Analysis and findings

Introduction:

From the review of existing literatures and a thorough study on performance appraisal, it becomes clear that performance appraisal has made a significant contribution towards development of man management relations in the organizations during the post independence era in India. Performance appraisal system acts as a driver to organizations to create a contented, committed and competent reservoir of a workforce that delivers value addition in service and product to the customers and societal members and to make the organizations enable to face challenges and obtain competitive advantage in the market.

In the IT companies, the importance of performance appraisal system is given high weightage as the whole activities under various project system work in a time bound program, that needs accomplishment through the people's performance activity and for which a continuous review system operates in a planned activities.

So, the above deliberation, makes it is clear that the organizational goal is achieved through effective utilization of human capital, increasing productivity, delighting customers and generating an innovation oriented organization culture, high performing, committed, loyal workforce and integrated team to provide
companies competitive advantage and confront challenges to sustain, grow and develop.

Employees are given an individual target/goal for their attainment during the review period and through the performance appraisal system, this performance/activities are assessed to find out individual employees competence to perform with the existing level of skill activities. A feedback system is also existing in the organizations, particularly in IT sector to make the employee know about the level employee performance and also to take necessary measures to strengthen/reinforce the deficit areas.

This system in the performance appraisal arena develops people knowledge area vis-à-vis their skill and ability level to make them enable to sustain within the system. The system thus facilitates a climate of continuous learning, growth and development of the employees to match present day requirement of the company and in the process, the performers, and achievers, develop themselves in order to change the performance behaviour in a paradigm shift of organizational activities. So, the system benefits the organization to choose the job-fit people in a project structured organization.

It is thus felt to examine the impact/influence of performance appraisal on the behavioural manifestation of executives of IT industry and also to study the effect on HR decision administration towards effective utilization of human resources.
5.1 **Reliability Analysis**

The objective of an exploratory study is always to measure the data in a precise and in an unambiguous way. Hence, a good research design is characterized by flexibility, appropriateness, efficiency by minimizing the bias and maximizing the reliability. But due to several reasons it is impossible to avoid errors in measurement. Errors generally creep into the study of the sources like: respondents, situation, measurer, research instruments. A sound measurement is featured by validity, reliability and practicability of the measuring tool. Validity indicates the utility of the measuring instrument. It indicates the degree to which the measuring instrument measures what it is supposed to measure. There are three types of validity: internal validity, external validity, and construct validity. Internal validity refers to the confidence in making cause and effect conclusion from the study. External validity refers to the degree in generalizing the results of the study. Construct validity is the degree to which the study represents what it was aimed to do. Reliability is the degree to which a measurement is free from measurement error. An examination of reliability is an easier and popular method than the test of validity. An instrument satisfying the reliability test confirms the absence of transitory and situational factor.

The tool to measure internal consistency/inter-relatedness of the items under the study was developed by Lee Cronbach in 1951¹. Cronbach alpha is used to measure the internal consistency of scale, particularly when a Likert type

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¹ (Tavakol & Dennick, 2011)
scale is used. Cronbach alpha reliability coefficient usually ranges between 0 and 1. Though the coefficient does not have exact lower limit, but various research studies indicated that more the value of cronbach alpha is nearer to 1, more is the internal consistency. Cronbach alpha is conducted on the entire survey instrument and on each subscale.

The table 5.1 shows the reliability statistics for 109 items the cronbach’s alpha is calculated as 0.971, which indicates a high level of internal consistency of the scale.

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.971</td>
<td>.971</td>
<td>109</td>
</tr>
</tbody>
</table>

Table 5.1 Reliability Statistics of the total standardized items

Source: Primary data

The summary of 109 items comprising the scale from 1= strongly disagree to 5= strongly agree for each item is shown in the table 5.2 below with mean value 362.61 and variance 2745.297, which indicates that the trend for the total scale value in average leaned between 3 to 4 for each item.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Variance</th>
<th>Std. Deviation</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>362.61</td>
<td>2745.297</td>
<td>52.396</td>
<td>109</td>
</tr>
</tbody>
</table>

Table 5.2 Scale Statistics

Source: Primary data

The following table provides the reliability value for each factor constructed by the items as proposed under the study during the administration of questionnaires:

2 (Gliem & Gliem, 2003)
<table>
<thead>
<tr>
<th>Factors</th>
<th>Variables</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals and Expectations</td>
<td>G1</td>
<td>Clear communication of corporate plan and business goals</td>
</tr>
<tr>
<td>(Cronbach alpha = 0.902)</td>
<td>G2</td>
<td>Self acceptance of the goal</td>
</tr>
<tr>
<td></td>
<td>G3</td>
<td>Mutual goals setting</td>
</tr>
<tr>
<td></td>
<td>G4</td>
<td>Acceptance of individual KRA criteria</td>
</tr>
<tr>
<td></td>
<td>G5</td>
<td>Discussions over constraints to achieve KRA’s</td>
</tr>
<tr>
<td></td>
<td>G6</td>
<td>Scope to assert for support to understand the KRA’s</td>
</tr>
<tr>
<td></td>
<td>G7</td>
<td>Promoting performance through the goal setting process</td>
</tr>
<tr>
<td>Action and Implementation</td>
<td>AI1</td>
<td>Allocation of sufficient resources towards the process and method</td>
</tr>
<tr>
<td>(Cronbach alpha = 0.770)</td>
<td>AI2</td>
<td>Prompt guidance on process knowledge</td>
</tr>
<tr>
<td></td>
<td>AI3</td>
<td>Appropriate action plan</td>
</tr>
<tr>
<td>Evaluation Process</td>
<td>EP1</td>
<td>Motivation from the scope of self evaluation</td>
</tr>
<tr>
<td>(Cronbach alpha = 0.793)</td>
<td>EP2</td>
<td>Rating on personality factor and attributes</td>
</tr>
<tr>
<td></td>
<td>EP3</td>
<td>Active role of HR Department</td>
</tr>
<tr>
<td></td>
<td>EP4</td>
<td>Efficiency at evaluation performance level</td>
</tr>
<tr>
<td></td>
<td>EP5</td>
<td>Evaluation of behavior beyond job description</td>
</tr>
<tr>
<td></td>
<td>EP6</td>
<td>Consistency in evaluation process</td>
</tr>
<tr>
<td></td>
<td>EP7</td>
<td>Supervisor’s interest and confidence in appraisal process</td>
</tr>
<tr>
<td></td>
<td>EP8</td>
<td>Regular monitoring of performance</td>
</tr>
<tr>
<td>Review and Monitoring Process</td>
<td>RM1</td>
<td>Reliable feedback system</td>
</tr>
<tr>
<td>(Cronbach alpha = 0.874)</td>
<td>RM2</td>
<td>Proper attention and time spent in review discussions</td>
</tr>
<tr>
<td></td>
<td>RM3</td>
<td>Careful Performance Review discussions</td>
</tr>
<tr>
<td></td>
<td>RM4</td>
<td>Open communication in review discussions</td>
</tr>
<tr>
<td></td>
<td>RM5</td>
<td>Identification of individual developmental need</td>
</tr>
<tr>
<td></td>
<td>RM6</td>
<td>The counseling on mistakes</td>
</tr>
<tr>
<td></td>
<td>RM7</td>
<td>Promotion of mutual relationship and trust</td>
</tr>
<tr>
<td></td>
<td>RM8</td>
<td>Exercise SWOT analysis for future project</td>
</tr>
<tr>
<td></td>
<td>RM9</td>
<td>Identification of competency area</td>
</tr>
<tr>
<td>Applications</td>
<td>APP1</td>
<td>Proactive implementation of appraisal data by HR department</td>
</tr>
<tr>
<td>(Cronbach Alpha = 0.597)</td>
<td>APP2</td>
<td>Use of appraisal in job redesign decisions</td>
</tr>
<tr>
<td></td>
<td>APP3</td>
<td>Use of appraisal data for rewards, recognition of the high performers</td>
</tr>
<tr>
<td></td>
<td>APP4</td>
<td>Promotion of continuous learning</td>
</tr>
<tr>
<td></td>
<td>APP5</td>
<td>Use of appraisal data for incentive scheme decisions.</td>
</tr>
<tr>
<td></td>
<td>APP6</td>
<td>Influence of appraisal system on individual and team behavior</td>
</tr>
<tr>
<td></td>
<td>APP7</td>
<td>Negative ratings on mistakes in challenging and risky job</td>
</tr>
<tr>
<td></td>
<td>APP8</td>
<td>Positive rating on innovation</td>
</tr>
<tr>
<td>Management Practice</td>
<td>MP1</td>
<td>Communication of changing intermediary goals and expectations by top management</td>
</tr>
<tr>
<td>(Cronbach alpha = 0.874)</td>
<td>MP2</td>
<td>Fairness and accuracy in rating</td>
</tr>
</tbody>
</table>
### Table: 5.3 Selection of Items and reliability study

<table>
<thead>
<tr>
<th>Factors</th>
<th>Variables</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha = 0.815</td>
<td>MP3</td>
<td>Regular review of goals and performance achievement</td>
</tr>
<tr>
<td></td>
<td>MP4</td>
<td>Review of implementation of Development plan</td>
</tr>
<tr>
<td></td>
<td>MP5</td>
<td>Performance ratings made by the supervisor</td>
</tr>
<tr>
<td></td>
<td>MP6</td>
<td>Awareness of information of individual appraisal file</td>
</tr>
<tr>
<td></td>
<td>MP7</td>
<td>Scope of appeal</td>
</tr>
<tr>
<td></td>
<td>MP8</td>
<td>Identification of skill sets for allocation of job</td>
</tr>
<tr>
<td>Supervisor's Role (Cronbach alpha = 0.915)</td>
<td>SR1</td>
<td>Clear communication of expectation by the team leader/ project leader</td>
</tr>
<tr>
<td></td>
<td>SR2</td>
<td>Trusts between employee and the team leader/ project leader</td>
</tr>
<tr>
<td></td>
<td>SR3</td>
<td>Continuous mentoring by team leader</td>
</tr>
<tr>
<td></td>
<td>SR4</td>
<td>Authenticity of judgment by team leader</td>
</tr>
<tr>
<td></td>
<td>SR5</td>
<td>Careful observation of individual competency</td>
</tr>
<tr>
<td></td>
<td>SR6</td>
<td>Reduction in bias and encouragement to form teams</td>
</tr>
<tr>
<td></td>
<td>SR7</td>
<td>Resolve conflict and reduction in politics within the team</td>
</tr>
<tr>
<td></td>
<td>SR8</td>
<td>Team leader as role model</td>
</tr>
<tr>
<td>Management Policy (Cronbach alpha = 0.581)</td>
<td>MPOL1</td>
<td>Relevance of training and development decisions with the skill requirement</td>
</tr>
<tr>
<td></td>
<td>MPOL2</td>
<td>Regularity in mentoring and guidance</td>
</tr>
<tr>
<td></td>
<td>MPOL3</td>
<td>Promotions decisions</td>
</tr>
<tr>
<td></td>
<td>MPOL4</td>
<td>Disciplinary processes &amp; procedures</td>
</tr>
<tr>
<td></td>
<td>MPOL5</td>
<td>Salary and increment decisions administration</td>
</tr>
<tr>
<td></td>
<td>MPOL6</td>
<td>Autonomy in doing the job</td>
</tr>
<tr>
<td></td>
<td>MPOL7</td>
<td>Fast track promotion</td>
</tr>
<tr>
<td>Organizational Culture and Climate (Cronbach alpha = 0.725)</td>
<td>OCC1</td>
<td>Treating employees as resources regardless of race and gender bias</td>
</tr>
<tr>
<td></td>
<td>OCC2</td>
<td>Encouragement for good works</td>
</tr>
<tr>
<td></td>
<td>OCC3</td>
<td>Culture of positive confrontation</td>
</tr>
<tr>
<td></td>
<td>OCC4</td>
<td>Get together programs for employee family member arranged by company</td>
</tr>
<tr>
<td></td>
<td>OCC5</td>
<td>Organizational supports towards team building activity</td>
</tr>
<tr>
<td></td>
<td>OCC6</td>
<td>Practice of encouraging the Innovative Ideas</td>
</tr>
<tr>
<td></td>
<td>OCC7</td>
<td>Excusing mistakes in a risky job are</td>
</tr>
<tr>
<td></td>
<td>OCC8</td>
<td>Empowerment to choose the job</td>
</tr>
<tr>
<td>Employee engagement, attitude, competence (Cronbach alpha = 0.868)</td>
<td>EEA1</td>
<td>Membership of the organization</td>
</tr>
<tr>
<td></td>
<td>EEA2</td>
<td>Generating a feeling of motivation to see the success of the company</td>
</tr>
<tr>
<td></td>
<td>EEA3</td>
<td>Employees involvement in the decisions that is related to them</td>
</tr>
<tr>
<td></td>
<td>EEA4</td>
<td>Reference to friends to join this company</td>
</tr>
<tr>
<td></td>
<td>EEA5</td>
<td>Desiring to serve this company till retirement</td>
</tr>
<tr>
<td></td>
<td>EEA6</td>
<td>Independence to use skills and abilities in job</td>
</tr>
<tr>
<td></td>
<td>EEA7</td>
<td>Right of speaking mind without fear of negative consequences</td>
</tr>
<tr>
<td></td>
<td>EEA8</td>
<td>Team commitment towards organizational goal</td>
</tr>
</tbody>
</table>
### Table: Selection of Items and reliability study

<table>
<thead>
<tr>
<th>Factors</th>
<th>Variables</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEA9</td>
<td>Use of appraisal feedback in improving job performance</td>
<td></td>
</tr>
<tr>
<td>EEA10</td>
<td>Scope of total development</td>
<td></td>
</tr>
<tr>
<td>EEA11</td>
<td>Feeling of being motivated from performance appraisal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role of Team Members (Cronbach alpha = 0.914)</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM1 Membership of the team</td>
<td></td>
</tr>
<tr>
<td>TM2 Culture of openness and honesty within team</td>
<td></td>
</tr>
<tr>
<td>TM3 Satisfaction with the team spirit</td>
<td></td>
</tr>
<tr>
<td>TM4 Easy and informal Communication between the team members</td>
<td></td>
</tr>
<tr>
<td>TM5 Encouragement to diverse arguments or positive conflicts within team</td>
<td></td>
</tr>
<tr>
<td>TM6 High coordination between team mates</td>
<td></td>
</tr>
<tr>
<td>TM7 Team proactive nature to the organizational goal</td>
<td></td>
</tr>
<tr>
<td>TM8 Comfortable to share feelings, opinion within team</td>
<td></td>
</tr>
<tr>
<td>TM9 Mutual respect</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial performance (Cronbach alpha = 0.866)</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP1 Market share</td>
<td></td>
</tr>
<tr>
<td>FP2 Return – on – investment</td>
<td></td>
</tr>
<tr>
<td>FP3 On time Project delivery</td>
<td></td>
</tr>
<tr>
<td>FP4 Efficient utilization of Capacity</td>
<td></td>
</tr>
<tr>
<td>FP5 Customer Satisfaction</td>
<td></td>
</tr>
<tr>
<td>FP6 Quality of workforce</td>
<td></td>
</tr>
<tr>
<td>FP7 Quality service providence</td>
<td></td>
</tr>
<tr>
<td>FP8 Management’s belief in innovation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non financial performance (Cronbach alpha = 0.794)</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFP1 Job security and stability in the organization</td>
<td></td>
</tr>
<tr>
<td>NFP2 Career growth opportunity</td>
<td></td>
</tr>
<tr>
<td>NFP3 Positive work environment</td>
<td></td>
</tr>
<tr>
<td>NFP4 Frequent Development Opportunity</td>
<td></td>
</tr>
<tr>
<td>NFP5 Overseas opportunities</td>
<td></td>
</tr>
<tr>
<td>NFP6 Transparent Organization practice and policies</td>
<td></td>
</tr>
<tr>
<td>NFP7 Clear communication of Career goals</td>
<td></td>
</tr>
<tr>
<td>NFP8 Management’s belief in employee empowerment</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

All the factors shows a cronbach alpha value above 0.7, except only the factor management policy, that indicates had the alpha value 0.581 which is also more than 0.5. So, the high alpha values reveal a high internal consistency within the items under a factor, which recommends continuing the study further.
5.2 An analytical study on the demographic profile of the respondents:

Analysis of a research problem is highly dependent on the proper organization, representation and analysis of data collected from the field of study. Different mathematical treatments over the collected and compiled data are done to understand the association within/between the different variables under study and towards searching relations within the data set. Organization and processing of data are hence of immense importance. Processing basically involves editing, coding and tabulation of data to make it computable. This section of the research deals with the tabular, graphical organization of data and it cover the descriptive agreements of the data set. Descriptive statistics illustrate, summarize and present the data in a meaningful way and help the researcher to visualize the raw data and to highlight the significance to the raw data.

The 633 data are collected from 18 NASSCOM enlisted companies working in Kolkata. The questionnaire was organized in three parts: section 1 deals with the demographic profile of the respondents, section 2 cover dichotomous questionnaires revealing the association of appraisal with other Human Resource Management functions and also some procedural part of appraisal practice in the respective organizations. The third part using a Likert type scale with 1 = strongly disagree and 5 = strongly agree, deals with the opinion survey about the various appraisal contracts as well as, appraisal antecedents, implications as well as the manifestation of appraisal practice on individual, team and organizational performance.

(Kothari, 2004)
The researcher for the purpose of analyzing the data and to have a complete finding has used software like: SPSS, Microsoft EXCEL, etc.

This section deals with the diagrammatic representation of the dataset along with the descriptive analysis of the variables to visualize the raw data in a meaningful way to understand the patterns that emerge from the data.

The section is limited to the description of measures of central tendency, and measures of spread and describes the demographic nature of the entire data set.

5.2.1 Classification of the respondents on the basis of age

The industry is basically featured by young, dynamic work force with 22 or 23 at the entry level and on an average, 40-45 years aged top level management employee set. In the BPOs, KPOs and as the software engineer a group of young technical fresher is taken into the IT organizations at the entry level in junior executive posts. These people amount a considerable proportion the workforce in the IT companies. The age group is distributed over 22 – more than 50. The respondents age group were codified as 1 = less than 26, 2= 26-30, 3 = 31 – 35, 4 = 36 – 40, 5 = 41 – 45, 6 = 46 – 50 and 7 = above 50, which is for the obvious reason of new sunshine industry.

The data compiled represents 31.8% participation from the age group ‘less than 26’, 42% in 26 – 30 group, 16.9% in 31 – 35, 5.8% in 36 – 40, 2.5% in 41 – 45, 0.8% in 46 – 50 and 0.2% above 50 years of age in the table 5.4 and in the figure 5.1.
Table: 5.4 Classification of the data obtained from the selected IT companies in West Bengal on the basis of the respondents’ age

<table>
<thead>
<tr>
<th>Valid</th>
<th>Less than 26</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td>266</td>
<td>42.0</td>
<td>42.0</td>
<td>73.8</td>
<td></td>
</tr>
<tr>
<td>31-35</td>
<td>107</td>
<td>16.9</td>
<td>16.9</td>
<td>90.7</td>
<td></td>
</tr>
<tr>
<td>36-40</td>
<td>37</td>
<td>5.8</td>
<td>5.8</td>
<td>96.5</td>
<td></td>
</tr>
<tr>
<td>41-45</td>
<td>16</td>
<td>2.5</td>
<td>2.5</td>
<td>99.1</td>
<td></td>
</tr>
<tr>
<td>46-50</td>
<td>5</td>
<td>0.8</td>
<td>0.8</td>
<td>99.8</td>
<td></td>
</tr>
<tr>
<td>&gt;50</td>
<td>1</td>
<td>0.2</td>
<td>0.2</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

Fig. 5.1 Classification of the data obtained from the selected IT companies in West Bengal on the basis of the respondents’ age

Source: primary data

The researcher has interviewed/ administered questionnaire on 633 employees working in different capacities in 18 samples IT companies. Respondents are grouped as IT executives and non IT executives. Out of 633 employees, 569 employees in IT cadre, and 64 employees are non – IT executives.
In case of IT executives, they are grouped under three categories: junior executives, senior executives and managers. The data in the table 5.5 and the pie diagram 5.2 confirm that 40.4% junior executive’s, 28.9% senior executive, 20.5% managers and 10.1% non IT executives participating in the study. Since a significant number of non-IT executives, who are working in different grades, are not available in sample companies, distribution of their age cannot be shown under different job grades. So, all the non–IT executives are presented in the table to highlight the influence of their age in the administrative structure of their companies.

