The value of Cronbach’s Alpha varies from 0 to 1. The Cronbach's alpha value of .6 or more is considered as acceptable and good Malhotra and Dash (2011). In the present study all the values of Cronbach’s alpha were calculated by using IBM SPSS version 21. All the values of alpha were greater than .6.

**Convergent Validity**

With the help of convergent validity, we measure the extent or the degree to which the scale correlates positively with the other measures of the same latent variable. Hence, the value of the factor loadings gives evidence of convergent validity Malhotra and Dash (2011). All the factor loadings should be greater than 0.5 and statistically significant. In the present study all the factor loadings of the items were statistically significant and greater than 0.5. Another measure of convergent validity is AVE (Average Variance Explained) which is widely used. AVE is the variance in the observed items, which is explained by the latent construct. The value of AVE varies from 0 to 1. AVE of .5 or greater than .5 is considered as satisfactory convergent validity. In the present study all the values of AVE were satisfactory which indicates that convergent validity was also satisfactory and the scale was free from all kind of validity issues.

**Discriminant Validity**

According to Malhotra and Dash (2011), discriminant validity shows that the latent variable is distinct from the other latent variables and contributing in a unique way.
To check the discriminant validity, we should check the cross loadings. The entire cross loadings of the measured items should be zero. Another measure of discriminant validity is that a latent variable should explain its observed items better than any other construct. This test is conducted by checking that the AVE is greater than MSV and ASV. In the present study there was no cross loading. The value of AVE was satisfactory and greater than ASV and MSV.

3.9.2 Model Fit Indices

There are several parameters to assess the fitness of model. Goodness of fit indices shows how well the specified model is representing the covariance matrix among the measured indicator items. Closer the values, better the model fit. The goodness of fit is measured with the help of GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index), NFI (Normed Fit Index) etc. Whereas the badness of the model is also measured by the badness fit indices. Badness of fit indices measures the errors. The lower the indices, better the model is said to be. Different authors stated different criterion for goodness of fit and badness of fit indices. Hair et al (2010) and Malhotra and Dash (2011) stated some standard fit indices which are discussed here below with their perspective criterions.

- **Chi-square ($\chi^2$) Statistics and Normed Chi-square Statistics**

Chi-square statistics is a mathematical function which represents the difference between the observed and estimated covariance matrices Hair et al (2010). It is the only statistically based measure of overall fit. The smaller the statistics value, better the model fit is said to be. The limitation of chi-square statistics is that it is highly influenced by the sample size. Therefore, the researcher should complement the chi-square statistics value with other measures of goodness of fit of a model. The impact of sample size on measurement Model Chi-Square can be minimized with help of CMIN/df i.e. normed or relative chi-square Wheaton et al (1977). Although there is no consensus regarding an acceptable ratio for this statistic, different recommendations have been given ranging from as high as 5.0 Wheaton et al (1977) to as low as 2.0 Tabachnick and Fidell, (2007) Hooper et al (2008). In the present study the overall five factor model resulted in chi-square value of 1001.971 with 550 degrees of freedom and a p-value of .000. The relative chi-square (CMIN/DF) value for the overall model was 1.822 (1001.971/550). The minimum was achieved, was also a notation in the model.
• **GFI (Goodness of Fit Index)**

The Goodness-of-Fit index (GFI) was created by Jöreskog and Sorbom. It is considered as an alternative to the Chi-Square statistics which calculates the proportion of variance that is accounted by the estimated population covariance Tabachnick and Fidell (2007). Jöreskog–Sörbom GFI is a nonstatistical measure of goodness of fit in a model Ho (2006). A general formula for the calculation of GFI is given below:

\[
GFI = 1 - \frac{C_{\text{res}}}{C_{\text{tot}}}
\]

In the above formula \(C_{\text{res}}\) estimate the residual and \(C_{\text{tot}}\), total variability in a sample covariance matrix. The numerator is related to the sum of the squared covariance residuals, and the denominator is related to the total sum of squares in the data matrix. Specific calculational formulas depend on estimation method (Jöreskog, 2004). GFI is also affected by the size of sample Kline (2011). The value of GFI lies between 0 to 1 Hooper et al (2008). Nearer the value to 1, better the model fit is said to be. In the present study all the values of GFI were satisfactory.