Table: 5.5. Classification of the data on the basis of the various job grades in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>256</td>
<td>40.4</td>
<td>40.4</td>
<td>40.4</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>183</td>
<td>28.9</td>
<td>28.9</td>
<td>69.4</td>
</tr>
<tr>
<td>Manager</td>
<td>130</td>
<td>20.5</td>
<td>20.5</td>
<td>89.9</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>64</td>
<td>10.1</td>
<td>10.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

Figure 5.2 Classification of the data based on respondents’ job grades

Source: Primary data
The following table 5.6 produces a distribution of data for different levels of job grades of employees and their age group. The data also establish the fact that young senior executives and managers in the IT industry are working as the decision centre for their organization.

<table>
<thead>
<tr>
<th>Job grade</th>
<th>Age group frequency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 26</td>
<td>26-30</td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>177 (69.14%)</td>
<td>75 (29.3%)</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>2 (1.09%)</td>
<td>144 (78.66%)</td>
</tr>
<tr>
<td>Manager</td>
<td>0</td>
<td>20 (15.38%)</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>22 (34.38%)</td>
<td>27 (42.19%)</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>266</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.6 shows that out of 256 junior executives, 69.14% are aged below 26 years of age. 29.3% are between 26 to 30 years of age. 0.78% are between 31-35 years, and 36-45 years of age respectively, which shows only 2 respondents out of 256 people. In the senior executive level the trend shows that a majority of the respondents are in the age group of 26–35 age group. 78.69% respondents are between 26 – 30 years and 16.39% of respondents are between 31 – 35 years of age, 5 out of 183, i.e. 2.73% are in the age range 36 – 40 years of age, 2 respondents out of 183, i.e. 1.09% are in the age range below 26 and also in 41 – 45 years of age group. It is observed that a high percent of young people (76%) falling in the age range of 26 – 40 years occupies the managerial position in various IT companies. The young managerial group is majorly (70%) distributed in the age group 31 – 40 years. 10% in the age range 41 – 45 years,
4.62% in the group 46 – over 50 years of age. The non IT executives are ranged majorly between below 25 – 30 years of age.

The following bar diagram also validates the finding.

![Fig. 5.3 Classification of data based on age of the respondents and their job grades understudy in the selected IT companies in West Bengal](image)

Source: primary data

The bar diagram highlights that a considerable number of young people directs, govern and administer the IT company, which in India have recent origin.

5.2.2 Classification of data based on respondent’s working experience

People in the IT industry are dynamic and highly educated. This industry also suffers from a shortage of specific skills required to deliver service to the transnational clients. During administration of questionnaire and interview, the researcher got the impression that the severity of the problem is very much prominent in the small and medium organizations. This creates a high demand of skilled workforce. The people keep moving from company to company to avoid stagnation and try to grab a better chance. They want to enhance their
worth in monetary value or manage a promotion to higher posts. So the intra-
industry movements are highly noticed.

The following table 5.7 gives the working experience of the respondents of the study in the present company, they are working in.

<table>
<thead>
<tr>
<th>Job grade</th>
<th>Work experience (in years) in present company</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 2 years</td>
<td>2-5 yrs</td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>140 (54.69%)</td>
<td>108 (42.19%)</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>47 (25.68%)</td>
<td>98 (53.55%)</td>
</tr>
<tr>
<td>Manager</td>
<td>14 (10.77%)</td>
<td>40 (30.77%)</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>28 (43.75%)</td>
<td>27 (42.19%)</td>
</tr>
<tr>
<td>Total</td>
<td>229</td>
<td>273</td>
</tr>
</tbody>
</table>

Source: Primary data

The data described 54.69%, i.e., the majority of the junior executives with less than 2 years, 42.19% junior executives with 2 – 5 years of experience, only 3.13% junior employees are working for 5 – 10 years in the present company. At the senior executive level, 25.68% respondents are found to have experience less than 2 years, 53.55% within 2 – 5 years, 19.67% in 5 – 10 years, and 1.09% in more than 10 years experience in their present company. A less number of managers, only 10.77% and 13.08% were found working for less than 2 years and more than 10 years experience respectively in the current company. 30.77% managers were found working for 2 – 5 years and 45.38% working for 5 – 10 years. At non IT executive level, 43.75% found working for less than 2 years, 42.19% were in between 2 – 5 years, and 10.93% with 5 – 10 years, 3.13% found working for more than 5 years in the current company.
The researcher observed a very fast movement of people across the companies in the industry. The NASSCOM data and various literatures have given the impression that the IT companies are facing a huge amount of attrition rate in their companies on one side, and on the other, the employees in many companies, are suffering from a massive retrenchment threat. The cause of attrition may be due to inadequate skill and ability for task accomplishment, discontinuance of projects, change of manpower requirement in terms of projects undertaken by the companies or use of control mechanism from perspectives of performance and discipline. The HR practitioners in the small and medium organization reported to the researcher that they are like “stepping stone” that gather experience and move out of parent employment for better placements. It also happens in big organization that the consistently poor performance drives the employees away from their job. The researcher has also noticed during interactions with employees and at the time of collection of data, that the employees working in big organizations quit the job and join small/medium
companies with higher responsibilities, better compensation package and other perquisites.

Table: 5.8 Classification of the data based on respondents from the selected IT companies in West Bengal based on their total working experience

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Total work experience in years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 - 5</td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>224</td>
<td>30</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>90</td>
<td>79</td>
</tr>
<tr>
<td>Manager</td>
<td>0</td>
<td>66</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>46</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>More than 5 - 10</td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>79</td>
<td>12</td>
</tr>
<tr>
<td>Manager</td>
<td>66</td>
<td>43</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>More than 10 - 15</td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Manager</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>More than 15</td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Manager</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>360</td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>256</td>
<td></td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>183</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>633</td>
</tr>
</tbody>
</table>

Source: Primary data

The analysis of table 5.8 indicates that a sizable number of executives join organization with considerable period of experience. The reason behind such movements may be a change in the career progression or acquiring experience in branded companies or may be higher level of perquisites and compensation package.

5.2.3 Classification of the data based on the Gender of the respondents from the selected IT companies in West Bengal

In order to have a clear picture about performance appraisal systems in IT sector from all walks of people, proper weightage to the female employees has been given. It transpires from the table 5.9 and figure 5.5, that 34% of female executives who have been administered questionnaire and subsequently interviewed have participated in the interactive process. 65.9% male executives participated in the study.
Table 5.9 Distribution of the data based on the gender of the respondents in the study in selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Valid</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Valid Percent</td>
<td>Cumulative Percent</td>
</tr>
<tr>
<td></td>
<td>417</td>
<td>65.9</td>
<td>34.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Primary data

Fig. 5.5 Classification of data based on the gender of the respondents in the study in selected IT companies in West Bengal

Source: Primary data

It is revealed from the table 5.10, that 69% male IT employees occupy the senior executives and managerial posts, while, more than 31% of identified female employees are also well placed in the IT sector, enjoying senior executives and managerial portfolios, which thus indicates that a substantial percentage of female employees occupies good position and discharge higher responsibilities in administration, decision making and governance of the companies. This is highlighted in the figure 5.6.

Table: 5.10 Classification of the respondents understudy in the selected IT companies in West Bengal based on their job grades and gender

<table>
<thead>
<tr>
<th>Job grade</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>167 (65.23%)</td>
<td>89 (34.77%)</td>
</tr>
</tbody>
</table>
Table: 5.10 Classification of the respondents under study in the selected IT companies in West Bengal based on their job grades and gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sr. Executive and Managers</td>
<td>212 (69%)</td>
<td>101 (31%)</td>
<td>183</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>38 (59.38%)</td>
<td>26 (40.62%)</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>417</td>
<td>216</td>
<td>633</td>
</tr>
</tbody>
</table>

Source: Primary data

It also transpires from the analysis that non IT executives make a significant contribution to organizational task achievement, as is evident from table 5.10 that represent 59.38% male non IT executives and 40.62% of female non IT executives in the sample IT sector.

![Figure: 5.6 Classification of data based on gender of the respondents in various job grades from the selected IT companies in West Bengal](image)

Source: Primary data

It is gathered from the research survey that such non IT executives are involved in implementation of decisions and also in design/ formulation of policies, etc.

5.2.4 Classification of the data based on the qualification of the respondents from the selected IT companies in West Bengal:

In order to have a thorough understanding and idea of quality of job, which is reflected from incumbent level of knowledge, an analysis of executives’
academic/technical qualification has been made and this is represented in the table 5.11 and also in the figure 5.7.

**Table: 5.11 Classification of data about academic qualification of the respondents in the selected IT companies in West Bengal**

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>479</td>
<td>75.7</td>
<td>75.7</td>
<td>75.7</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>24.3</td>
<td>24.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The data show 75.7% respondents from the sampled IT companies, with technical/academic graduation, while 24.3% participants in the administration of questionnaire and interview are found to have post graduation degree.

**Figure 5.7 Classification of data about academic qualification of the respondents in the selected IT companies in West Bengal**

Source: Primary data

**Table: 5.12 Classification of the data on the respondent’s qualification for the different job grades in the selected IT companies**

<table>
<thead>
<tr>
<th>Job grade</th>
<th>Qualification</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Graduate</td>
<td>PG</td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>232 (90.62%)</td>
<td>24 (9.38%)</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>142 (77.6%)</td>
<td>41 (22.4%)</td>
</tr>
<tr>
<td>Manager</td>
<td>60 (46.15%)</td>
<td>70 (53.85%)</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>45 (70.31%)</td>
<td>19 (29.69%)</td>
</tr>
<tr>
<td>Total</td>
<td>479</td>
<td>154</td>
</tr>
</tbody>
</table>

Source: Primary data
The table 5.12 and figure 5.8 reveals that managerial level jobs are occupied by the executives having PG level education. The primary as well secondary data collected from different IT company show that such managers having PG degree in administration and technical field.

![Classification of the data on the basis of qualification of the respondents for various job grades in the selected IT companies in West Bengal](image)

**Source:** Primary data

It is very much apparent from the table in non IT job areas graduate executives dominate. Table 5.12 and figure 5.8 gives a clear indication about the upward trend of the level of education, the executives’ posses while ascending to various job responsibilities (such as junior executives – senior executives, senior executives – managers). It depicts that, percentage of executives with PG degree moves upward from 9.38% in junior executive level to 53.85% in managerial cadre.
It may give us an idea that with the movement of executives from one cadre to another, an additional degree may become a necessity from the viewpoint of general management and decision making in the organization.

5.3 Testing of Hypotheses:

Descriptive statistics, dealing with arranging, summarizing and presenting a set of data to make it extractable, meaningful essential data and the inferential statistics deals with the process of inference conclusions about the properties of a population based on information obtained from the sample drawn from that population, are the two vital areas of statistics. A population is the set of all items of interest in a statistical problem and a representative portion of that population is sample. As populations are almost always very large and sometimes infinitely large, so investigating each member of the population to know its characteristics would be laborious, time-consuming, expensive and sometimes impossible. It is far easier and cheaper to take a sample from the population and the statistical inference is developed to know about population from the sample. Statistical inference is divided into two parts: Estimation and Testing of Hypothesis. When the feature of the population is completely unknown and the enquirer wants to make a guess about this feature on the basis of sample, then the problem is known as estimation. On the other hand, if the enquirer has the prior information or idea regarding the feature of the population and he wants to test whether the idea is tenable in the light of the sample information, then this is known as “Testing of Hypothesis”.
In hypothesis testing the prior information or belief about a character of population is tested on the basis of sample information. There are four components of hypothesis testing, namely (i) Null hypothesis, (ii) Alternative hypothesis, (iii) Test statistic with its sampling distribution and (iv) Decision rule. Null hypothesis, denoted by \( H_0 \) is formed by specifying one single value for the population characteristic. Alternative to this \( H_0 \) is known as alternative hypothesis, denoted by \( H_1 \). Actually this alternative hypothesis answers the basic question of testing.

After hypotheses formation, next is the test statistic to be selected, on the basis of which testing is made. The test statistic is generally based on the point estimation of the population characteristic. For example, as sample mean is the good point estimator of population mean, so to test population mean test statistic is formed on the basis of sample mean. But this has to be modified slightly so that the test statistic follows any one of the standard sampling distributions: Standard Normal (z), \( \chi^2 \), t and F. For example, to test population mean the relevant test statistic is \( \frac{\bar{X} - \mu}{\sigma / \sqrt{n}} \) which follows z distribution.

The value of the test statistic is calculated under \( H_0 \) and this calculated value is compared with the table value obtained from the relevant sampling distribution to take decision. More specifically, decision rule defines the range of values of the test statistic, that lead either to reject or not to reject the null hypothesis.
When statistical tests are performed on those characteristics of population which are specified by the parameters of the parent distribution (such as tests of population mean, population proportion, population variance, regression parameters etc.), then these tests are known as parametric tests. On the other hand, non-parametric tests are those tests which are applied to test the characteristics of population without referring the parameters of the parent distribution.

Parametric tests are applicable only when the parent distribution is specified (such as normal) and the data are either quantitative or qualitative in nature. But the non-parametric tests have wide applications, though they are less efficient. More specifically, along with the areas of parametric tests, non-parametric tests can also be applied when the normality assumption or existence of specific distribution does not hold or when the data are obtained only as ranks (i.e., the cases where parametric tests fail).

Like parametric test, we get various techniques of non-parametric test and these techniques of parametric and non-parametric tests can be selected on the basis of two criteria: problem objective and data type.

The study undertaken by the researcher deals with the data which is categorical in nature and comprising of responses from companies varied in size, business focus, client contracts, etc. So the non-parametric test mainly chi-square is used under study.

The following section deals with the testing of hypotheses.
5.3.1 Regularity in appraisal process

Analytical study of various research works, gives the idea that peak performance can be made through the competent working force that helps the organization to obtain the competitive advantage: and the organizations, particularly IT and other sophisticated organization make an effort to have their employees competent, contented and committed to the work and to the organization. Such employees develop a desire to give their best when they are convinced that the organization develop a system of effective performance appraisal of employees through a well designed and planned monitoring process on a regular and continuous basis.

In order to explore this area as to whether performance appraisal systems made on regular basis in sample IT organizations, the following dichotomous question was placed before the sample executives: “Appraisals of employees are done on a regular basis throughout the year”

On the basis of the responses the following hypotheses were analyzed in order to establish the matter which exists in the IT organization.

**Hypothesis No. – 1**

H₀  Appraisal of the employees is not regularly conducted

H₁  The practice of the Appraisal is regularly conducted

**Hypothesis No. – 2**

H₀  Performance Appraisal is not regularly practiced in all the companies based on size

H₁  Performance Appraisal is regularly practiced in all the companies based
on their size

**Hypothesis 1**

The responses of the executives are shown in the Table 5.14 in respect of regularity/irregularity of performance appraisal in the concerned sample IT organizations.

| Table: 5.13 Regularity/ Irregularity of appraisal in selected IT companies in West Bengal |
|---------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Valid             | Frequency | Percent | C Percent | Cumulative Percent |
| No                | 100       | 15.8    | 15.8      | 15.8             |
| Yes               | 533       | 84.2    | 84.2      | 100.0            |
| Total             | 633       | 100.0   | 100.0     |                  |

Source: Primary data

It transpires from the table that majority of the respondents (84.2%) expressed that employee performance appraisal is made on regular basis and they expressed their satisfaction about the system practiced all over in the respective organization. This is also shown through the pie chart that reflects the responses of the sample executives.

![Figure 5.9 Representation of responses of the respondents from the selected IT companies in West Bengal on Regularity/irregularity of appraisal](image)

Source: Primary data

<p>| Table 5.14: Descriptive Statistics for the variable showing regularity/irregularity of appraisal system in the sampled IT companies in West Bengal |
|---------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Regularity of appraisal</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regularity of appraisal</td>
<td>633</td>
<td>.84</td>
<td>.365</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Primary data
The mean and the standard deviations (i.e. the descriptive statistics) of 633 variables with a dichotomous answer 0 and 1 (where 0 denotes that appraisal in the sampled companies is not regularly done, and 1 denotes that appraisal in the organizations is regular) are 0.84 and 0.365 respectively, as shown in the table 5.14.

In order to get to know whether frequency of ‘no’ responses is statistically larger (or different) than the frequency of yes responses, a contingency table is prepared with observed and expected frequencies, which is shown in the table 5.15. The expected frequencies are calculated considering an equal probability (0.5) of answering no or yes to the research question under one parameter chi-square testing as the data consists of responses from the selected IT companies varied in work force size (from employee strength 50 - 15,000 in West Bengal).

<table>
<thead>
<tr>
<th></th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>100</td>
<td>316.5</td>
<td>-216.5</td>
</tr>
<tr>
<td>Yes</td>
<td>533</td>
<td>316.5</td>
<td>216.5</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>316.5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

One parameter chi square test (χ²) conducted on the question to test the regularity of performance appraisal in the sampled IT companies.

Table 5.15 provides the values used to compute the χ² statistics. The test statistics are a χ² defined by the following equation: χ² = Σ [(O_r,c – E_r,c)^2 / E_r,c ]

where O_r,c is the observed frequency count at the level r on Variable A and level c of Variable B, and E_r,c is the expected frequency count at level r of Variable A and
level \( c \) of Variable B. From the table 5.16, the calculated \( \chi^2 \) value is 296.191 with 1 degree of freedom.

**Table 5.16. Chi-square test Statistics to test the regularity of appraisal in selected IT companies in West Bengal**

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>Regularity of appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>296.191 (^a)</td>
</tr>
<tr>
<td>Df</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

\(^a\) 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 316.5.

Source: Primary data

The p-value is the probability of observing a sample statistic as extreme as the test statistic. The p-value suggests the chance of existing a Type I error. The standard ‘\( \alpha \) value’ of 0.05, allows up to a 5% chance of making a Type I error. The null hypothesis is rejected in this case because the p-value of 0.000 lies below 0.05. The p-value is also compared to \( \alpha \) of 0.01, which also results in rejection of the hypothesis at even 1% level.

So, \( p = 0.000 < 0.05 \), results in rejecting the Null Hypothesis, and accepting the alternative hypotheses.

This statistical result suggests that the practice of appraisal is *regularly* done in selected IT companies

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, related to regularity/irregularity in appraisal system, a one-way ANOVA is performed. One-way ANOVA compare the mean values of
the groups classified on the basis of some characteristics. The data obtained from the field survey are also classified on the basis of gender, age, qualification. To understand the opinion patterns a sub hypothesis is made:

Ho: The opinions of the respondents about regularity/irregularity of appraisal do not vary with the gender, qualification and experience

H1: The opinions of the respondents about regularity/irregularity of appraisal vary with the gender, qualification and experience

Table 5.17 Descriptive values of the variable analyzing the regularity/irregularity in appraisal system based on gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Regularity/irregularity in appraisal process</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.84</td>
<td>.365</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.84</td>
<td>.365</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.85</td>
<td>.354</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.81</td>
<td>.397</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>.83</td>
<td>.377</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.87</td>
<td>.339</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.83</td>
<td>.380</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>.71</td>
<td>.463</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.17 shows the descriptive values of the variable showing regularity/irregularity of the appraisal process obtained from the field study.

Table 5.18 ANOVA table to understand the opinion difference about regularity/irregularity in appraisal system based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>84.202</td>
<td>1</td>
<td>.000</td>
<td>.001</td>
<td>.977</td>
</tr>
<tr>
<td>Within Groups</td>
<td>84.202</td>
<td>631</td>
<td>.133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84.202</td>
<td>632</td>
<td>.133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.276</td>
<td>1</td>
<td>.276</td>
<td>2.075</td>
<td>.150</td>
</tr>
<tr>
<td>Within Groups</td>
<td>83.926</td>
<td>631</td>
<td>.133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84.202</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.587</td>
<td>3</td>
<td>.196</td>
<td>1.473</td>
<td>.221</td>
</tr>
<tr>
<td>Within Groups</td>
<td>83.615</td>
<td>629</td>
<td>.133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84.202</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

* indicates item significant at the level of 5% significance level
The table 5.18 shows that the opinions related to regularity/irregularity in appraisal process do not vary with the gender, qualification and even with work experience in the current company, as the test results show p value > 0.05 for all these levels (Hence, H1 rejected and H0 accepted).

So it can be concluded that Performance appraisal system is regularly administered in the selected IT companies, irrespective of gender, qualification or working experience in the current company.