• **AGFI (Adjusted Goodness of Fit Index)**

In any model, GFI measures the absolute fit whereas AGFI accounts for degree of freedom in model. AGFI varies between 0 and 1 Kline (2011). Generally, value of AGFI is lower than GFI. Value of 0.90 ranges is acceptable for AGFI. This index is also affected by the sample size hence the researcher should not rely only on AGFI for the model fit. Other measures of goodness of fit should be complemented with the statistics of AGFI.

• **NFI (Normed Fit Indices)**

It is one of widely used and original incremental fit indices for model fit measures. NFI is the ratio of the difference in \(\chi^2\) values for specified model and a null model divided by \(\chi^2\) for the null model. The value of NFI varies from 0 to 1 Hooper et al (2008). Values near 1 are considered good. In the present study all the values of NFI were acceptable.

• **CFI (Comparative Fit Index)**

CFI is also a measure of goodness of fit of a measured model. It is a revised form of Normed Fit Index (NFI) which considered the size of sample Byrne (1998) and

\[
CFI = 1 - \frac{\chi^2_M - df_M}{\chi^2_B - df_B}
\]

In the above equation \(M\) stands for the model developed by the researcher and \(B\) for the baseline model. The baseline model is the independent model. When the value of \(\chi^2_M\) is equal to or greater than \(df_M\), depicts that CFI is equal to 1. But do not assume that the value of chi-square for researcher’s model is 0 or the model has perfect fit. The range of CFI is 0 to 1. Closer the value to 1, better the model fit is said to be. In the present study all the values of CFI are acceptable.

- **RMSEA (Root Mean Square Error of Approximation)**

The RMSEA is widely used measure of badness of fit which tells us how well a model fits a population with unknown but optimally chosen parameter estimates (Byrne, 1998). RMSEA explicitly makes an attempt to reduce the errors for both the sample size and model complexity by considering each in computation Hair et al (2010). The values of RMSEA ranging from .05 to .08 are considered acceptable, values ranging from .08 to .10 indicate the mediocre fit whereas the values greater than .10 are considered as the poor fit MacCallum et al (1996), Ho (2006) and Browne & Cudeck (1993).

### 3.9.3 Descriptive Statistics

For the basic analysis in the study, frequency and percentage analysis were used as descriptive statistics. Frequency and percentage analysis is basically a mathematical distribution Malhotra and Dash (2011), in which a count of the number of the response by the respondents associated with different values of a variable was obtained and expression of these counts was done in percentage terms.

### 3.9.4 Factor Analysis

Factor analysis is a technique of data reduction and summarization Malhotra and Dash (2011). In the present study, for the attainment of the desired objectives through the analysis of collected data, EFA and CFA techniques were used. Under exploratory factor analysis, relationship among a set of thirty five interconnected items/variables/statements were identified and further represented in terms of five underlying construct/factors i.e. learning
and developmental skills, compensation and commitment, organizational culture and communication, interpersonal relationship and working environment. Further, confirmatory factor analysis was also used which is a multivariate statistical technique, employed to verify the factor structure of a set of observed variables. It also validated the factors affecting talent management practices with the help of model fit indices and by using different validity measures. In confirmatory factor analysis there were two categories of the variables viz. observed variables and continuous latent variable. An overall measurement model was developed with the help of CFA.

3.9.5 Correlation Analysis

Correlation technique is used to know the relationship between two or more variables. In the present study Pearson’s correlation of coefficient, invented by Karl Pearson was calculated to know the relationship between the factors affecting talent management and employee effectiveness.

3.9.6 Regression Analysis

Correlation technique tells us about the relationship between the variables whereas regression includes the magnitude of relationship. When we want to know the impact of an independent variable on dependent variable, regression technique can be applied. The independent variables are called predictors and the dependent variables are called the outcome. When there is only one predictor, the technique is referred as simple regression and when there are several predictors in the model, the analysis is called multiple regression analysis Field (2013). In the present study multiple regression analysis was used as there were five predictors (factors) and one outcome variable (employee effectiveness).

3.9.7 Rank Correlation Test for Agreement in Multiple Judgments

This test was used to know the consistency between the ranks assigned by the respondents Kanji (2006).