**Hypotheses 2:**

This hypothesis aimed to study the regularity/irregularity of an appraisal system in the selected IT companies varied according to employee strength. The research also aimed to study whether the practice of appraisal varies with the job grade in the selected IT companies, grouped on the basis of employee strength. The descriptive statistics describe in details in table 5.19, the respondent’s views regarding the regularity/irregularity of appraisal system. The total data set is divided into two parts based on the employee strength, and the data are calculated in the cells. The table also describes the expected values for each cell, to be used in the chi – square calculation.

![Table 5.19 Frequency distribution of responses and contingency table to test the regularity /irregularity in appraisal practice in the sampled IT companies in West Bengal, on the basis of their employee strength](image)

Source: Primary data
The data compiled in the graph 5.10 reveals the response patterns of the executives from both groups of selected IT companies, on the basis of the employee strength. The figure illustrates that a clear majority of respondents accepts the regularity of appraisal in their companies, while in the selected small and medium companies with workforce below 15,000 a slightly higher percentage of respondents deny the regularity of appraisal practice.

The table 5.19 describes the contingency table for the calculation of chi-square. The expected frequency counts are computed separately for one level of each categorical variable at each level of the other categorical variable. \( r \times c \) is computed for expected frequencies, according to the following formula. 

\[
E_{r,c} = \frac{(n_r \times n_c)}{n}
\]

where \( E_{r,c} \) is the expected frequency count for level \( r \) of Variable A and level \( c \) of Variable B, \( n_r \) is the total number of sample observations at the level \( r \) of Variable A, \( n_c \) is the total number of sample observations at level \( c \) of Variable B, and \( n \) is the total sample size.
The table 5.20 describes the chi-square test made to analyze the regularity/irregularity in appraisal practice in selected IT companies. The chi-square test assumes that there are a large number of respondents in each cell and the standard rule is that every cell should have a frequency of at least 5. The Pearson chi square test is done to understand the regularity in appraisal practice across the selected IT companies varying in employee strength.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>34.551a</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 47.08.

Source: Primary data

The p value is .000 which is < 0.01, which rejects null hypotheses and accepts alternative hypotheses that appraisal process is regularly practiced in different companies whether big, small or medium.

So, we reject the null hypotheses, that Performance Appraisal is not regularly practiced in the companies based on size (H₀ rejected).

And accept alternative hypotheses that practice of performance appraisal is regular irrespective of the organization’s size (H₁ accepted).

To explore a micro view on the research question across the job grades in the selected companies differing in employee strength, a one parameter chi-square testing is done for each job grades under the two groups of selected companies differing in employee strength. A sub hypothesis is made to study the regularity/irregularity in appraisal practice differs in various job grades across the selected companies with different workforce size:
Ho: The opinions of the respondents from the sampled IT companies in West Bengal about regularity/irregularity in appraisal process do not differ with their job grades in the selected IT companies varying in size.

H1: The opinions of the respondents from the sampled IT companies in West Bengal about regularity/irregularity in appraisal process differ with their job grades in the selected IT companies varying in size.

The table 5.21 and the following graph provides the response pattern of the executives from each job grades of selected companies with employee strength below/above 15000. The data is divided into two groups on the basis of employee strength. The section aimed to study whether there is any opinion difference among the respondents from the different job grades in the two groups of selected IT companies based on the employee strength.

| Table 5.21. Regularity/irregularity in the practice of appraisal based on job grades and employee strength of the selected IT companies in West Bengal |
|-----------------------------------------------|-----------------|-----------------|
| Employee Strength                           | Regularity of appraisal | Total    |
|                                              | No              | yes          |
| Above 15,000                                |                 |              |
| Jr. Executive                               | Count           | 14 (9.7%)    | 130 (90.3%) | 144   |
|                                              | Expected Count  | 11.2         | 132.8       | 144.0 |
| Sr. Executive                               | Count           | 4 (4.2%)     | 92 (95.8%)  | 96    |
|                                              | Expected Count  | 7.5          | 88.5        | 96.0  |
| Manager                                     | Count           | 7 (10.8%)    | 58 (89.2%)  | 65    |
|                                              | Expected Count  | 5.0          | 60.0        | 65.0  |
| Non IT Executive                            | Count           | 1 (3.3%)     | 29 (96.7%)  | 30    |
|                                              | Expected Count  | 2.3          | 27.7        | 30.0  |
| Total                                       | Count           | 26           | 309         | 335   |
|                                              | Expected Count  | 26.0         | 309.0       | 335.0 |
| Below 15,000                                |                 |              |
| Jr. Executive                               | Count           | 27 (24.1%)   | 85 (75.9%)  | 112   |
|                                              | Expected Count  | 27.8         | 84.2        | 112.0 |
| Sr. Executive                               | Count           | 17 (19.5%)   | 70 (80.5%)  | 87    |
|                                              | Expected Count  | 16.1         | 65.4        | 87.0  |
| Manager                                     | Count           | 16 (24.6%)   | 49 (75.4%)  | 65    |
|                                              | Expected Count  | 16.1         | 48.9        | 65.0  |
| Non IT Executive                            | Count           | 14 (41.2%)   | 20 (58.8%)  | 34    |
|                                              | Expected Count  | 8.4          | 25.6        | 34.0  |
| Total                                       | Count           | 74           | 224         | 298   |
|                                              | Expected Count  | 74.0         | 224.0       | 298.0 |

Source: Primary data
It transpires from the table 5.21 and from the figure 5.11 that almost 90% of executives from all cadres in the big organizations perceived that the regular practice in appraisal system prevails in the selected IT companies irrespective of job grades and their company size. The reason behind, perceiving a higher percentage of people towards a regular appraisal system followed in a big organization are mainly a strategic design and implementation of performance appraisal system and also effecting the corporate policy for attaining excellence through peoples performance, while some small organization (where less than 15000, in more cases less than 100 people are employed) are not very much system concern particularly in the area of performance appraisal system.

It also reveals so through the interactive sessions with different category of executive met by the researcher that mostly non IT executives (non executives in the selected IT companies with employee strength less than depicts a sizable percentage (41.2%) of ‘no’ response to the research question) have expressed
their views about irregular practice of appraisal system in the respective organization.

The table 5.22 provides the chi – square test statistics based on the data given in contingency table 5.21, to test the sub hypothesis. The p value is calculated as $0.246 > 0.05$ for the selected IT companies with workforce size more than 15000; and the same p value is $0.102 > 0.05$ in the selected small/medium IT companies with workforce less than 15000. The p values for both the group of companies, suggests rejection of alternative hypothesis and acceptance of null hypothesis.

![Table 5.22 Chi-square test statistics showing Regularity/irregularity in the practice of appraisal based on job grades across the selected IT companies in West Bengal grouped on the basis of employee strength](image)

So, the null hypothesis $H_0$ is accepted: There is *no opinion difference* among the respondents from the sampled IT companies based on their job grades and the company employee strength.

A further micro view to understand the research question for each of the job grades is obtained through one parameter chi-square testing, to study the opinion of the respondents from each job grades from selected IT companies.
varied in work force size. Table 5.22A provides the test statistics to analyze the hypothesis:

\[ H_0 \] Appraisal of the employees is not regularly conducted
\[ H_1 \] The practice of the Appraisal is regularly conducted

As the objective of the research study is to understand the perception of the IT executives in the sampled IT companies, the non IT executives from all the selected companies are taken together and compared with the IT executives of different grades.

| Table. 5.22A One parameter chi-square test statistics showing Regularity/irregularity in the practice of appraisal based on job grades across the companies in selected IT companies in West Bengal, on the basis of employee Strength |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Above 15000                       | Below 15000                        |                                 |
| Junior Executive                  | Senior Executive                  | Manager                          | Junior Executive                  | Senior Executive                  | Manager                          | Non IT executive                  |
| Chi-Square                        | 93.444                            | 80.667                           | 40.015                            | 30.036                            | 32.287                           | 16.754                           | 18.063                           |
| df                                | 1                                 | 1.0                              | 1.0                               | 1.0                               | 1.0                              | 1.0                              | 1.0                              |
| Asymp. Sig.                       | .000***                           | .000***                          | .000***                           | .000***                           | .000***                          | .000***                          | .000***                          |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 56.0.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.5.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.0

*** significant even at 1% level

Source: Primary data

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>H0</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>All selected companies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
The opinions of respondents across their job grades show the p value $0.000 < 0.01$ level. So we reject the null hypothesis that appraisal of the employees is not regularly conducted in the selected IT industry, and accept the alternative hypothesis that the practice of the Appraisal is regularly done in the selected IT industry for all job grades.

The table 5.22 A, substantiate the results of the table 5.22 that there is no opinion difference among the respondents from the sampled IT companies in West Bengal regarding regularity/irregularity in appraisal system. It transpires that all the executives of IT cadre, working in different portfolios of responsibility from different sized companies (companies having more than 15000 employees and less than 15000) have expressed that the respective companies follow a systematic practice of using appraisal system. Even the non IT executive cadre of the selected IT companies in West Bengal, agreed the regular practice in appraisal system.

5.3.2 Linage between performance appraisal and training need identification in the selected IT companies West Bengal

In the face of stiff international competition and fast technology change, the sustainable growth can only be achieved by a company through its talented and highly skilled workforce. So, continuous learning is of paramount importance in the organizations, especially in technology driven IT companies. Every individual is unique in nature and also different in capability to perform a job. So the employees (executives) need exclusive trainings to improve the present performance, future potential and also to help the organization in future
succession planning. Hence, an obvious and initial step before the training programs are implemented is to identify the individual employee’s performance gap in order to ascertain training need of employees. During personal survey and interaction with the selected personnel, the researcher has gathered that the training need identification is mostly done through review of performances. The researcher has also got to understand that due weightage is given during discovery of training need at joint goal setting exercise made between boss and subordinates.

This section makes an attempt to identify the association between performance appraisals (PAS) and training need identification (TNI), in the IT companies’ understudy and ascertain as to whether there is any difference in practice of TNI for executives working at different level in the companies with different size.

To analyze the association between training need identification and performance appraisal, a dichotomous question is asked to the respondents from the selected IT companies: “Training needs are identified on the basis of performance appraisal report” and also the following hypotheses are made:

**Hypothesis No. – 3**

H0 Training need identification does not have a relationship with the appraisal practice

H1 Training need identification has a relationship with the appraisal practice

**Hypothesis No. – 4**

H0 Training need is not identified from performance appraisal in all the companies based on their size

H1 Training need is identified from performance appraisal in all the companies
based on their size

**Hypothesis 3**

The table 5.23 gives a picture of percentage of people that accepted/rejected the association of training need and performance appraisal.

**Table: 5.23 Responses of the executives showing association between training need identification and performance appraisal system in the overall sampled IT companies in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>No</td>
<td>140</td>
<td>22.1</td>
<td>316.5</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>493</td>
<td>77.9</td>
<td>316.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>633</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The analysis of the table indicates that a majority number of executives (77.9%) have perceived that there is a great association between performance appraisal systems (PAS) and training need identification (TNI). This is also shown through the diagrammatic presentation.

![Pie chart to analyze the Training need identification and appraisal association, in the overall selected IT companies in West Bengal](image)

Source: Primary data

Table 5.24 describes the mean and the standard deviations (i.e. the descriptive statistics) of 633 variable with a dichotomous answer 0 and 1 (where
0 denotes that training need identification is not associated with appraisal in the company, and 1 denotes that training need identification is associated with appraisal in the organizations are regular) are respectively 0.78 (which is leaned to the response 1, i.e. ‘yes’) and 0.415 respectively.

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNI and PA</td>
<td>633</td>
<td>.78</td>
<td>.415</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Primary data

The association between training need identification and performance appraisal are computed by one parameter non parametric (χ²) chi-square test. Table 5.23 provides the information about the observed and expected values which constitute the chi-square formula for the data. The expected values are calculated considering an equal probability (0.5) of answering no or yes to the research question under one parameter chi-square testing, hence the expected N are 316.5, in each cell.

The table 5.25 provides the chi-square test statistics to understand as to whether there is any statistical difference in the opinions of the respondents from the selected IT companies.

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>TNI and PA 196.855a</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 316.5.

Source: Primary data
The footnote of the table 5.25 shows that 0 cells have expected count less than 5, which is denoted towards the appropriateness of p value. The chi-square value is calculated as 196.855. The p value is 0.000 which is < 0.01, which rejects null hypotheses and accepts alternative hypotheses that training needs are identified based on the appraisal process even at 1% level.

H1 accepted that training need identification has a relationship with the appraisal practice in the IT industry

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and training need identification, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:

H0: The opinions of the respondents about linkage between training need identification and performance appraisal do not vary with the age, gender, qualification and experience

H1: The opinions of the respondents about linkage between training need identification and performance appraisal vary with the age, gender, qualification and experience

The table 5.26 shows the descriptive values (i.e., mean and standard deviation) of the variable showing linkage between performance appraisal system and training need identification based on age, gender, qualification, work experience in the
current company as obtained from the field survey in the selected IT companies in West Bengal.

Table 5.26 Opinion patterns of the executive showing linkage between performance appraisal system and training need identification based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between PAS and TNI</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>.801</td>
<td>.3998</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>.715</td>
<td>.4529</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>.727</td>
<td>.4558</td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.760</td>
<td>.4275</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.815</td>
<td>.3804</td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.797</td>
<td>.4023</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.815</td>
<td>.3804</td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.797</td>
<td>.4023</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.721</td>
<td>.4501</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.797</td>
<td>.4023</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.721</td>
<td>.4501</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>.760</td>
<td>.4281</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.810</td>
<td>.3934</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.764</td>
<td>.4268</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>.667</td>
<td>.4830</td>
</tr>
</tbody>
</table>

Source: Primary data

Table 5.27 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and training need identification based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.867</td>
<td>2</td>
<td>.433</td>
<td>2.524</td>
<td>.081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>108.170</td>
<td>630</td>
<td>.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.036</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.425</td>
<td>1</td>
<td>.425</td>
<td>2.467</td>
<td>.117</td>
</tr>
<tr>
<td>Within Groups</td>
<td>108.612</td>
<td>631</td>
<td>.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.036</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.686</td>
<td>1</td>
<td>.686</td>
<td>3.994</td>
<td>.046*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>108.351</td>
<td>631</td>
<td>.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.036</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>109.036</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>108.407</td>
<td>629</td>
<td>.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.036</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data * indicates item significant at the level of 5% significance level
The above table 5.27 demonstrates that the opinions related to linkage between training need identification and appraisal process do not vary with the age, gender and even with work experience in the current company, as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and H0 accepted for age, gender, and working experience in current company). So, there is no opinion difference among the respondents about the linkage between training need identification and performance appraisal system on the basis of age, gender, working experience in the current companies. The qualification of the respondents show a significant difference in opinion among the groups as the p value shows a value < 0.05, which transpires an opinion difference among the executives based on the qualification related to the practice of appraisal based training need identification. During personal interaction with the sampled management personnel it is gathered that training need identification is made on the basis of performance appraisal system practiced in the company. But in some cases it happens that management people are identified not exclusively on the basis of performance appraisal system, but looking to new technology introduced or a specific strategy undertaken in connection with the specification of business process activity. There are some HR mandates training programs like quality training, ISO trainings, etc., which every executives of the company has to take; in this case training need identification is not appraisal based. Training need is identified for management people on such basis. It happens only in limited cases and in specific area of business processes undertaken by the company but overall it is found that a great linkage exist between training need identification and performance appraisal system
To understand the association between TNI and PAS, sub questions are asked whether the training need identification and appraisal association is dependent on the level of job grade or not. To understand the question the hypotheses are:

$H_0$: There is no opinion difference among the executives from the selected IT companies in West Bengal about the linkage between training need identification and performance appraisal system based on their job grades

$H_1$: There is opinion difference among the executives from the selected IT companies in West Bengal about the linkage between training need identification and performance appraisal system based on their job grades

The table 5.28 provides the frequency distribution of the responses obtained from various job grades, who administered questionnaire from the selected IT companies. A cross tabulation is done with the variable describing association between appraisal and training need identification association with the level of job grade from the selected IT companies.

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>TNI and PA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>58 (22.7%)</td>
<td>198 (77.3%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>56.6</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>33 (18.0%)</td>
<td>150 (82.0%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>40.5</td>
</tr>
<tr>
<td>Manager</td>
<td>30 (23.1%)</td>
<td>100 (76.9%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>28.8</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>19 (29.7%)</td>
<td>45 (70.3%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>14.2</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>493</td>
</tr>
</tbody>
</table>

Source: Primary data
It transpires from the table 5.28 and the figure 5.13 a significantly large sample (more than 70% to 82%) in all job grades are accepting that training needs are identified on the basis of performance appraisal.

The table 5.29 describes the chi-square ($\chi^2$) test to examine the opinion difference among the executives based on different levels of job grades about the linkage between training need identification and the performance appraisal.

**Table 5.29 Chi square table to calculate TNI and PA association across the job grades in selected IT companies in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.014a</td>
<td>3</td>
<td>.260</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.15.

Source: Primary data

The test specifies that 0 cells have expected count less than 5. The critical value of $\chi^2 = 4.014$ and the p value in chi-square ($\chi^2$) come out to be $0.260 > 0.05$. So H₁ rejected and H₀ accepted, which tells that there is no opinion
difference about the linkage between training need identification and the performance appraisal among the executives based on different job grades from the sampled IT companies. The bar chart also describes the same.

So, Ho accepted that there is *no opinion difference* among the executives from all the selected IT companies in West Bengal about the linkage between training need identification and performance appraisal system based on their job grades

**Hypothesis 4:**

The industry comprises of different sized and different business focus, which results in different management practice. So it is relevant to understand that whether the appraisal and training need association differs depending on the company size or not. To get the answer, the data set is divided into two parts according to company size based on the employee strength (below and above 15,000). The table 5.30 shows the frequency distribution, distributed over the selected IT companies in two groups according to employee strength and also calculates the expected cell values to calculate the chi – square test statistics.

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Above 15,000</th>
<th>Below 15,000</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>48 (14.3%)</td>
<td>92 (30.9%)</td>
<td>140</td>
</tr>
<tr>
<td>No</td>
<td>74.1</td>
<td>65.9</td>
<td>140.0</td>
</tr>
<tr>
<td>Yes</td>
<td>260.9</td>
<td>232.1</td>
<td>493.0</td>
</tr>
<tr>
<td>Total</td>
<td>335.0</td>
<td>298.0</td>
<td>633.0</td>
</tr>
</tbody>
</table>

**Source:** Primary data
It reveals from the table 5.32 and also from the bar diagram, that a considerably high percentage of responses (85.67% of the respondents from the companies having employee strength 15,000 and 69.13% of the executives in the companies below 15,000 employee strength) in the both selected group of companies, accept that training needs are identified on the basis of appraisal report.

The table 5.31 describes the chi-square test statistics showing as to whether there is any statistical difference in the employee opinion about the training need identification and performance appraisal association, in the selected IT companies varying in their size. The footnote in the table shows that 0 cells have expected count less than 5, which is denoted towards the appropriateness of p value.
Table 5.31. Chi-Square Tests to study the Association between TNI and PA in the selected IT companies varying in size in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>25.060*</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 65.91.
b. Computed only for a 2x2 table

Source: Primary data

The critical chi square value is calculated as 25.060. The p value is 0.000 which is < 0.01, which rejects null hypotheses at 1% level also.

So, H0 rejected i.e. Training need is not identified from performance appraisal in the companies based on their size

H1 accepted: Training need is identified from performance appraisal irrespective of company size

IT companies, whether small or big, dependent on its knowledge capital. Technologies are changing very fast and hence to cope with the change training is most essential for employee development. Training needs are identified from performance appraisal report, and this is a wide practice irrespective of company size.

Further extending the study by taking into calculation the different job grades in the organizations with different employee strength, to understand as to whether the dependence of TNI on PAS differs with the level of the job grade and the size of the organization. The following table shows a calculation of frequency of the responses based on job grade code in different sized companies.
To study the opinions of the executives from various job grades on the research question studying the dependence of TNI on PAS, in the companies with workforce more than 15,000 and below 15000, the following sub-hypotheses are made by the researcher:

\( H_0 \): There is no opinion difference about the linkage between training need identification and performance appraisal among the sampled executives on the basis of job grades and the employee strength

\( H_1 \): There is opinion difference about the linkage between training need identification and performance appraisal among the sampled executives on the basis of job grades and the employee strength

The contingency table 5.32 shows the observed and expected values for each cell to calculate the chi square value, for the variable showing response of the sampled executives from the selected IT companies in West Bengal. The followed table provides the percentages of the responses. The figure 5.15 also depicts the response pattern diagrammatically.

The table and the figure below transpires that though majority (more than 58%) of the responses accept the linkage between training need identification and performance appraisal, the respondents from the selected companies with employee strength above 15000 are more confident (responses are more than 83% in all job grades) about the linkage in their companies.
Table 5.32 Observed and expected opinions of the sampled executives from different job grades showing dependence of TNI on PA in different selected companies based on employee strength in West Bengal

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job Grade</th>
<th>Count</th>
<th>%</th>
<th>Expected Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Jr. Executive</td>
<td>24</td>
<td>16.7</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>9</td>
<td>9.4</td>
<td>13.8</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>10</td>
<td>15.4</td>
<td>9.3</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>5</td>
<td>16.7</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>48</td>
<td></td>
<td>48.0</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Jr. Executive</td>
<td>34</td>
<td>30.4</td>
<td>34.6</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>24</td>
<td>27.6</td>
<td>30.1</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>20</td>
<td>30.8</td>
<td>20.1</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>14</td>
<td>41.2</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>92</td>
<td></td>
<td>92.0</td>
</tr>
</tbody>
</table>

Total Count

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Count</th>
<th>%</th>
<th>Expected Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jr. Executive</td>
<td>144</td>
<td>96.0</td>
<td>144.0</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>96</td>
<td>65.0</td>
<td>96.0</td>
</tr>
<tr>
<td>Manager</td>
<td>65</td>
<td>30.0</td>
<td>65.0</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>30</td>
<td>335.0</td>
<td>30.0</td>
</tr>
</tbody>
</table>

Total Expected Count

Source: Primary data

Fig. 5.15 Response pattern showing Dependence of training need on appraisal report for various job grade in different sized companies

Source: Primary data
Only in the non IT executive cadre in the small IT companies with employee strength below 15000, a considerable amount of sample respondents (41.2%) denying that training needs are identified on the basis of appraisal reports. During personal survey, the HR executives of selected small companies (more particularly with workforce size less than 100) informed the researcher that these companies are facing high attrition rate, and within one or two years the employees quit the job for better placements. Hence, it becomes very difficult to maintain a well structured and systematic training and appraisal system. The training needs are often identified by the supervisor based on his observation and recommendations and the trainings are arranged when there is any requirement created by the change in technology/ requirement related to projects.

To test whether there is any opinion difference between various job grades related to the practice of appraisal based training need identification in different selected companies in West Bengal; a chi square test is conducted. The following tables 5.33 test whether association between appraisals based training need identification and the level of work vary with the company size.

<table>
<thead>
<tr>
<th>Table 5.33 Chi square test statistics to test the opinion differences among the executives from different job grades in companies differing on the basis of employee strength in West Bengal to analyze the linkage of TNI and PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee strength</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Above 15,000</td>
</tr>
<tr>
<td>Below 15,000</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.30.

<sup>b</sup>. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.50.

Source: Primary data
The chi – square test reveals that for the companies with more than 15,000 work force, the critical value of chi- square ($\chi^2_{calc}$) 2.753, with p value $0.431 > 0.05$ (H1 rejected and H0 accepted), which tells that there is no opinion difference among the executives from various cadre related to the linkage between training need identification and appraisal report in their respective organizations.

In the small companies (with workforce size less than 15000), the chi-square calculated value ($\chi^2_{calc}$) for the small and medium company is 2.14, with p value $0.543 > 0.05$ (H1 rejected and H0 accepted), in the companies with employee strength less than 15,000, indicates the same result as the sampled big companies with employee strength above 15000.

So it can be concluded that *training need identified on the basis of appraisal* for all job grades in the selected IT companies in West Bengal.

A micro view further to understand the opinions of executives from each job grades from the two groups of selected IT companies in West Bengal area, the original hypothesis is tested by one parameter chi- square test for each job grades:

H0  Training need identification does not have a relationship with the appraisal practice in the IT industry

H1  Training need identification has a relationship with the appraisal practice in the IT industry
Table. 5.33A One parameter chi-square test statistics showing linkage between training need identification and performance appraisal for each job grade in selected IT companies differing in employee strength in West Bengal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Above 15000</th>
<th>Below 15000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>64.000a</td>
<td>63.375b</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000***</td>
<td>.000***</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.0.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 56.0.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.5.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0.

*** significant even at 1% level;  ** significant at 5% level

Source: Primary data

Linkage between training need identification and performance appraisal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.002</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

The opinions of respondents across their job grades show the p value 0.000 < 0.01 level. So we reject the null hypothesis that training need identification is not linked to performance appraisal in the selected IT industry, and accept the alternative hypothesis that the TNI and PAS are linked in the sampled IT industry.

It transpires that all the executives of IT cadre, working in different portfolios of responsibility from different sized companies (companies having
more than 15000 employees and less than 15000) have expressed that the respective companies follow a systematic practice of training need identification on the basis of appraisal system. Even the non IT executive cadre of the selected IT companies in West Bengal, agreed the regular practice in appraisal system.

The table 5.33 A, substantiate the results of the table 5.33 that there is no opinion difference among the respondents from the sampled IT companies in West Bengal regarding regularity/irregularity in appraisal system.

5.3.3 Career planning and performance appraisal linkage

Being project based in nature, the IT companies’ focuses on specific skill sets required for the ongoing projects. Hence the industry requires specific skills at every individual level to complete the part of the project assigned to the employee. The specification of the assigned job keeps changing with the changing requirement of the projects so the employees have to regularly update the knowledge and skill set to sustain and grow in the volatile and changing “techno-culture”. It is also a necessity that the employees must be deployed to the person-fit projects which will help the incumbent to give the best performance in the job as well as increase his/her employability. On the other hand the companies also require a robust manpower planning to find out job-fit person with specific skill required for the future projects. An effective manpower planning will help the organization to understand the future requirement of skill for upcoming projects and the supply patterns of internal resources.

Hence individual career planning of the employees must be matched with the organizational manpower planning to effectively and efficiently use
their reservoir of workforce. During the personal survey the respondents from some of the selected big (With workforce size above 15000) companies informed that there is regular career counseling for them as to choose the project matching with individual career goals. The big IT houses sometimes arrange pre-placement discussion with senior members of the project verticals/ HR for the newly joined young technical executives focusing on company’s policy, career path, individual career goals etc.

This section has studied the association between career planning and performance appraisal system in the IT industry. To comprehend the general trend regarding the relational dynamics between career planning and appraisal practice in the whole IT industry. To test the hypotheses the question asked to the respondents were: “Are you given any plan of your career after Appraisal process?” and the following hypotheses are made to study the research question.

**Hypothesis No. – 5**

H0  Career Planning decisions are not related to the appraisal process

H1  Career Planning decisions are related to the appraisal process

**Hypothesis No. – 6**

H0  Regular practice of career planning does not exist in all companies based on size

H1  Regular practice of career planning exist in all companies based on size

**Hypothesis No – 5**

The table 5.34 illustrates the frequency distribution of the responses obtained from the field study through the administration of questionnaire and
personal interview of the executives from the selected IT companies from West Bengal.

<table>
<thead>
<tr>
<th></th>
<th>Observed N</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>175 (27.65%)</td>
<td>316.5</td>
<td>-141.5</td>
</tr>
<tr>
<td>yes</td>
<td>458 (72.35%)</td>
<td>316.5</td>
<td>141.5</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

It transpires from the table 5.34 and figure 5.16 above that overall a high percentage (72%) of executives from the sampled IT companies in West Bengal, accepts the linkage between career planning and performance appraisal. The figure 5.16 depicts graphically the overall responses of the respondents on the question whether the career planning decisions are related to the performance appraisal report, which clearly indicates a positive bent of overall responses.
5.35 Descriptive statistics of the variable studying the association between Career Planning & PA in selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Career Planning &amp; PA</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>633</td>
<td>.72</td>
<td>.448</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.35 describes the mean and the standard deviations of 633 variable with a dichotomous answer 0 and 1 (where 0 denotes that career planning are not associated with appraisal in the company, and 1 denotes that career planning are associated with appraisal in the organizations) are 0.72 (which is leaned towards 1, i.e. ‘yes’) and 0.448 respectively.

The table 5.36 provides the test statistics to calculate to whether there is any statistical difference in opinions of the respondent related to the research question.

5.36. One parameter chi square test of the variable studying the association between Career Planning & PA in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Career Planning &amp; PA</th>
<th>Chi-Square</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>126.523a</td>
<td>1</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 316.5.

Source: Primary data

The table 5.36 shows that 0 cells have expected count less than 5, which is denoted towards the appropriateness of p value. The Critical \( \chi^2 \) value 126.523 and p value is .000 which is < 0.01, which rejects null hypotheses and accepts alternative hypotheses that career planning are associated to the appraisal process.

So, H0 is rejected: Career Planning decisions are not related to the appraisal process in IT industry
H1 is accepted: Career Planning decisions are related to the appraisal process in IT industry

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and career planning, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:

H₀: The opinions of the respondents about linkage between career planning and performance appraisal do not vary with the age, gender, qualification and experience

H₁: The opinions of the respondents about linkage between career planning and performance appraisal vary with the age, gender, qualification and experience

The table shows the descriptive values (i.e., mean and standard deviation) of the variable showing linkage between performance appraisal system and career planning based on age, gender, qualification, work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal.
Table 5.37 Opinion patterns of the executive showing linkage between performance appraisal system and career planning based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between career planning and PAS</th>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>.782</td>
<td>.4136</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>.792</td>
<td>.4075</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>.591</td>
<td>.5032</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.777</td>
<td>.4168</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.778</td>
<td>.4167</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.781</td>
<td>.4141</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.766</td>
<td>.4246</td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>.742</td>
<td>.4383</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.806</td>
<td>.3963</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.809</td>
<td>.3948</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>.619</td>
<td>.4976</td>
</tr>
</tbody>
</table>

Source: Primary data

Table 5.38 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and career planning based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.803</td>
<td>2</td>
<td>.401</td>
<td>2.324</td>
<td>.099</td>
</tr>
<tr>
<td>Within Groups</td>
<td>108.790</td>
<td>630</td>
<td>.173</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.592</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.000</td>
<td>1</td>
<td>.000</td>
<td>.001</td>
<td>.982</td>
</tr>
<tr>
<td>Within Groups</td>
<td>109.592</td>
<td>631</td>
<td>.174</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.592</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.025</td>
<td>1</td>
<td>.025</td>
<td>.142</td>
<td>.706</td>
</tr>
<tr>
<td>Within Groups</td>
<td>109.568</td>
<td>631</td>
<td>.174</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.592</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.139</td>
<td>3</td>
<td>.380</td>
<td>2.203</td>
<td>.087</td>
</tr>
<tr>
<td>Within Groups</td>
<td>108.453</td>
<td>629</td>
<td>.172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>109.592</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
The above table 5.38 demonstrates that the opinions related to linkage of career planning with appraisal process do not vary with the age, gender and even with work experience in the current company, as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and H0 accepted for age, gender, and working experience in current company). So, there is no opinion difference among the respondents about the linkage between career planning and performance appraisal system on the basis of age, gender, working experience in the current companies.

To understand the research question elaborately, the career planning and performance appraisal relational association is observed across the job grade of the executives. The question asked to the executives that: Are you given any plan of your career after Appraisal process? The sub hypotheses are:

H0: The opinions of the executives related to career planning and performance appraisal association do not differ depending on their job grade

H1: The opinions of the executives related to career planning and performance appraisal association differ depending on their job grade

The table 5.39 provides the frequency distribution of the responses across the various job grades, and the contingency table to calculate the chi-square value to test whether the practice of appraisal based career planning is pervasive across the job grades in all the selected IT companies in West Bengal or not. The cross tabulation is done on the variable depicting distribution of appraisal based career planning with the level of job grades.
Table 5.39. Contingency table to study the association between career planning & PA across the job grade in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Career Planning &amp; PA</th>
<th>No Count</th>
<th>Job Grade</th>
<th>Yes Count</th>
<th>Job Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Jr. Executive</td>
<td>Sr. Executive</td>
<td>Manager</td>
<td>Non IT Executive</td>
</tr>
<tr>
<td></td>
<td>65 (25.4%)</td>
<td>45 (24.6%)</td>
<td>40 (30.8%)</td>
<td>25 (39%)</td>
<td>175</td>
</tr>
<tr>
<td>Expected Count</td>
<td>70.8</td>
<td>50.6</td>
<td>35.9</td>
<td>17.7</td>
<td>175.0</td>
</tr>
<tr>
<td>Count</td>
<td>191 (74.6%)</td>
<td>138 (75.4%)</td>
<td>90 (69.2%)</td>
<td>39 (61%)</td>
<td>458</td>
</tr>
<tr>
<td>Expected Count</td>
<td>185.2</td>
<td>132.4</td>
<td>94.1</td>
<td>46.3</td>
<td>458.0</td>
</tr>
<tr>
<td>Total</td>
<td>256</td>
<td>183</td>
<td>130</td>
<td>64</td>
<td>633</td>
</tr>
<tr>
<td>Expected Count</td>
<td>256.0</td>
<td>183.0</td>
<td>130.0</td>
<td>64.0</td>
<td>633.0</td>
</tr>
</tbody>
</table>

Source: Primary data

It transpires from the table and figure 5.17 above that a majority of the responses (61% - 74.6%), agrees about the dependence of career planning on appraisal report. During the personal interview the researcher has perceived that
a well structured and systematic career planning exists for the junior and senior executives than for the non IT executives in the selected IT companies.

The table 5.40 describes the chi-square ($\chi^2$) test to examine the association of appraisal based career planning and the level of work.

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>6.309a</td>
<td>3</td>
<td>.097</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The test specifies that 0 cells have expected count less than 5. The critical value of $\chi^2 = 6.309$ and the p value in chi-square ($\chi^2$) come out to be $0.097 > 0.05$, rejecting the H1.

**Ho is accepted:** The opinions related to career planning and performance appraisal association do not differ depending on the job grade

So, the chi-square test indicates that career planning decisions are *related* to the performance appraisal for each job grades.

**Hypotheses 6:**

The hypothesis tries to study whether the career planning is practiced in all the IT companies irrespective of their sizes or not? The question was asked to the respondents were: “Do you have any career planning in your organization?”

The cross tabulation in the table 5.41 below describes observed and expected frequencies about employee opinion about career planning and the performance appraisal in the organizations grouped on the basis of their employee strength.
Table 5.41 Contingency table to study the practice of appraisal based career planning in different companies grouped on the basis of employee strength in West Bengal

<table>
<thead>
<tr>
<th>Career Planning</th>
<th>No</th>
<th>Count</th>
<th>Expected Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>43(13%)</td>
<td>74.6</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>292(87%)</td>
<td>260.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Count</th>
<th>Expected Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>175</td>
<td>458</td>
</tr>
<tr>
<td></td>
<td>175.0</td>
<td>633</td>
</tr>
</tbody>
</table>

Source: Primary data

Figure 5.18 Practice of appraisal based career planning in the selected IT companies in West Bengal grouped on the basis of employee strength

Source: Primary data

The table 5.41 and the figure 5.18 transpire that majority (more than 67%) of the responses in both selected group of IT companies’ on the basis of employee strength, accept the existence of career planning in their companies. During personal survey, it was informed by the non IT executives of the medium and small companies with employee strength below 15000, (especially the companies with workforce size below 100), that discussion and implementation of career progression policy is hardly practiced for their cadre, though the IT executives
enjoy a career planning system through formal / informal discussion with their supervisor.

The table 5.42 calculates the chi square value to test the practice of appraisal based career planning process in the companies varying in size on the basis of employee strength. The footnote informs the appropriateness of the p value.

| Table 5.42 Chi square test statistics to study the existence of appraisal based career planning in different selected IT companies in West Bengal on the basis of employee strength |
|-----------------|----------------|-----------------|-----------------|-----------------|
| Pearson Chi-Square | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
| Pearson Chi-Square | 52.289a | 1 | .000 |                |                |
| N of Valid Cases | 633 | | | | |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 82.39.

Source: Primary data

The critical $\chi^2$ value calculated as 52.289, and the p value is .000 which is $< 0.01$, which rejects null hypotheses (H0) and accepts alternative hypotheses (H1) even at 1% level, that practice of appraisal based career planning is widely practiced irrespective of company size.

H1 is accepted: Regular practice of career planning exist irrespective of company size

So, dependence of career planning practice on performance appraisal do not vary with the company size

The research question is further more elaborated to check whether the career planning is exists for all job grade levels of the executives in different companies on the basis of employee strength. To understand the trend and analyze the practice of career planning for different job grades, a sub – hypothesis is framed:
H₀: The opinion about the practice of appraisal based career planning of the executives does not vary with the job grades in the different selected IT companies on the basis of employee strength.

H₁: The opinion about the practice of appraisal based career planning of the executives does not vary with the job grades in the different selected IT companies on the basis of employee strength.

The table 5.43 depicts the observed and expected frequencies of opinions of the executive from different job grade in different sized IT companies’ about the association of career planning and performance appraisal.

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Career Planning</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No ( charismatic )</td>
<td>Yes ( charismatic )</td>
</tr>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>Count 21 (15%)</td>
<td>123 (85%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 18.5</td>
<td>125.5</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>Count 6 (6%)</td>
<td>90 (94%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 12.3</td>
<td>83.7</td>
</tr>
<tr>
<td>Manager</td>
<td>Count 10 (15%)</td>
<td>55 (85%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 8.3</td>
<td>56.7</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>Count 6 (20%)</td>
<td>24 (80%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 3.9</td>
<td>26.1</td>
</tr>
<tr>
<td>Total</td>
<td>Count 43</td>
<td>292</td>
</tr>
<tr>
<td></td>
<td>Expected Count 43.0</td>
<td>292.0</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>Count 36 (32%)</td>
<td>76 (68%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 36.8</td>
<td>75.2</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>Count 25 (29%)</td>
<td>62 (71%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 28.6</td>
<td>58.4</td>
</tr>
<tr>
<td>Manager</td>
<td>Count 24 (37%)</td>
<td>41 (63%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 21.4</td>
<td>43.6</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>Count 13 (38%)</td>
<td>21 (62%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 11.2</td>
<td>22.8</td>
</tr>
<tr>
<td>Total</td>
<td>Count 98</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Expected Count 98.0</td>
<td>200.0</td>
</tr>
</tbody>
</table>

Source: Primary data
It is clear from the above frequency distribution of the responses gathered through the administration of questionnaire from different sized organization and demonstrates that irrespective of organizational size, the career planning is practiced for all job grades, for each of the selected group of IT companies on the basis of employee strength. The table 5.44 provides the chi square value to test the practice of career planning process across the job grades in different sized companies.

**Table 5.44 Chi square table to study the practice of career planning based on PA for different job grades in companies on the basis of strength in West Bengal**

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Pearson Chi-Square</td>
<td>5.868a</td>
<td>3</td>
<td>.118</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td>335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Pearson Chi-Square</td>
<td>1.628b</td>
<td>3</td>
<td>.653</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td>298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The chi – square test in table 5.44 reveals that the critical value of chi-square (\(\chi^2_{\text{calc}}\)) 5.686, with p value 0.118 > 0.05, in the companies with employee
strength more than 15,000, which tells that career planning exists for all the level of job grades in those companies. The chi-square calculated value ($\chi_{\text{calc}}^2$) for the small and medium sized companies is 1.628, with p value 0.653 > 0.05, in the companies with employee strength less than 15,000, indicates the same result. So, H1 rejected and H0 accepted.

H0 is accepted: The practice of career planning does not vary with the job grades in the IT companies with varied size.

So, it can be concluded that appraisal based career planning exists for all level of job grades, irrespective of the company size.

A micro view on the existence of career planning in each job grades from the two groups of selected IT companies in West Bengal area is calculated by one parameter chi-square test in each job grades from the selected IT companies.

H0 Career Planning decisions are not related to the appraisal process
H1 Career Planning decisions are related to the appraisal process

Table 5.44A. One parameter chi square table to study the practice of career planning based on PA for different job grades in companies with varying employee strength in West Bengal

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>Junior Executive</th>
<th>Below 15000</th>
<th>Above 15000</th>
<th>Non IT Executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 15.0.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 56.0.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.5.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0.