3.9.8 Mann-Whitney Test

It is a non-parametric test which is used to compare the distributions in two conditions or groups and these conditions contain different entities Field (2013). This test is used in ranked data. In the present study Mann-Whitney Test was applied to know the difference in the opinions of respondents towards a variety of problems faced in the effective implementation
of talent management practices in case of two categories (Gender i.e. male and female, Marital Status i.e. married and unmarried etc) of independent variables.

3.9.9 Kruskal-Walis Test

This test is similar to Mann-Whitney test. It is also a non-parametric test which is used on ranked data. The difference between the two is that, Mann-Whitney test is used when two categories of independent variable is given but when there are several groups or categories then Kruskal-Walis test is used (Field 2013). In the present study this test is applied to know the difference in the opinions of respondents towards a variety of problems faced in the effective implementation of TM practices in case of more than two groups (age, annual salary, education, total experience in IT sector, experience in present IT company).

3.10 Limitations of the Study

- The present study has been undertaken only for the IT Companies; therefore, a generalization cannot be made for talent management in other sectors.
- For the attainment of the objectives, the data was collected through the questionnaire only, therefore, element of biasness in the responses cannot be avoided.
- Due to the resources constraints, for the data collection purpose, the top management of the sampled IT Companies was not included in the survey.

3.11 Organization of the Study

- **Chapter 1: Introduction**
  This chapter starts by giving a brief overview about the all related aspects of talent management which entails the meaning of talent, meaning of talent management, significance of talent management, procedure of talent management, factors affecting talent management practices, problems in the effective implementation of talent management practices etc. Moreover, a general review about IT Sector and sampled IT Companies is also included.

- **Chapter 2: Review of Literature**
  This chapter presents an extensive literature survey organized by the researcher in a summarized form. Thereafter, a statement of problem is also given in this chapter which is based upon the research gaps identified by the researcher.

- **Chapter 3: Research Methodology**
  This chapter presents the objectives of the study followed by research design, hypotheses of the study, research method, scope of the study, significance of the
study, data collection procedure, demographic profile of sampled respondents, data analysis procedure including data analysis tools and techniques i.e. descriptive statistics, factor analysis, correlation analysis, regression analysis, rank correlation test for agreement in multiple judgments, Mann-whitney test and Kruskal-Wallis test and the limitations of the study. How the scale reliability and validity was tested in the study, is also mentioned in this chapter. Additionally the chapterization scheme is also specified in chapter entitled “research methodology”.

- **Chapter 4: Existing Status of Talent Management Practices in Selected IT Companies**
  This chapter starts with discussion about the talent management practices in selected IT Companies. Under this chapter attrition rates of different selected companies were presented. Furthermore, the opinions of the sampled respondents about the talent management practices are also represented in tabular form by using frequency and percentage analysis.

- **Chapter 5: Factors affecting Talent Management Practices**
  This chapter starts with the descriptive analysis of thirty five statements constituting the factors affecting talent management practices. Furthermore, by using these thirty five statements, five factors namely learning and developmental skills, compensation and commitment, organizational culture and communication, interpersonal relationship and working environment were extracted. Exploratory factor analysis was used for those factors development. These factors were further confirmed by using confirmatory factor analysis with the help of different model fit indices, reliability analysis, construct validity, discriminant validity etc. A five factor measurement model is developed under this chapter.

- **Chapter 6: Relationship between Talent Management Practices and Employees Effectiveness**
  This chapter starts with the frequency and percentage analysis of thirteen statements constituting employee effectiveness. Pearson’s correlations coefficient among employee effectiveness and the five factors which were identified and evaluated under previous chapter was calculated in this chapter. To know the impact of those factors on employee effectiveness, multiple regression technique was also applied and the results of it have been discussed in this chapter.
• **Chapter 7: Obstacles faced in effective implementation of Talent Management Practices**
  This chapter starts with the discussion about the seven obstacles (identified from literature review) by using frequency and percentage analysis. Afterwards, rank correlation test for agreement in multiple judgments was applied to know whether these problems are independent to each other or not. To know the demographic categories difference in the opinions, Kruskal-Walis test and Mann-Whitney test was also applied under this chapter.

• **Chapter 8: Findings and Suggestions**
  This is the last chapter of thesis. On the basis of the analysis of the gathered data, findings are discussed in this chapter. Additionally, practical suggestions to improve upon effectiveness of talent management practices derived from the analysis are also taken up in this chapter.