Source: Primary data
Linkage between career planning and performance appraisal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>P value</td>
<td>Ho</td>
<td>H1</td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.035</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.170</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

5.3.4 Practice of feedback intervention after appraisal

From administration of questionnaires and focus group interview the researcher has conceived the idea that continuous monitoring and feedback on performances is the one most important intervention to improve the employee performance in the IT industry. The executives in the IT industry are dealing with domestic as well as multinational clients with varied requirements of skill. As the Indian IT companies have grown in experience and became one of the major IT solution providers in the world, the requirement of sophisticated skill sets has increased a lot. The software engineering is a very complex process to administer. As a result a practice of candid feedback process helps to increase team performance. The team-lead monitors the progress of the team member and help them to implement/in incorporate innovative ideas into their software designing. In the BPO companies, the “caller” deals with multinational clients, so they require improving the communication skill, follow the clients’ accents, understanding the clients’ requirements and deliver value added service to them. Feedback on performances helps them to understand their strengths and weaknesses, and at the same time refine their activities to tune it to the
organizational requirements and deliver a competent and valued service to the clients.

This section is aimed to study the feedback process in the IT companies as a whole and also to test the views of the companies diverse in size. To get a comprehensive understanding, the question asked to the respondents/executives was: “Are you given any feedback about your performance after the appraisal process” and the following hypotheses are made:

**Hypothesis No. – 7**

H₀ Feedback after appraisal process is not done on a regular basis
H₁ Feedback after appraisal process is done on a regular basis

**Hypothesis No. – 8**

H₀ The practice appraisal feedback intervention do not exist in all companies depending on the company size
H₁ The practice appraisal feedback intervention exist in all companies depending on the company size

**Hypothesis No – 7**

The researcher in this section, tried to understand the overall trend of appraisal feedback mechanism in the IT industry. The table 5.45 provides the frequency of the responses obtained from the selected IT companies in West Bengal to understand the linkage between feedback intervention and performance appraisal. The table also provides the expected value calculated considering an equal probability (0.5) of answering no or yes to the research question under one parameter chi-square testing to test one parameter chi-square test.
The figure 5.20 shows the pictorial view of the research question, which also justifies the chi – square test with 81.4% people admits the regular practice of appraisal feedback.

Table 5.45 Frequency distribution and contingency table for practice of feedback after appraisal in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Observed N</th>
<th>percentage</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>118</td>
<td>18.4</td>
<td>316.5</td>
<td>-198.5</td>
</tr>
<tr>
<td>yes</td>
<td>515</td>
<td>81.4</td>
<td>316.5</td>
<td>198.5</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

Table 5.46 Descriptive statistics for the variable analyzing the practice of feedback after appraisal in overall selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback of appraisal</td>
<td>633</td>
<td>.81</td>
<td>.390</td>
<td>0.152</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Primary data
The table 5.47 of test statistics provides the information about the chi-square test to investigate the regularity of appraisal in IT industry as a whole. The table shows that 0 cells have expected count less than 5, which is denoted towards the appropriateness of p value. The Critical $\chi^2$ value 248.987 and p value is .000 which is < 0.01, which rejects null hypotheses and accepts alternative hypotheses that practice of appraisal is regular in the IT industry at 1% level also.

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>Feedback of appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
<tr>
<td>a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 316.5.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

So, H0 is rejected that feedback after appraisal process is not done on a regular basis

H1 is accepted that feedback after appraisal process is *done on a regular basis*

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and feedback intervention, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:
Ho: The opinions of the respondents about the practice of appraisal based feedback intervention, do not vary with the age, gender, qualification and experience

H1: The opinions of the respondents about the practice of appraisal based feedback intervention, vary with the age, gender, qualification and experience

Table 5.48 Opinion patterns of the executive showing linkage between performance appraisal system and feedback intervention based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between feedback intervention and appraisal system</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>.82</td>
<td>.383</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>.78</td>
<td>.417</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>.86</td>
<td>.351</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.81</td>
<td>.394</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.82</td>
<td>.382</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.83</td>
<td>.375</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.76</td>
<td>.429</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 yrs</td>
<td>229</td>
<td>.81</td>
<td>.391</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.82</td>
<td>.387</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.79</td>
<td>.409</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>.90</td>
<td>.301</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.48 shows the descriptive values (i.e., mean and standard deviation) of the variable showing linkage between performance appraisal system and feedback intervention based on age, gender, qualification, work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal.
The above table 5.49 demonstrates that the opinions related to linkage between feedback intervention and appraisal process do not vary with the age, gender and even with work experience in the current company, as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and H0 accepted for age, gender, and working experience in current company).

So, there is *no difference* in feedback practice in the sampled IT companies in West Bengal on the basis of age, gender, qualification or working experience in the current companies.

An in depth study further, is administered to understand the regularity of the appraisal feedback process across the job grades of the IT industry. The study is administered through the understanding the hypotheses are:
**H0:** There is no opinion difference among the executives from various job
grades about the regular practice of appraisal feedback

**H1:** There is opinion difference among the executives from various job grades
about the regular practice of appraisal feedback

The table 5.50 organizes the responses obtained on the research question
probing the linkage between regular feedback intervention and performance
appraisal, from the various job grades, over all the selected IT companies in West
Bengal. The table also provides the contingency table to calculate the chi square
value to test the practice of appraisal based feedback across the job grades. All the
cells have calculated expected value more than 5.

<table>
<thead>
<tr>
<th>Feedback of appraisal</th>
<th>No</th>
<th>Job Grade</th>
<th>Expected Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Jr. Executive</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>49 (19.1%)</td>
<td>47.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sr. Executive</td>
<td>25 (13.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manager</td>
<td>29 (22.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non IT Executive</td>
<td>15 (23.4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>118.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>207 (80.9%)</td>
<td>208.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>158 (86.3%)</td>
<td>148.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>101 (77.7%)</td>
<td>105.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>49 (76.6%)</td>
<td>52.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>515.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>256</td>
<td>256.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>183</td>
<td>183.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>130</td>
<td>130.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64</td>
<td>64.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>633.0</td>
</tr>
</tbody>
</table>

Source: Primary data

**Figure 5.21.** the response pattern of the varied job grades related to the
existence of feedback intervention in the IT industry

Source: Primary Data
The table 5.50 and the figure clearly indicate that over 76.6% respondents describe an association between the level of job grade and the feedback intervention.

The table 5.51 describes the chi-square ($\chi^2$) test to examine the association of appraisal feedback and the level of work. The test specifies that 0 cells have expected count less than 5.

<table>
<thead>
<tr>
<th>Table: 5.51 Chi square test statistics to analyze the opinion patterns of the executives about the practice of appraisal based feedback intervention across the job grades in over all selected IT companies in West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
</tr>
<tr>
<td>---------------------</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
</tr>
<tr>
<td>N of Valid Cases</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.93.

Source: Primary data

The critical value of $\chi^2 = 5.158$ and the p value in chi-square ($\chi^2$) come out to be $.161 > 0.05$, so we reject the alternative hypotheses and accepts the null hypothesis.

<table>
<thead>
<tr>
<th>Hypothesis: 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through this study, the researcher intended to comprehend the practice of appraisal feedback in the companies within the IT industry. Also the researcher tried to get a micro view of the practice across the job grades in the companies</td>
</tr>
</tbody>
</table>

Ho is accepted that there is no opinion difference among the executives from various job grades about the regular practice of appraisal feedback in all the selected IT companies in West Bengal
varied in size. The research question asked to the respondent was: Are you regularly given any feedback about your performance after the appraisal process?

The table 5.52 provides a contingency table for observed and expected frequencies of responses based on the employee strength of the selected IT companies in West Bengal.

<table>
<thead>
<tr>
<th>Feedback of appraisal</th>
<th>Employee strength</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Above 15,000</td>
<td>Below 15,000</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>28 (84%)</td>
<td>90 (30.2%)</td>
</tr>
<tr>
<td>Expected Count</td>
<td>62.4</td>
<td>59.6</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>335</td>
<td>298</td>
</tr>
<tr>
<td>Expected Count</td>
<td>335.0</td>
<td>298.0</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.52 as well as the figure 5.22 clearly depicts that out of total responses obtained from the companies with workforce size above 15,000, 91.6% and 69.8% of respondents from small, medium companies admit that there is a sound feedback policy in the organizations. During personal interview, the
impression is given by the executives from very small companies with employee size less than 100 to the researcher that, these organizations follow an informal practice of feedback.

The table 5.53, tests the association between the appraisal feedback practice and the organizational size. The footnote provides the information that 0 cells have expected count less than 5, which justifies the appropriateness of the p value.

**Table: 5.53 Chi-Square Test statistics to analyze the association between performance appraisal systems and feedback system in selected companies varying in employee strength in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>49.614a</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 55.55.
b. Computed only for a 2x2 table

Source: Primary data

The critical chi-square ($\chi^2$) value is calculated as 49.614, with p value $0.000 < 0.01$. Hence the null hypothesis $H_0$ is rejected at 1% level also, that: The practice appraisal feedback intervention do not exist in all companies depending on the company size. And $H_1$ is accepted.

The alternative hypothesis $H_1$ is accepted that The regular practice of appraisal based feedback intervention exist irrespective of the company size

An in depth further study, is done to understand the regularity of the appraisal feedback process in various job grades across the companies varied in size in the IT industry. The study is administered through the understanding the hypotheses are:
Ho: The opinion about the regular practice of appraisal feedback does not differ based on the Job grades in different companies based on their employee strength

H1: The opinion about the regular practice of appraisal feedback differ based on the Job grades in different companies based on their employee strength

The table 5.54 shows the observed and contingency values of responses on the research question showing linkage between feedback intervention and performance appraisal across various job grades in different selected IT companies on the basis of employee strength. The figure 5.23 also substantiates the table values and illustrates the trend of appraisal based feedback system across the job grades in the companies with employee strength above/ below 15000.

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jr. Executive</td>
<td>Sr. Executive</td>
</tr>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feedback of appraisal</td>
<td>No</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>Count</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Feedback of appraisal</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>Count</td>
</tr>
</tbody>
</table>

Source: Primary data
The figure also justifies the data that a majority (64.7% - 93.7%) of the responses accept the practice of appraisal based feedback system in the selected IT companies for all job grades. A clear indication of having a structured appraisal based feedback process is found for all the job grades in the big organization (with employee strength more than 15000). In small and medium organization (with employee strength less than 15000), the proportion of the answer ‘no’ compared to ‘yes’ takes a considerable percentage. As it was found, during the interview that in the small, medium organizations the feedback system is practiced regularly but is unstructured and informal in nature, whereas in the big companies the feedback system is structured and regularly practiced.

The table 5.55 test the as to whether, there is any opinion difference among the executives from different job grades in the different sized organization about the regular practice of feedback intervention.
The chi-square test divulges that the critical value of chi-square ($\chi^2_{calc}$) 2.265, with p value 0.519 > 0.05, in the companies with employee strength more than 15,000, which tells that feedback mechanism exists for all the level of job grades in those companies. The chi-square calculated value ($\chi^2_{calc}$) for the small and medium sized companies is 6.861, with p value 0.076 > 0.05, in the companies with employee strength less than 15,000, indicates the same result.

$H_0$ is accepted: The opinion about the regular practice of appraisal feedback does not differ based on the Job grades in different companies based on their employee strength

So, it can be concluded that appraisal based feedback exists for all level of job grades, irrespective of the company size

A further micro view to understand the research question for each of the job grades from selected IT companies varied in work force size, is obtained through one parameter chi-square testing. Table 5.55A provides the test statistics to analyze the hypothesis:
H0  Feedback after appraisal process is not done on a regular basis  

H1  Feedback after appraisal process is done on a regular basis  

| Table. 5.55A  The one chi square test statistics to understand the opinions of the executives from every job grade in the selected companies grouped on the basis of employee strength above/ below 15000 in West Bengal on appraisal based feedback |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|
| **Chi-Square** | **Above 15000** | **Below 15000** | **Non IT executive** |
| **df** | 1 | 1 | 1 | 1 | 1 |
| **Asymp. Sig.** | .000 | .000 | .000 | .002 | .000 | .004 | .000 |
| a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.0. |
| b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0. |
| c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5. |
| e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 15.0. |
| f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 56.0. |
| g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.5. |
| d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.0. |
| Source: Primary Data |

Linkage between performance appraisal and feedback intervention

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>H0</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.002</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.004</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

As the p values are < 0.05 for every job grades in each of the companies with employee strength above or below 15000, so, it substantiate the table 5.55 that there is a linkage between appraisal system and feedback intervention.
5.3.5 Linkage of promotion practice and performance appraisal

The important HR decision that improves the loyalty among the workforce and helps the organization for better utilisation of their existing workforce for future positions is the promotion decisions. Promotion practices results in higher status, more responsibilities and higher salary for the individual. IT industry generally works in project structure, and requisite skill required for the different projects are different. So, identification of job-fit persons for the future projects are done from the appraisal ratings. During the focus group interview with the executives of the companies understudy, the researcher has got the impression that though the industry in the lower level of the workforce is getting a flow of young graduates but it is facing the shortage of skill appropriate with the project demand, in the top level of the workforce. Hence promotion policy is generally, based on employee performance/ merit in IT industry, the seniority is given less weightage in most cases of promotion decisions.

To understand the linkage of the promotion policy with the performance appraisal in IT industry the following hypotheses are made:

Hypothesis No. – 9

H0 Appraisal decisions are not linked to the Promotion

H1 Appraisal decisions are linked to the Promotion

To understand the hypotheses the research question asked to the respondents were: Appraisal and Promotion decisions are linked. The question was administered with a dichotomous question where: 1= yes, 0=No.

The following table provides the descriptive statistics for the variable:
Table 5.56 The descriptive values of the variable showing the opinions of the sampled respondents from the selected IT companies in West Bengal on the linkage between promotion decisions and performance appraisal system

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion to PA</td>
<td>633</td>
<td>0.85</td>
<td>0.357</td>
<td>0.127</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Primary data

The mean value for the variable calculated is 0.85 which show a clear inclination towards the answer 1= agree with standard deviation 0.357 and variance 0.127.

The following table 5.57 provides the distribution of response obtained from the field study on the research question to analyze the linkage between promotion policy and appraisal practice in the selected IT companies in West Bengal. The table also provides the expected value for the calculation of one parameter chi square testing.

Table : 5.57 Frequency distribution and contingency table of the responses to analyze the linkage between appraisal and promotion policy in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>95</td>
<td>15.0</td>
<td>15.0</td>
<td>316.5</td>
<td>-221.5</td>
</tr>
<tr>
<td>yes</td>
<td>538</td>
<td>85.0</td>
<td>100.0</td>
<td>316.5</td>
<td>221.5</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

It transpires from the table 5.57 and the figure 5.24 below that a majority of the responses (85%) responses accept the linkage between promotion and appraisal policy and also expressed satisfaction over the policy during personal interview.
One parameter chi square test was done on the variable to check the linkage between promotion decisions and appraisal practice in the table 5.58.

Table 5.58. Test Statistics to analyze linkage between promotion policy and performance appraisal in the sampled IT companies in West Bengal

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>310.030a</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

The footnote in the table provides the information about the appropriateness of the p value, as 0 cells have expected frequencies less than 5. The critical chi-square value ($\chi^2$) is 310.030 and the p value is 0.000 < 0.05, hence the null hypothesis ($H_0$) is rejected, and the alternative hypothesis ($H_1$) are accepted.

H1 is accepted that appraisal decisions are linked to Promotion

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between
performance appraisal systems and promotion decisions, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:

H0: The opinions of the respondents about the practice of appraisal based promotion system, do not vary with the age, gender, qualification and experience

H1: The opinions of the respondents about the practice of appraisal based promotion system, vary with the age, gender, qualification and experience

The table 5.59 shows the descriptive values (i.e., mean and standard deviation) of the variable showing linkage between performance appraisal system and promotion systems based on age, gender, qualification, and work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal.

<table>
<thead>
<tr>
<th>Linkage between promotion and appraisal system</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>.85</td>
<td>.357</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>.84</td>
<td>.368</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>.91</td>
<td>.294</td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.86</td>
<td>.346</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.83</td>
<td>.378</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.86</td>
<td>.346</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.83</td>
<td>.378</td>
</tr>
<tr>
<td><strong>Qualification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.86</td>
<td>.349</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.82</td>
<td>.381</td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>.85</td>
<td>.361</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.86</td>
<td>.347</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.82</td>
<td>.387</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>.90</td>
<td>.301</td>
</tr>
</tbody>
</table>

Source: Primary data
Table 5.60 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and promotion system based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.090</td>
<td>2</td>
<td>.045</td>
<td>.353</td>
<td>.703</td>
</tr>
<tr>
<td>Within Groups</td>
<td>80.652</td>
<td>630</td>
<td>.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80.742</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.148</td>
<td>1</td>
<td>.148</td>
<td>1.156</td>
<td>.283</td>
</tr>
<tr>
<td>Within Groups</td>
<td>80.595</td>
<td>631</td>
<td>.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80.742</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.130</td>
<td>1</td>
<td>.130</td>
<td>1.015</td>
<td>.314</td>
</tr>
<tr>
<td>Within Groups</td>
<td>80.613</td>
<td>631</td>
<td>.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80.742</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.208</td>
<td>3</td>
<td>.069</td>
<td>.542</td>
<td>.654</td>
</tr>
<tr>
<td>Within Groups</td>
<td>80.534</td>
<td>629</td>
<td>.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80.742</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The above table demonstrates that the opinions related to linkage between promotion and appraisal process do not vary with the age, gender and even with work experience in the current company, as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and H0 accepted for age, gender, and working experience in current company).

So, there is no difference in promotion policy in the sampled IT companies in West Bengal on the basis of age, gender, qualification or working experience in the current companies.
A further study is made to understand whether the promotion policy for each job grades is same or not. The following sub hypothesis is made.

H0 Practice of appraisal based promotion decisions do not vary depending on the job grades

H1 Practice of appraisal based promotion decisions vary depending on the job grades

The following table 5.61 provides the frequency distribution for the variable analyzing the linkage between performance appraisal and promotion across the job grades in the whole IT industry. The table also provides the expected frequencies to calculate the chi – square test.

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Promotion to PA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Jr. Executive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>38 (15)</td>
<td>218 (85)</td>
</tr>
<tr>
<td>%</td>
<td>(15)</td>
<td>(85)</td>
</tr>
<tr>
<td>Expected Count</td>
<td>38.4</td>
<td>217.6</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>27 (15)</td>
<td>156 (85)</td>
</tr>
<tr>
<td>%</td>
<td>(15)</td>
<td>(85)</td>
</tr>
<tr>
<td>Expected Count</td>
<td>27.5</td>
<td>155.5</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>17 (13)</td>
<td>113 (87)</td>
</tr>
<tr>
<td>%</td>
<td>(13)</td>
<td>(87)</td>
</tr>
<tr>
<td>Expected Count</td>
<td>19.5</td>
<td>110.5</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>13 (20)</td>
<td>51 (80)</td>
</tr>
<tr>
<td>%</td>
<td>(20)</td>
<td>(80)</td>
</tr>
<tr>
<td>Expected Count</td>
<td>9.6</td>
<td>54.4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>95</td>
<td>538</td>
</tr>
<tr>
<td></td>
<td>633</td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>95.0</td>
<td>538.0</td>
</tr>
</tbody>
</table>
| Source: Primary Data
The table 5.61 and figure below clearly shows a positive trend (more than 80%) in all job grades towards accepting the linkage between promotion policy and performance appraisal practices. During personal interview the respondents from the selected IT companies, informed the researcher that in the big companies, (with workforce more than 15000), a structured competence management system is administered based on the performance reports of the incumbent. The placement in challenging and important projects perceived similar to promotion by the employees, in respect to better career opportunity, better compensation package and perquisites.

![Figure 5.25 Responses about the promotion policy in varied job grades in the selected IT companies in West Bengal](image)

Source: Primary data

The 5.62 table conducts chi square as to understand whether there is any statistical difference exists in the practice of a promotional policy based on the appraisal report across the job grades in the selected IT industry. The footnote expresses the appropriateness of p value.
Table 5.62. Chi square test statistics to analyze linkage between promotion policy and performance appraisal across the job grades in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1.807</td>
<td>3</td>
<td>.614</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.61.

Source: Primary data

As the p value calculated is 0.614 > 0.05, hence the alternative hypothesis H1 rejected and H0 is accepted, i.e. there is no significant difference between the appraisals based promotion policy.

The appraisal based promotional policy is practiced for all the job grades.

The study aimed to analyze the practice of promotional policy in different organizations based on their employee strength. The study aimed to find out whether the promotional policy and the performance appraisal linkage is pervasive through all the companies or not. A sub hypothesis is formed to study this:

H0: The opinions about linkage between promotion and performance appraisal of the executives from different job grades and different companies based on the employee strength does not differ

H1: The opinions about linkage between promotion and performance appraisal of the executives from different job grades and different companies based on the employee strength differs
A cross tabulation on the item provides the following table 5.63. The table depicts the responses for the executive in different sized IT companies understudy about the linkage between promotion and performance appraisal.

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Above 15,000</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>5</td>
<td>139</td>
<td>144</td>
</tr>
<tr>
<td>Count</td>
<td>3</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>8.2</td>
<td>135.8</td>
<td>144.0</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>6</td>
<td>90</td>
<td>96</td>
</tr>
<tr>
<td>Count</td>
<td>6</td>
<td>94</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>5.4</td>
<td>90.6</td>
<td>96.0</td>
</tr>
<tr>
<td>Manager</td>
<td>3</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>Count</td>
<td>5</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>3.7</td>
<td>61.3</td>
<td>65.0</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>5</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Count</td>
<td>17</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>1.7</td>
<td>28.3</td>
<td>30.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19</td>
<td>316</td>
<td>335</td>
</tr>
<tr>
<td>Expected Count</td>
<td>19.0</td>
<td>316.0</td>
<td>335.0</td>
</tr>
<tr>
<td><strong>Below 15,000</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>33</td>
<td>79</td>
<td>112</td>
</tr>
<tr>
<td>Count</td>
<td>29</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>28.6</td>
<td>83.4</td>
<td>112.0</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>21</td>
<td>66</td>
<td>87</td>
</tr>
<tr>
<td>Count</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>22.2</td>
<td>64.8</td>
<td>87.0</td>
</tr>
<tr>
<td>Manager</td>
<td>14</td>
<td>51</td>
<td>65</td>
</tr>
<tr>
<td>Count</td>
<td>22</td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>16.6</td>
<td>48.4</td>
<td>65.0</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>8</td>
<td>26</td>
<td>34</td>
</tr>
<tr>
<td>Count</td>
<td>24</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>8.7</td>
<td>25.3</td>
<td>34.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>76</td>
<td>222</td>
<td>298</td>
</tr>
<tr>
<td>Expected Count</td>
<td>76.0</td>
<td>222.0</td>
<td>298.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
The table and the figure clearly describes acceptance of a structured and systematic appraisal based promotion policy.

### Table 5.64. Chi square test Statistics to analyze linkage between promotion policy and performance appraisal across the job grades in companies varying in size in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Above 15,000</th>
<th>Below 15,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>3.604</td>
<td>3.103</td>
</tr>
<tr>
<td>df</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.308</td>
<td>.376</td>
</tr>
</tbody>
</table>

Source: Primary data

For the company with workforce size more than 15,000, the critical chi square value is 3.604. The p value is 0.308 > 0.05, it can be concluded that the alternative hypothesis is rejected and H₀ accepted. So, the promotion is linked to performance appraisal system across the job grades in the big companies.

In the small and medium companies, the critical chi – square value is 3.103. The p value 0.376 > 0.05, so same can be concluded for the small and medium companies also, the promotion is linked with the appraisal process irrespective of job grades.
Promotion is linked to performance appraisal across the job grades irrespective of the size of the companies in the IT industry.

A micro view on the existence of promotion policy in each job grades from the two groups of selected IT companies in West Bengal area is calculated by one parameter chi-square test in each job grades from the selected IT companies, the original hypothesis is tested:

H₀ Appraisal decisions are not linked to the Promotion

H₁ Appraisal decisions are linked to the Promotion

Table 5.64A. One parameter chi square table to study the practice of promotion based on PA for different job grades in companies with varying employee strength in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>124.611abc</td>
<td>90.458abcdef</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.0.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.8.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H₁</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Junior Executive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Junior Executive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

As the P values are 0.000 < 0.05 for each job grades, so H₀ rejected, it substantiate the results of 5.64 that feedback intervention is linked to performance appraisal systems.
5.3.6 Linkage between salary increment decisions and performance appraisal system

One of the most important issues in a job holder’s life is the salary and its related issues. The IT industry is widely known as a good pay master to their employees. The survival and sustained growth of the industry is dependent on their highly talented workforce. Hence, maintenance of their workforce is also very important in these organizations. During the field study and through the administration of questionnaire it was found that in general the salary increments are related to the performance of the employee. It also depends on the importance of the skill acquired by the employee. Small organizations reported that due to high turnover problems, to retain their talented employees they emphasize on practicing a competitive monetary policy. Hence increments and incentives play a very vital role towards employee motivation in the IT companies of any size (big or small).

To analyze the linkage between salary increment and the performance appraisal the respondents were asked a dichotomous question: Are your salary increment is linked to Performance appraisal report?

The hypotheses made to analyze the question were:

**Hypotheses No. – 10**

H0  Appraisal decisions are not linked to Salary increment

H1  Appraisal decisions are linked to Salary Increment

The table 5.65 depicts the response pattern of the executives from the selected IT companies in West Bengal to analyse the linkage between salary
increments and performance appraisal process. The table also calculates the expected frequency for further calculation of chi-square.

<table>
<thead>
<tr>
<th>No</th>
<th>Observed N</th>
<th>% of frequency</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>533</td>
<td>15.8%</td>
<td>316.5</td>
<td>-216.5</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>84.2%</td>
<td>316.5</td>
<td>216.5</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.66 provides the descriptive statistics for the variable. To understand the linkage between salary increment and performance appraisal the mean calculated from total 633 data on a dichotomous question (where 0= No and 1 = yes) is 0.84 (leaned towards 1. i.e. ‘yes’) and standard deviation 0.365.

<table>
<thead>
<tr>
<th>Increment to PA</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increment to PA</td>
<td>633</td>
<td>.84</td>
<td>.365</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Primary data
It clearly transpires from the table as well as the figure that a significantly major (84.2%) respondents across the selected companies in the IT industry of West Bengal, accepts the linkage between salary increment and performance appraisal.

The following table 5.67 provides the information about one parameter non parametric test performed on the variable. The footnote provides the information about the appropriateness of the p value. The Chi-Square value calculated was 296.191, and the p value calculated is 0.000 < 0.05.

<table>
<thead>
<tr>
<th>Increment to PA</th>
<th>Chi-Square</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>296.191^a</td>
<td>.000</td>
</tr>
<tr>
<td>Df</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 316.5.

Source: Primary data

As the p value < 0.05, the null hypothesis is rejected and the alternative hypothesis is accepted.

The alternative hypothesis H1 is accepted: Appraisal decisions are linked to Salary Increment

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and salary increment decisions, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:
Ho: The opinions of the respondents about the linkage between appraisal and salary increment system, do not vary with the age, gender, qualification and experience

H1: The opinions of the respondents about linkage between appraisal and salary increment system, vary with the age, gender, qualification and experience

The table 5.68 shows the descriptive values (i.e., mean and standard deviation) of the variable showing linkage between performance appraisal system and salary increments based on age, gender, qualification, and work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal.

<table>
<thead>
<tr>
<th>Linkage between salary increment and appraisal system</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>.84</td>
<td>.371</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>.85</td>
<td>.361</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>.95</td>
<td>.213</td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.82</td>
<td>.380</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.88</td>
<td>.331</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.82</td>
<td>.380</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.88</td>
<td>.331</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.85</td>
<td>.358</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.82</td>
<td>.387</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>.83</td>
<td>.377</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.84</td>
<td>.372</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.85</td>
<td>.354</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>1.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Primary data
Table 5.69 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and salary increment based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Source: Primary data</th>
</tr>
</thead>
</table>

The above table 5.69 demonstrates that the opinions related to linkage between salary increments and appraisal process do not vary with the age, gender and even with work experience in the current company, as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and Ho accepted for age, gender, and working experience in current company).

So, there is no difference in salary increment decisions in the sampled IT companies in West Bengal on the basis of age, gender, qualification or working experience in the current companies.

To study further in a micro level the opinions of executives based on their job grades and company’s employee strength, etc., the following section aimed to test whether the appraisal linked salary increment practice is pervasive across the...
job grades in all the sampled companies or not. To understand the association, some sub hypotheses are made:

H₀ Appraisal linked Salary increment decisions do not differ with the job grades
H₁ Appraisal linked Salary increment decisions differ with the job grades

The table 5.70 describes the responses of the executives obtained from the field study about the appraisal linked salary increment decisions across the job grades the selected IT companies in West Bengal.

<table>
<thead>
<tr>
<th>Increment to PA</th>
<th>No</th>
<th>Jr. Executive 46 (18%)</th>
<th>Sr. Executive 23 (12.6%)</th>
<th>Manager 18 (13.8%)</th>
<th>Non IT Executive 13 (20.3%)</th>
<th>Total 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Expected count</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>40.4</td>
<td>28.9</td>
<td>20.5</td>
<td>10.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>210 (82%)</td>
<td>160 (87.4%)</td>
<td>112 (86.2%)</td>
<td>51 (79.7%)</td>
<td>533</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expected count</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>215.6</td>
<td>154.1</td>
<td>109.5</td>
<td>53.9</td>
<td>633</td>
</tr>
<tr>
<td></td>
<td></td>
<td>256</td>
<td>183</td>
<td>130</td>
<td>64</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The figure 5.28 below clearly depicts the response pattern of the employees across the job grade on the research question showing linkage between salary increment decisions on the performance appraisal report.

Source: Primary data
The figure and the table transpires a clear communication from the respondents across the various job grades in the selected IT companies that a majority (above 79% - 87.4%) of them accepting the link between salary increments and performance appraisal.

The table 5.71 tests the chi – square value to analyze whether the practice of salary increment on the basis of performance appraisal report differs in different job grades or not. The footnote justifies the appropriateness of the p value. The critical chi-square value is 3.695 and the p value is 0.296 > 0.05.

<table>
<thead>
<tr>
<th>Table: 5.71 Chi-Square Tests to study the practice of appraisal linked salary increment decisions across the job grades in IT industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Pearson Chi-Square</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
</tr>
<tr>
<td>N of Valid Cases</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.11.

Source: Primary Data

As the p value > 0.05, the alternative hypothesis is rejected and null hypothesis is accepted. The null hypothesis H0 is accepted: Appraisal linked Salary increment decisions do not differ with the job grades.

In IT industry, the salary decisions are based on appraisal report irrespective of job grades.

Further to get a micro view, the responses are cross tabulated across the job grades for the selected IT companies in West Bengal with employee strength above/ below 15000.
Table: 5.72 Response related linkage between salary increment with performance appraisal system across the Job Grade in different sized selected IT organization in West Bengal

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Increment to PA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>Count 12 (8%)</td>
<td>132 (92%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 10.7</td>
<td>133.3</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>Count 5 (5%)</td>
<td>91 (95%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 7.2</td>
<td>88.8</td>
</tr>
<tr>
<td>Manager</td>
<td>Count 5 (8%)</td>
<td>60 (92%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 4.9</td>
<td>60.1</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>Count 3 (10%)</td>
<td>27 (90%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 2.2</td>
<td>27.8</td>
</tr>
<tr>
<td>Total</td>
<td>Count 25</td>
<td>310</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>Count 34 (30%)</td>
<td>78 (70%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 28.2</td>
<td>83.8</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>Count 18 (21%)</td>
<td>69 (79%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 21.9</td>
<td>65.1</td>
</tr>
<tr>
<td>Manager</td>
<td>Count 13 (20%)</td>
<td>52 (80%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 16.4</td>
<td>48.6</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>Count 10 (29%)</td>
<td>24 (71%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 8.6</td>
<td>25.4</td>
</tr>
<tr>
<td>Total</td>
<td>Count 75</td>
<td>223</td>
</tr>
<tr>
<td></td>
<td>Expected Count 75.0</td>
<td>223.0</td>
</tr>
</tbody>
</table>

Source: Primary data

Figure 5.29. Response related Increment to PA across the Job Grade in different sized organization

Source: Primary data
It is strikingly noted from table 5.72 and the figure 5.29 that all the job grades are clearly agrees that the salary increments are based on performance appraisal of the incumbent, though during personal interview the employees from selected IT (small/medium and some big) companies expressed their dissatisfaction over process of administration of the decision.

To analyze the data in a comprehensive way a sub hypothesis is made.

\[ \text{H}_0 \] The opinions of the executives do not differ with the job grades and employee strength of the company about the linkage between appraisal and salary increment decisions

\[ \text{H}_1 \] The opinions of the executives differ with the job grades and employee strength of the company about the linkage between appraisal and salary increment decisions

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Pearson Chi-Square</td>
<td>1.149(^a)</td>
<td>3</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Pearson Chi-Square</td>
<td>3.775(^b)</td>
<td>3</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

As, the chi-square value calculated for the selected companies with workforce strength above/ below 15000, is \(p = 0.765 > 0.05\), and \(p = 0.287 > 0.05\) respectively,

So, the alternative hypothesis \(H_1\) is rejected: The opinions of the executives differ with the job grades and employee strength of the company about the linkage between appraisal and salary increment decisions.
The null hypothesis $H_0$ is accepted: The opinions of the executives *do not differ* with the job grades and employee strength of the company about the linkage between appraisal and salary increment decisions.

So it can be concluded, that the salary decisions are linked to appraisal reports irrespective of job grades and organizational size.

A further micro view to understand the research question for each of the job grades from selected IT companies varied in work force size, is obtained through one parameter chi-square testing. Table 5.73A provides the test statistics to analyze the hypothesis:

$H_0$  Appraisal decisions are not linked to Salary increment

$H_1$  Appraisal decisions are linked to Salary Increment

**Table 5.73A. One parameter chi square table to study the practice of salary increment on PA for different job grades in companies with varying employee strength in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>100.000&lt;sup&gt;a&lt;/sup&gt;</td>
<td>77.042&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 56.0.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.5.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0.

Source: Primary Data
As all the p values for each job grades in the selected IT companies with different employee strength are 0.000 < 0.05, Hence, table 5.73A substantiate the finding in table 5.73, that there is no opinion difference among the executives from various job grades in the companies with workforce above/ below 15000, and salary increments are linked to performance appraisal for all job grades.

5.3.7 Linkage of Salary incentives to the performance appraisal

Salary incentive, a monetary reward given to the employees at the end of the year, generates a tremendous motivation among the workforce to perform best. A huge amount of money paid to the employees can help them to fulfil their desires and hence can create a contented workforce. The practice promotes a positive climate of competition to give a paramount performance in the work to earn the incentive. During the administration of questionnaire and direct interview, many of the executives has shown a keen interest and expressed contentment towards the practice. Different organizations practice different forms of incentives to motivate their workforce.

This section tries to identify whether the incentives are linked to the appraisal data or not.
To get the answer, respondents were asked a question that: “Are appraisal data used for incentive schemes decisions”. A likert type scale was used to administer the question with 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree and the hypotheses are made as follows:

**Hypotheses No. – 11**

H₀ Appraisal decisions are not linked to Salary Incentive

H₁ Appraisal decisions are linked to Salary Incentive

The table 5.74 below provides the descriptive statistics of the variable understudy for the total IT industry as obtained from the organization of questionnaire. As calculated under for 633 variables the mean of the data are calculated 3.72, with a standard deviation of 0.929 for the whole industry.

<table>
<thead>
<tr>
<th>APP5</th>
<th>N</th>
<th>Mean</th>
<th>Mode</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>633</td>
<td>3.72</td>
<td>4.00</td>
<td>.929</td>
<td>0.864</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Primary Data

The table 5.75 is providing the calculated frequencies for the variable understudy: A total of 58.1% respondents admit that salary incentives are linked to appraisal data out of which, 22.9% respondents strongly agreed and 35.2% respondents agreed the issue. A total of 8.2% respondents disagree with the issue of linkage out of which 7.3% disagreed and 0.9% strongly disagreed. The overall trend in the IT industry shows a positive inclination towards the answer that salary incentives are linked to appraisal data.
Table 5.75. The overall trend of opinions of the respondents in the selected IT companies in West Bengal related to appraisal linked salary incentive decisions

<table>
<thead>
<tr>
<th></th>
<th>Observed N</th>
<th>Percentages</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>6</td>
<td>.9</td>
<td>126.6</td>
<td>-120.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>46</td>
<td>7.3</td>
<td>126.6</td>
<td>-80.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>213</td>
<td>33.6</td>
<td>126.6</td>
<td>86.4</td>
</tr>
<tr>
<td>Agree</td>
<td>223</td>
<td>35.2</td>
<td>126.6</td>
<td>96.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>145</td>
<td>22.9</td>
<td>126.6</td>
<td>18.4</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td>126.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

The table also provides the information about the data to be used in chi-square test, taken the equal probability of response in any of the points in the Likert type scale, the expected value of N is calculated as 126.6. The corresponding residuals for all five scale values are calculated in table 5.75. The pie diagram below shows the frequency distribution pictorially.

Source: Primary data

Now, the table 5.76, tests the association between the salary incentive decisions and the appraisal data. The footnote confirms the appropriateness of
the p value. The critical chi-square value ($\chi^2$) as calculated in the table is 301.242, with p value 0.000 < 0.05.

| Chi-Square | 301.242<sup>a</sup> |
| df | 4 |
| Asymp. Sig. | .000 |

Table 5.76. Chi-square test to analyze the linkage between salary incentives and appraisal data

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary Data

As p value < 0.05, then the H<sub>0</sub> is rejected and H<sub>1</sub> accepted that the salary incentives are linked to the appraisal data.

So, it can be concluded as overall practice in IT industry, the salary incentives are linked to performance appraisal.

To understand the effect of age, gender, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and salary incentive decisions, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:

H<sub>0</sub>: The opinions of the respondents about the linkage between appraisal and salary incentive system, do not vary with the age, gender, qualification and experience

H<sub>1</sub>: The opinions of the respondents about linkage between appraisal and salary incentive system, vary with the age, gender, qualification and experience

The table shows the descriptive values (i.e., mean and standard deviation) of the variable.
Table. 5.77 Opinion patterns of the executive showing linkage between performance appraisal system and salary incentive based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between salary incentive and appraisal system</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>3.69</td>
<td>.934</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>3.80</td>
<td>.897</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>3.86</td>
<td>1.037</td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.77</td>
<td>.918</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.63</td>
<td>.947</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.77</td>
<td>.918</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.63</td>
<td>.947</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>3.69</td>
<td>.915</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>3.68</td>
<td>.930</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.80</td>
<td>.946</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>4.10</td>
<td>.944</td>
</tr>
</tbody>
</table>

Source: Primary data

Table. 5.78 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and salary incentive based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Age</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.840</td>
<td>2</td>
<td>.920</td>
<td>1.065</td>
<td>.345</td>
</tr>
<tr>
<td>Within Groups</td>
<td>544.106</td>
<td>630</td>
<td>.864</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>545.946</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.885</td>
<td>1</td>
<td>2.885</td>
<td>3.352</td>
<td>.068</td>
</tr>
<tr>
<td>Within Groups</td>
<td>543.061</td>
<td>631</td>
<td>.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>545.946</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.275</td>
<td>3</td>
<td>1.425</td>
<td>1.655</td>
<td>.176</td>
</tr>
<tr>
<td>Within Groups</td>
<td>541.671</td>
<td>629</td>
<td>.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>545.946</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The above table demonstrates that the opinions related to linkage between salary incentives and appraisal process do not vary with the age, gender and even
with work experience in the current company, as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and H0 accepted for age, gender, and working experience in current company).

So, there is no difference in salary incentive decisions in the sampled IT companies in West Bengal on the basis of age, gender or working experience in the current companies.

To get a micro view of the practice of salary incentives in the companies under the IT industry, the appraisal linked salary incentive decisions are checked in the companies diverse in size.

A sub hypothesis is made to study the question:

H0  The salary incentives are not linked to the performance appraisal depending on the employee strength of the company

H1  The salary incentives are linked to the performance appraisal depending on the employee strength of the company

The frequency distribution table 5.79 to study the research question is as follows:

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>0</td>
<td>15 (4.5%)</td>
<td>118 (35.2%)</td>
<td>122 (36.4%)</td>
<td>80 (23.9%)</td>
<td>335</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>6 (2%)</td>
<td>31 (10.4%)</td>
<td>95 (31.9%)</td>
<td>101 (33.9%)</td>
<td>65 (21.8%)</td>
<td>298</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>46</td>
<td>213</td>
<td>223</td>
<td>145</td>
<td>633</td>
</tr>
</tbody>
</table>

Source: Primary Data
The table 5.79 describes that the companies with workforce above 15000, the majority of the responses are leaned towards positive trend. 60.3% responses agree, out of which 23.9% strongly agree and 36.4% agree, that the incentives are based on the appraisal data. Only 4.5% responses disagree with the issue.

In the companies with workforce below 15000, 12.4% responses are negative, out of which 2% employees strongly disagree with the issue of existence of appraisal based incentive scheme. 55.7% of the companies agree with the issue of existence of appraisal based incentive scheme.

The figure 5.31 clearly depicts a pattern of opinion of the employees in the selected companies with different employee strength.

The table 5.80 analyzes the existence of appraisal based incentive system in different companies, diverse in size. The critical chi-square ($\chi^2$) value as calculated in this table is 15.468, with p value 0.004 < 0.05.
Table: 5.80. Chi-Square Tests to analyze the practice of appraisal based incentive across the selected IT companies in West Bengal with different employee strength

<table>
<thead>
<tr>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.468a</td>
<td>4</td>
<td>.004</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

As the p value < 0.05, H₀ is rejected and H₁ accepted. So, it can be concluded that the practice of appraisal are linked to salary incentives irrespective of the company size.

A further micro study on the existence of an incentive based appraisal system across the job grades in various companies varied in size. The table 5.81 provides the frequency distribution of existence of an appraisal based incentive system across the Job Grade in companies varying in size. To study this, a sub hypothesis is made:

H₀  The employee opinion about appraisal linked salary incentive decisions do not differ with the job grades in the different companies based on employee strength

H₁  The employee opinion about appraisal linked salary incentive decisions differ with the job grades in the different companies based on employee strength
Table 5.81. Frequency distribution of the responses obtained about the existence of an appraisal based incentive system across the Job Grade in different companies on the basis of employee strength

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jr. Executive</td>
<td>Sr. Executive</td>
</tr>
<tr>
<td>Above 15,000 APP5</td>
<td>Disagree</td>
<td>8 (53.3%)</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>51 (43.2%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>52 (42.6%)</td>
</tr>
<tr>
<td>Total</td>
<td>Strongly Agree</td>
<td>33 (41.3%)</td>
</tr>
<tr>
<td>Below 15,000 APP5</td>
<td>Strongly Disagree</td>
<td>1 (16.7%)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>12 (38.7%)</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>34 (35.8%)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>38 (37.6%)</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>27 (41.5%)</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>87</td>
</tr>
</tbody>
</table>

Source: Primary Data

From the table 5.81 and the figure 5.32, that a majority of the responses from each job grades are agreeing the administration of salary incentives based on the performance appraisal system. The IT executives from each cadre in both the companies grouped on the basis of employee strength, accept a systematic administration of salary incentives based on appraisal system, but a considerably large number (12% - 18%) of non IT executives from the big (with employee strength above 15000) companies and medium and small companies (with employee strength below 15000) disagree with the practice of systematic and regular incentive schemes.

It is also understood from the personal survey that the IT companies, whether big or small practice a regular and systematic incentive practice for their IT executive cadres.
The data gathered from the field is tested using the chi-square analysis as to whether there is any statistical difference in the opinions of the respondents or not. In the selected IT companies with employee strength above 15,000, the critical chi-square value as calculated in the table is 8.495, with p value 0.485 > 0.05.

In the companies with employee strength less than 15,000, the critical chi-square value is calculated as 7.890, with the p value 0.794 > 0.05.

Table 5.82. Chi-Square Tests statistics to understand whether there is any opinion difference among the respondents related to the linkage between salary incentives and performance appraisal based on their job grades and size based on employee strength of the selected IT company in West Bengal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Pearson Chi-Square</td>
<td>8.495(^a)</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Pearson Chi-Square</td>
<td>7.890(^b)</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td>298</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
As the p value > 0.05, so H0 is accepted, i.e., appraisal linked salary incentive decisions do not differ with the job grades irrespective of company size and H1 rejected.

So, it can be concluded that salary incentive are linked to performance appraisal system and is practiced irrespective of job grades, and also the size of company.

A further micro view to understand the research question for each of the job grades from selected IT companies varied in work force size, is obtained through one parameter chi-square testing. Table 5.82A provides the test statistics to analyze the hypothesis:

H0  Appraisal decisions are not linked to Salary incentive
H1  Appraisal decisions are linked to Salary Incentives

<table>
<thead>
<tr>
<th></th>
<th>Junior Executive</th>
<th>Senior Executive</th>
<th>Manager</th>
<th>Junior Executive</th>
<th>Senior Executive</th>
<th>Manager</th>
<th>Non IT executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35.389</td>
<td>21.417</td>
<td>46.538</td>
<td>43.089</td>
<td>33.402</td>
<td>25.231</td>
<td>34.906</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.

Source: Primary Data
### Linkage between salary incentive and performance appraisal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

As all the p values for each job grades in the selected IT companies with different employee strength are 0.000 < 0.05, Hence, the table 5.82A substantiate the results of table 5.82 that there is no opinion difference among the executives from various cadre in both group of companies with employee strength above/ below 15000.

### 5.3.8 Linkage between fast track promotion and performance appraisal

A striking feature of the modern organizations that differentiate it from the traditional and old organizations is the inclusion/promotion of a large number of young and dynamic workforces, even at the senior managerial positions. The modern and sophisticated organizations, strives to get talented people in their strategic and decision making posts to achieve a competitive advantage in the market, using the innovative and dynamic ideas of these people. Young workforce is also at the same time; want to expedite their career towards positions with higher responsibilities, higher compensation packages and better placements. It revealed from the interview with the respondents from the sampled IT companies that merit/ performance dimensions of the employees are
given leverage over the seniority during the selection of executives for future projects, succession planning and promotion decisions. Fast track promotion helps the organization to get the best job–fit person in terms of performance and potential to manage the responsibilities and also people enjoy their hard work to be paid by the organization.

To investigate whether the appraisal based fast track promotion policy exist in the sampled IT companies, respondents were asked a question: “Appraisal based Fast track promotion scheme is applicable in my organization” using a Likert type scale, where 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree.

To understand the fast track promotion policy in the selected IT organizations, the following hypothesis is made and the responses are analysed.

**Hypotheses No. – 12**

H0  Fast Track promotion decisions are not linked to appraisal in the IT companies

H1  Fast Track promotion decisions are linked to the performance appraisal in the IT companies

The responses of the executives are shown in the table 5.83 in respect of the practice of fast track promotion in the sampled IT companies.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>13</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>45</td>
<td>7.1</td>
<td>7.1</td>
<td>9.2</td>
</tr>
<tr>
<td>Neutral</td>
<td>196</td>
<td>31.0</td>
<td>31.0</td>
<td>40.1</td>
</tr>
<tr>
<td>Agree</td>
<td>270</td>
<td>42.7</td>
<td>42.7</td>
<td>82.8</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>109</td>
<td>17.2</td>
<td>17.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>633</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
It transpires from the table 5.84 that a majority (i.e. 59.9%) of the respondents expressed that the fast track promotion scheme is practiced widely in the sampled IT companies. This can also be visualized through the pie diagram 5.33.

![Pie chart showing practice of fast track promotion](image)

**Source:** Primary data

The mean and standard deviations of the 633 variables in a Likert type scale with 1 = strongly disagree to 5 = strongly agree, is calculated. The mean = 3.66 and median = 4.00 with standard deviation of 0.914, shows an overall positive inclination of the data set.

<table>
<thead>
<tr>
<th>Table: 5.84. Descriptive statistics of the variable showing the practice of fast track promotion in the selected IT companies in West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regularity of appraisal</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Source:** Primary data

In order to get to know whether there is any statistical difference between the responses of the executives from sampled IT companies, a contingency table is prepared with observed and expected frequencies, which is shown in the table 5.85. On the basis of the observed and expected frequencies a chi – square test is performed.
The table 5.85 provides the test statistics to study the existence of appraisal based fast track promotion policy across the selected IT companies.

The chi square calculated is 357.450 with p value 0.000. The null hypothesis is rejected in this case because the p-value of 0.000 lies below 0.05. The p-value is also compared to $\alpha$ of 0.01, which also results in rejection of the hypothesis at even 1% level.

So, $p = 0.000 < 0.05$, results in rejecting the Null Hypothesis: Fast Track promotion decisions are not linked to appraisal in the selected IT companies.
Accepting the alternative hypothesis: Fast Track promotion decisions are linked to appraisal in the selected IT companies.

This statistical result suggests that the practice of appraisal based fast track promotion policy is widely practiced in the selected IT companies.

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and fast track promotion decisions, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:

$H_0$: The opinions of the respondents about the linkage between appraisal and a fast track promotion decision, do not vary with the age, gender, qualification and experience

$H_1$: The opinions of the respondents about linkage between appraisal and a fast track promotion decision, vary with the age, gender, qualification and experience

The table shows the descriptive values (i.e., mean and standard deviation) of the responses.
Table. 5.87 Opinion patterns of the executive showing linkage between performance appraisal system and fast track promotion policy based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between salary increment and appraisal system</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>3.64</td>
<td>.903</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>3.74</td>
<td>.952</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>3.55</td>
<td>.912</td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.70</td>
<td>.887</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.57</td>
<td>.962</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.70</td>
<td>.887</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.57</td>
<td>.962</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>3.60</td>
<td>.922</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>3.83</td>
<td>.869</td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>3.60</td>
<td>.876</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>3.61</td>
<td>.953</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.84</td>
<td>.862</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>4.00</td>
<td>.949</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 yrs</td>
<td>229</td>
<td>3.60</td>
<td>.876</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>3.61</td>
<td>.953</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.84</td>
<td>.862</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>4.00</td>
<td>.949</td>
</tr>
</tbody>
</table>

Source: Primary data

Table. 5.88 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and fast track promotion policy based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Between Groups</td>
<td>1.505</td>
<td>2</td>
<td>.752</td>
<td>.900</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>526.789</td>
<td>630</td>
<td>.836</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>528.294</td>
<td>632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Between Groups</td>
<td>2.352</td>
<td>1</td>
<td>2.352</td>
<td>2.822</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>525.942</td>
<td>631</td>
<td>.834</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>528.294</td>
<td>632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td>Between Groups</td>
<td>6.049</td>
<td>1</td>
<td>6.049</td>
<td>7.308</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>522.245</td>
<td>631</td>
<td>.828</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>528.294</td>
<td>632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td>Between Groups</td>
<td>7.339</td>
<td>3</td>
<td>2.446</td>
<td>2.954</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>520.955</td>
<td>629</td>
<td>.828</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>528.294</td>
<td>632</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at 5% level

Source: Primary data

The above table demonstrates that the opinions related to linkage between salary increments and appraisal process do not vary with the age, gender as all the test results show p value > 0.05 for each and every one these levels (hence, H1
rejected and H\textsubscript{0} accepted for age, gender, and working experience in current company).

But qualification and work experience in the current company show a significant relationship with the appraisal based fast track promotion practice. It is also clear from the personal survey that the employees with higher qualification and working experience get leverage during the fast track promotion decisions.

So, there is opinion difference about fast track promotion decisions in the sampled IT companies in West Bengal on the basis of qualification or working experience in the current companies.

To get a thorough understanding about the practice of appraisal based fast track promotion system in the selected IT companies, the opinions are tested across the size of the organizations participated in the study and a sub hypothesis is formed:

H\textsubscript{0} Appraisal based fast track promotion decisions are not practiced in all selected IT companies based on their size

H\textsubscript{1} Appraisal based fast track promotion decisions are practiced in all selected IT companies irrespective of their size

The table 5.89 below provides the observed and expected frequency distribution of the opinions of the respondents from the selected IT companies grouped on the basis of employee strength.
It is revealed from the table as well as the figure below, that majority (66.2%) of respondents from the big organization with workforce above 15,000 expressed that appraisal based fast track promotion policy is practiced in their organization, while a significant percentage (52.7%) of respondents from the small and medium companies also accepts the existence of same practice.

![Figure 5.34. Response pattern showing the practice of fast track promotion in the selected IT companies of different size in West Bengal](image-url)

Source: Primary data
The following table provides test statistics value and the chi square values to understand the practice of fast track promotion policy in the selected companies varying in size. The footnote justifies the acceptance of p value as 0 cells counts < 5.

| Table: 5.90. Chi square test statistics analyzing as to whether there is any difference in the practice of fast track promotion in the selected IT companies in West Bengal based on employee strength |
|-----------------|-----------------|-----------------|-----------------|
| Pearson Chi-Square | Value | df | Asymp. Sig. (2-sided) |
| 21.906a | 4 | .000 |
| N of Valid Cases | 633 |  |

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.12.

Source: Primary data

The chi square calculated from the data is 21.906, with p value 0.000 < 0.05.

So, H0 is rejected that: Appraisal based fast track promotion decisions are not practiced in all selected IT companies based on their size

H1 is accepted: Appraisal based fast track promotion decisions are practiced in all selected IT companies irrespective of their size

The hypothesis is tested further for various job grades of the respondents to understand whether there is any difference in opinions of the respondents towards the practice of appraisal based fast track promotion decisions. The following table provides the information collected from the respondents with different job grades. To understand the practice of fast track promotion across job grades, a sub hypothesis is made:

H0 There is no opinion difference among the respondents from various job grades
grades in the selected IT companies about the practice of appraisal based fast track promotion decisions

H1 There is opinion difference among the respondents from various job grades in the selected IT companies about the practice of appraisal based fast track promotion decisions

The data in the table 5.91 and also the following figure reveals that respondents from almost all job grades accept that fast track promotion is practiced on the basis of job grades.

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jr. Executive</td>
<td>4 (1.6%)</td>
<td>13 (5.1%)</td>
<td>76 (29.7%)</td>
<td>122 (47.7%)</td>
<td>41 (16.0%)</td>
<td>256</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>6 (3.3%)</td>
<td>12 (6.6%)</td>
<td>69 (37.7%)</td>
<td>68 (37.2%)</td>
<td>28 (15.3%)</td>
<td>183</td>
</tr>
<tr>
<td>Manager</td>
<td>2 (1.5%)</td>
<td>14 (10.8%)</td>
<td>32 (24.6%)</td>
<td>52 (40.0%)</td>
<td>30 (23.1%)</td>
<td>130</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>1 (1.6%)</td>
<td>6 (9.4%)</td>
<td>19 (29.7%)</td>
<td>28 (43.8%)</td>
<td>10 (15.6%)</td>
<td>64</td>
</tr>
</tbody>
</table>

Total: 13 | 45 | 196 | 270 | 109 | 633

Source: Primary data

The figure also indicates that majority of the junior executives (63.7%) admits that fast track promotion is practiced on the basis of appraisal report at their job grades. The figure also transpires that the non IT executives who are also involved in the administrative jobs enjoys a fast track promotion policy based on their performances.
The table 5.92 provides the chi square value to test whether there is any statistical difference in the opinions of the respondents about appraisal based fast track promotion policy for various job grades. The chi-square calculated is 17.225. The p value calculated is 0.141 > 0.05, hence the alternative hypothesis H1 is rejected and Ho accepted.

**Table: 5.92. Chi – square test statistics to study the practice of appraisal based fast track promotion for different job grades in the selected IT companies**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>17.225</td>
<td>12</td>
<td>.141</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

A further micro study is done to understand the opinion pattern among the respondents about the appraisal system based fast track promotion practice for various job grades in various companies different in employee strength. The table 5.93 provides the frequency distribution of existence of an appraisal based...
incentive system across the Job Grade in companies varying in size. To study this, a sub hypothesis is made:

H0 The employee opinion about appraisal linked fast track promotion decisions do not differ with the job grades in the different companies based on employee strength

H1 The employee opinion about appraisal linked fast track promotion decisions differ with the job grades in the different companies based on employee strength

Table 5.93. Frequency distribution of the responses obtained about the linkage between fast track promotion system and appraisal for different Job Grade in different companies on the basis of employee strength

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>Count</td>
<td>1</td>
<td>5</td>
<td>42</td>
<td>76</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1%</td>
<td>3%</td>
<td>29%</td>
<td>53%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>1.3</td>
<td>6.9</td>
<td>40.4%</td>
<td>72.2%</td>
<td>23.2%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>Count</td>
<td>2</td>
<td>5</td>
<td>29</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2%</td>
<td>5%</td>
<td>30%</td>
<td>47%</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>.9</td>
<td>4.6</td>
<td>26.9%</td>
<td>48.1%</td>
<td>15.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>Count</td>
<td>0</td>
<td>3</td>
<td>16</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>0%</td>
<td>5%</td>
<td>25%</td>
<td>46%</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>.6</td>
<td>3.1</td>
<td>18.2%</td>
<td>32.6%</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>Count</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>0%</td>
<td>10%</td>
<td>23%</td>
<td>57%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>.3</td>
<td>1.4</td>
<td>8.4%</td>
<td>15.0%</td>
<td>4.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>3</td>
<td>16</td>
<td>94</td>
<td>168</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>3.0</td>
<td>16.0</td>
<td>94.0%</td>
<td>168.0%</td>
<td>54.0%</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>Count</td>
<td>3</td>
<td>8</td>
<td>34</td>
<td>46</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3%</td>
<td>8%</td>
<td>30%</td>
<td>41%</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>3.8</td>
<td>10.9</td>
<td>38.3%</td>
<td>38.3%</td>
<td>20.7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>Count</td>
<td>4</td>
<td>7</td>
<td>40</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>5%</td>
<td>8%</td>
<td>46%</td>
<td>26%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>2.9</td>
<td>8.5</td>
<td>29.8%</td>
<td>29.8%</td>
<td>16.1%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>Count</td>
<td>2</td>
<td>11</td>
<td>16</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3%</td>
<td>17%</td>
<td>25%</td>
<td>34%</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>2.2</td>
<td>6.3</td>
<td>22.2%</td>
<td>22.2%</td>
<td>12.0%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>Count</td>
<td>1</td>
<td>3</td>
<td>12</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3%</td>
<td>9%</td>
<td>35%</td>
<td>32%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>1.1</td>
<td>3.3</td>
<td>11.6%</td>
<td>11.6%</td>
<td>6.3%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>10</td>
<td>29</td>
<td>102</td>
<td>102</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>10.0</td>
<td>29.0</td>
<td>102.0</td>
<td>102.0</td>
<td>55.0</td>
</tr>
</tbody>
</table>

Source: Primary data
From the table 5.93 and the figure 5.36, depicts that a majority of the responses from each job grades are agreeing the existence of fast track promotion based on the performance appraisal system. It is also understood from the personal survey that the IT companies, whether big or small practice a fast track promotion based on performance/ merit/ working experience to motivate competent employee to give their best on the job.

![Fig. 5.36. Responses to awards existence of an appraisal based fast track promotion system for different job Grade in different companies on the basis of employee strength](image)

**Job Grades**

- **Above 15,000**
- **Below 15,000**

Source: Primary data

The data gathered from the field is tested using one way ANOVA analysis as to whether there is any statistical mean difference in the opinions of the respondents or not as the p value in Pearson chi-square is not appropriate because 8 cells (40%) in the contingency table for the companies with employee strength above 15000, and 5 cells (25%) in the group of companies with employee strength below 15000, have expected counts less than 5.
Table 5.94 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and fast track promotion policy based on various job grades in the selected IT companies with different employee strength in West Bengal

<table>
<thead>
<tr>
<th>Source: Primary data</th>
</tr>
</thead>
</table>

As the p value > 0.05, for both the group of companies (with employee strength below/above) so H0 is accepted, i.e., the mean difference of opinions does not vary with the job grades in the companies with different employee strength.

So, it can be concluded that fast track promotions are linked to performance appraisal system and is practiced irrespective of job grades, but it differs with the size of company.

A further micro view to understand the research question for each of the job grades from selected IT companies varied in work force size, is obtained through one parameter chi-square testing. Table 5.94A provides the test statistics to analyze the hypothesis:

H0  Appraisal decisions are not linked to fast track promotion
H1  Appraisal decisions are linked to fast track promotion
Table 5.94A. One parameter chi square table to study the practice of fast track promotion based on PA for different job grades in companies with varying employee strength in West Bengal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Above 15,000</th>
<th>Below 15,000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chi-Square</td>
<td></td>
</tr>
<tr>
<td></td>
<td>df</td>
<td></td>
</tr>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>132.597$^a$</td>
<td></td>
</tr>
<tr>
<td>Senior Executive</td>
<td>66.500$^b$</td>
<td>22.446$^c$</td>
</tr>
<tr>
<td>Manager</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>57.018$^d$</td>
<td>48.805$^e$</td>
</tr>
<tr>
<td>Senior Executive</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Manager</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Non IT executive</td>
<td>36.156$^g$</td>
<td></td>
</tr>
</tbody>
</table>

Asymp. Sig.  .000  .000  .000  .000  .000  .002  .000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.3.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.

Source: Primary Data

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.002</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

So, the above findings substantiate the table 5.94, that the fast track promotion decisions are linked to performance appraisal systems, at each level of the respondents grades and in all sampled IT companies.

5.3.9 Linkage between punitive measures and performance appraisal

A thorough analytical study, gives the idea that performance appraisal in various organizations are well used for disciplinary and punitive reasons. Disciplinary/ Punitive decisions are corrective in nature. In the face of fast changing technological as well as competitive business climate, it is almost
impossible for any organization to continue with the employment of the consistently poor performing employees, which obviously results in loss of productivity, problem to attain the deadlines to complete the projects and finally to lose the projects. Performance appraisal system helps the organization to identify the poor performers. The HR personnel from the selected IT companies informed that after identification of the poor performers, the areas of deficiencies are documented and the employees are notified through the appraisal interviews. The explanations provided by the employees are documented and the required corrective measures in terms of performance coaching/ training/ mentoring is decided together with the incumbent. But instead of the development initiatives, if the consecutive performance appraisal report of the incumbent shows a declining report, then disciplinary measures are taken against them. At the same time most the executives interviewed expressed their dissatisfaction on over emphasis on appraisal report while taking punitive decisions.

To understand the practice of disciplinary measures in the organizations under study a dichotomous question was asked to the respondents that: “Any disciplinary action is taken generally on the basis of Performance Appraisal?” and the following hypotheses are made to test.

**Hypotheses No. – 13**

H0  Punitive measures are not taken on the basis of the appraisal report

H1  Punitive measures are taken on the basis of the appraisal report

The table 5.95 shows the frequency distribution of the responses of the respondents from the selected IT companies. The table also provides the expected
values of the variable to conduct the chi – square test. The pie diagram substantiates the table and shows a clear acceptance (74.7%) that disciplinary measures are practiced on the basis of performance appraisal report in the sample IT companies.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>No</td>
<td>160</td>
<td>25.3</td>
<td>316.5</td>
<td>-156.5</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>473</td>
<td>74.7</td>
<td>316.5</td>
<td>156.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>633</td>
<td>100.0</td>
<td>316.5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

To understand whether there is any statistical difference between the opinions of the respondents from the sampled IT companies, a one parameter chi – square test is done. The foot note justifies the appropriateness of p value.
Table 5.96 Test Statistics to study the linkage between punitive measures and appraisal report in the selected IT companies in West Bengal

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>154.769&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

<sup>a</sup> 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 316.5.

Source: Primary data

The chi-square test statistics calculated as 154.769, with degrees of freedom 1, with p value 0.000 < 0.05.

So, the null hypothesis H<sub>0</sub> is rejected: Punitive measures are not taken on the basis of the appraisal report.

The alternative hypothesis H<sub>1</sub> is accepted: Punitive measures are taken on the basis of the appraisal report.

To understand the effect of age, gender, qualification, working experience on the opinion differences among the respondents from the selected IT companies in west Bengal, on the research question to study the linkage between performance appraisal systems and punitive decisions, a one-way ANOVA is performed. To understand the opinion patterns a sub hypothesis is made:

H<sub>0</sub>: The opinions of the respondents about the linkage between appraisal and a punitive decision, do not vary with the age, gender, qualification and experience

H<sub>1</sub>: The opinions of the respondents about linkage between appraisal and a punitive decision, vary with the age, gender, qualification and experience

The table shows the descriptive values (i.e., mean and standard deviation) of the responses.
### Table 5.97 Opinion patterns of the executive showing linkage between performance appraisal system and punitive policy based on age, gender, qualification, work experience in the current company as in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between punitive decisions and appraisal system</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>.75</td>
<td>.433</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>.74</td>
<td>.442</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>.73</td>
<td>.456</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>.75</td>
<td>.436</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>.75</td>
<td>.434</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>.74</td>
<td>.441</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>.78</td>
<td>.416</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>.70</td>
<td>.458</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>.75</td>
<td>.433</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>.79</td>
<td>.409</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>229</td>
<td>.70</td>
<td>.458</td>
</tr>
</tbody>
</table>

Source: Primary data

### Table 5.98 ANOVA table to understand the opinion difference of the executive showing linkage between performance appraisal system and punitive policy based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.036</td>
<td>2</td>
<td>.018</td>
<td>.094</td>
<td>.911</td>
</tr>
<tr>
<td>Within Groups</td>
<td>119.522</td>
<td>630</td>
<td>.190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.558</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.003</td>
<td>1</td>
<td>.003</td>
<td>.013</td>
<td>.908</td>
</tr>
<tr>
<td>Within Groups</td>
<td>119.555</td>
<td>631</td>
<td>.189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.558</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.208</td>
<td>1</td>
<td>.208</td>
<td>1.101</td>
<td>.294</td>
</tr>
<tr>
<td>Within Groups</td>
<td>119.349</td>
<td>631</td>
<td>.189</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.558</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.544</td>
<td>3</td>
<td>.515</td>
<td>2.744</td>
<td>.052</td>
</tr>
<tr>
<td>Within Groups</td>
<td>118.013</td>
<td>629</td>
<td>.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.558</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
The above table demonstrates that there is no opinions difference related to linkage between punitive decisions and appraisal process with the age, gender, qualification, or working experience as all the test results show p value > 0.05 for each and every one these levels (hence, H1 rejected and H0 accepted for age, gender, and working experience in current company).

So, punitive decisions are *practiced based on appraisal* report *irrespective* of age, gender, qualification, working experience in the sampled IT companies in West Bengal

An in-depth study further is done to understand whether the appraisal based punitive measure practice differ in the sampled IT companies varying with workforce size.

A sub hypothesis is made to understand the response pattern in the companies with workforce size above or below 15,000.

**H0** Opinions of the respondents towards appraisal based punitive decisions do not differ in selected IT companies based on their size

**H1** Opinions of the respondents towards appraisal based punitive decisions differ in selected IT companies based on their size

The following table provides information about the frequency distribution of the variable studying the association between punitive decisions and the performance appraisal practice in the selected IT companies varies in the size of workforce. The table 5.99 and the figure 5.38, both depicts almost same pattern of responses in both the companies understudy.
Table 5.99. Frequency distribution and contingency table to study the appraisal based punitive decision practice in the sampled IT companies varied in workforce size

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Disciplinary action</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Above 15,000</td>
<td>Count 86 (25.70%)</td>
<td>249 (74.30%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 84.7</td>
<td>250.3</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Count 74 (24.80%)</td>
<td>224(75.20%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count 75.3</td>
<td>222.7</td>
</tr>
<tr>
<td>Total</td>
<td>Count 160</td>
<td>473</td>
</tr>
<tr>
<td></td>
<td>Expected Count 160</td>
<td>473</td>
</tr>
</tbody>
</table>

Source: Primary data

Figure 5.38. Response pattern to study the appraisal based punitive decision practice in the sampled IT companies grouped on the basis of employee strength

Source: Primary data

The table 5.100 provides the chi square test statistics to study the statistical differences between the responses obtained from different companies based on the size of workforce, regarding the research question probing the association between punitive decisions and appraisal report. The footnote provides the appropriateness of the p value.
Table 5.10 Test statistics to study the appraisal based punitive decision practice in the different sampled IT companies on the basis of employee strength

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>0.059</td>
<td>1</td>
<td>.808</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 75.32.

b. Computed only for a 2x2 table

Source: Primary data

The calculated chi-square value is 0.059, with p value 0.808 > 0.05 results in rejecting the alternative hypothesis.

So, the null hypothesis H0 is accepted: Appraisal based punitive decisions do not differ in selected IT companies based on their size.

A more elaborate study on the responses provide a micro view of opinions of the executives from different job grades of different selected IT companies on the basis of workforce size. The table 5.101 provides the distribution of responses over different job grades across the companies varying in size. The table 5.101 and the figure 5.39 clearly indicates that punitive decisions are based on appraisal report in all job grades in the companies with work force varying in size.
Table 5.10. Frequency distribution of responses to analyze the linkage between punitive decisions and performance appraisal for different job grades in different sampled companies on the basis of employee strength in West Bengal

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job Grade</th>
<th>Disciplinary action</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Jr. Executive</td>
<td>No</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35 (24.3%)</td>
<td>109 (75.7%)</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>34 (35.4%)</td>
<td>62 (64.6%)</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>13 (20%)</td>
<td>52 (80%)</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>4 (13.3%)</td>
<td>26 (86.7%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>86</td>
<td>249</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Jr. Executive</td>
<td>24 (21.4%)</td>
<td>88 (78.6%)</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>20 (23.0%)</td>
<td>67 (77.0%)</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>23 (35.4%)</td>
<td>42 (64.6%)</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>7 (20.6%)</td>
<td>27 (79.4%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>74</td>
<td>224</td>
</tr>
</tbody>
</table>

Source: Primary data

Fig. 5.39 Frequency distribution of responses to analyze the linkage between punitive decisions and job grades across the companies varying in size

Source: Primary data
The data gathered from the field is tested using the chi-square analysis as to whether there is any statistical difference in the opinions of the respondents or not.

Table 5.102. Chi-Square Tests statistics to understand whether there is any opinion difference among the respondents related to the linkage between punitive decisions and performance appraisal based on their job grades and size based on employee strength of the selected IT company in West Bengal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Pearson Chi-Square</td>
<td></td>
<td>7.408&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Pearson Chi-Square</td>
<td></td>
<td>5.059&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

In the selected IT companies with employee strength above 15,000, the critical chi-square value as calculated in the table is 7.408, with p value 0.06 > 0.05.

In the companies with employee strength less than 15,000, the critical chi-square value is calculated as 5.059, with the p value 0.168 > 0.05.

As the p value > 0.05, so H0 is accepted.

So, it can be concluded that punitive decisions are linked to performance appraisal system and is practiced irrespective of job grades, and also with the size of company.

The table 5.102A has calculated the responses individually, across the job grades in the selected IT companies, divided on the basis of size of workforce. The critical chi-square value calculated is highest for the junior executives in both the selected companies with workforce above or below 15,000 (38.028 for junior
executives in the companies with workforce above 15,000 and 36.571 for junior executives in the companies with workforce below 15,000).

Table 5.102A. One parameter Chi square test statistics to analyze the linkage between punitive decisions for each job grades across the sampled IT companies varying in size in West Bengal

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Above 15000</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>38.028a</td>
<td>1</td>
</tr>
<tr>
<td>Senior Executive</td>
<td>8.167b</td>
<td>1</td>
</tr>
<tr>
<td>Manager</td>
<td>23.400c</td>
<td>1</td>
</tr>
<tr>
<td><strong>Below 15000</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>36.571e</td>
<td>1</td>
</tr>
<tr>
<td>Senior Executive</td>
<td>25.391f</td>
<td>1</td>
</tr>
<tr>
<td>Manager</td>
<td>5.554c</td>
<td>1</td>
</tr>
<tr>
<td>Non IT executive</td>
<td>22.563d</td>
<td>1</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.0.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 48.0.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.5.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 32.0.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 56.0.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 43.5.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.0.

Source: Primary Data

So, the following inferences can be drawn from the above chi square table for the selected IT companies.

| Linkage between punitive decisions and performance appraisal systems |
|-------------------------------------------------|-----|--------|-------|
| Employee Strength                               | P value | H0   | H1   |
| Above 15,000                                   |       |       |      |
| Junior Executive                               | 0.000 | Rejected | Accepted |
| Senior Executives                             | 0.004 | Rejected | Accepted |
| Managers                                      | 0.001 | Rejected | Accepted |
| Below 15,000                                   |       |       |      |
| Junior Executive                               | 0.000 | Rejected | Accepted |
| Senior Executives                             | 0.000 | Rejected | Accepted |
| Managers                                      | 0.018 | Rejected | Accepted |
| Non IT executives                             | 0.001 | Rejected | Accepted |

5.3.10 Scope of self evaluation in appraisal practice

The extensive survey of literatures on the practice of appraisal and field survey has given the researcher the understanding that the modern organizations
prefer a multisource appraisal feedback system instead of a single rater/supervisor oriented approach. The individual incumbent certainly is a party to evaluate self performance. The practice of ‘self performances’ offer an active role to the job incumbent rather being only a passive listener to the supervisor during the appraisal feedback session. The self evaluation scheme provides the individual better perception about the self performances and thus a better acceptance of individual strength and weaknesses on job performances. The perception about own strength and weak areas of performance promote a productive discussion with the supervisor and hence, facilitating the change in policy, programs and operations. The researcher through the administration of questionnaire and interview with the sampled respondents from selected IT companies, has got the impression that most of the big IT companies are practicing a policy of mutual goal setting and self appraisal to promote a clear communication about the expected performance from the executives and a clear understanding of self progress to achieve that goal under a project.

To understand the practice in the selected IT companies, the respondents were asked a question “The appraisal process provides me the opportunity for self evaluation and self reflection” using a Likert type scale, where the satisfaction level was distributed: 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree.

The following hypothesis is made to understand the research question:

**Hypotheses No. – 14**

H0 Employees do not have the scope of self evaluation in the appraisal process

H1 Employees do have the scope of self evaluation in the appraisal process
The table 5.103 provides the frequency distribution of the variable across the selected IT companies. The table and the figure 5.40 clearly describes that majority (69.8%) of the executives who administered the questionnaire and subsequently interviewed agree that the performance appraisal system provides a scope of self assessment.

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>20</td>
<td>3.2</td>
<td>3.2</td>
<td>126.6</td>
<td>-106.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>115</td>
<td>18.2</td>
<td>21.3</td>
<td>126.6</td>
<td>-11.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>263</td>
<td>41.5</td>
<td>62.9</td>
<td>126.6</td>
<td>136.4</td>
</tr>
<tr>
<td>Agree</td>
<td>179</td>
<td>28.3</td>
<td>91.2</td>
<td>126.6</td>
<td>52.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>56</td>
<td>8.8</td>
<td>100.0</td>
<td>126.6</td>
<td>-70.6</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.104 provides the central tendency by the mean value (3.21) and the dispersion by the standard deviation (0.949) of the variable to study the research question shows a slight inclination to the response value 4 = agree.

<table>
<thead>
<tr>
<th>Self evaluation scope</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>633</td>
<td>3.21</td>
<td>.949</td>
<td>.900</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Primary data

![Fig. 5.40 Table of the variable analyze the scope of self evaluation in the appraisal process in the sampled IT companies](source: Primary data)
To study whether the opinions obtained from the field study differ statistically or not on the research question, a one parameter chi-square test is done with degrees of freedom 4. The calculated critical chi-square value obtained from the study is 298.840

<table>
<thead>
<tr>
<th>Table 5.105 The Chi-square Test Statistics of the variable analyze the scope of self evaluation in the appraisal process in the sampled IT companies in West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chi-Square</strong></td>
</tr>
<tr>
<td><strong>df</strong></td>
</tr>
<tr>
<td><strong>Asymp. Sig.</strong></td>
</tr>
</tbody>
</table>

* a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary data

The p value calculated for the variable is 0.000< 0.05, which suggests rejection of null hypothesis: employees do not have the scope of self evaluation in the appraisal process in the selected IT companies

The alternative hypothesis is accepted: Employees do have the scope of self evaluation in the appraisal process in the selected IT companies

The hypothesis is tested further to have an in-depth understanding about the scope of self evaluation in the appraisal process in the companies with different size of workforce; the following sub hypothesis is made:

**H<sub>0</sub>** The scope of self evaluation in the appraisal process do not vary with the employee strength of the companies

**H<sub>1</sub>** The scope of self evaluation in the appraisal process do not vary with the employee strength of the companies

The table 5.106 and the figure 5.41 describe the response patterns as obtained from the administration of questionnaire. Though majority of the responses are neutral (45.1% in the companies with workforce more than 15,000, and 37.6% in the companies below 15,000) in nature, still a considerable amount of responses (35.9% in the big companies with workforce above 15,000 and 38.6% in small,
medium companies with workforce size below 15,000) agree that the appraisal system provides scope of self evaluation.

| Table 5.106 Frequency distribution and contingency table of the variable to analyze the scope of self evaluation in the appraisal process in different sampled IT companies on the basis of employee strength |
|---|---|---|---|---|---|---|
| Employee strength | Count | Expected Count | Strongly Disagree | Disagree | Neutral | Agree |
| Above 15,000 | 10.6 | 10.6 | 9 (2.7%) | 55 (16.4%) | 151 (45.1%) | 94 (28.1%) | 29.6 |
| Below 15,000 | 9.4 | 9.4 | 11 (3.7%) | 60 (20.1%) | 112 (37.6%) | 85 (28.5%) | 26.4 |
| Total | 20.0 | 20.0 | 20 (3.2%) | 115 (18.4%) | 263 (42.7%) | 179 (28.8%) | 56.0 |

Source: Primary data

Fig. 5.41 Response pattern of the variable to analyze the scope of self evaluation in the appraisal process in the sampled IT companies varying in size

Source: Primary data

The following table 5.107 provides test statistics to test the hypothesis on the responses obtained from the companies with employee strength above/below 15,000. The critical chi square value calculated from the data is 4.793 with the p value 0.309 > 0.05.
Table 5.107 Test Statistics table of the variable to analyze the scope of self evaluation in the appraisal process in the sampled IT companies varying in size

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>4.793a</td>
<td>4</td>
<td>.309</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9.42.

Source: Primary data

The alternative hypothesis is rejected that the employees do have the scope of self evaluation in the appraisal process in all the selected IT companies with different sized work force above/ below 15,000.

The null hypothesis $H_0$ is accepted that: the scope of self evaluation from appraisal do not vary with the size of the company based on the employee strength.

The hypothesis is studied further across the job grades to analyse whether there is any difference in the practice of self appraisal with the job grades. To understand whether there is any statistical difference in the opinions of the executives for different job grades, the following sub hypothesis is made:

$H_0$ The scope of appraisal based self evaluation process do not differ with the job grades

$H_1$ The scope of appraisal based self evaluation process differ with the job grades

The table 5.108 and the figure5.42 describe the response pattern of the executives from the sampled IT companies. It is clear that more than 34% sampled respondents agree that they have the scope to evaluate self during the appraisal process and also expressed satisfaction towards this process during
interview. The acceptance of the self evaluation scope is showing a upward trend from junior executives – senior executives and senior executives – managers. A big amount (more than 35% for all job grades) of executives responded during administration of questionnaire around 3 in the Likert type scale. During the personal interview, they agreed that they have scope to evaluate self during appraisal process, but the process is not adding any extra satisfaction to them as sometimes the process is rigid, leaving hardly any space for an individual to add any extra achievements or comments in the big organizations, whereas in the SMEs, it is less structured, poorly managed and a less weightage is given to this part while calculating the overall ratings.

<table>
<thead>
<tr>
<th>Job Grade</th>
<th>Count</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jr. Executive</td>
<td></td>
<td>10 (3.9%)</td>
<td>38 (14.8%)</td>
<td>120 (46.9%)</td>
<td>69 (27.0%)</td>
<td>19 (7.4%)</td>
<td>256</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td></td>
<td>8 (4.4%)</td>
<td>39 (21.3%)</td>
<td>64 (35.0%)</td>
<td>50 (27.3%)</td>
<td>22 (12.0%)</td>
<td>183</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td>2 (1.5%)</td>
<td>25 (19.2%)</td>
<td>53 (40.8%)</td>
<td>41 (31.5%)</td>
<td>9 (6.9%)</td>
<td>130</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td></td>
<td>0 (0%)</td>
<td>13 (20.3%)</td>
<td>26 (40.6%)</td>
<td>19 (29.7%)</td>
<td>6 (9.4%)</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>20</td>
<td>115</td>
<td>263</td>
<td>179</td>
<td>56</td>
<td>633</td>
</tr>
</tbody>
</table>

Source: Primary Data
A chi-square test is done on the variable describing the scope of self evaluation from appraisal with the job grades. The Pearson Chi-square value calculated as 14.875, and p value calculated is 0.248 > 0.05.

Table. 5.109 Test Statistics table of the variable to analyze the scope of self evaluation in the appraisal process across the various job grades in the sampled IT companies

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>14.875a</td>
<td>12</td>
<td>.248</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>16.962</td>
<td>12</td>
<td>.151</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.475</td>
<td>1</td>
<td>.491</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 2 cells (10.0%) have expected count less than 5. The minimum expected count is 2.02.

Source: Primary data
So, alternative hypothesis H1 is rejected: The scope of appraisal based self-evaluation process differs with the job grades.

The null hypothesis H0 is accepted: The scope of appraisal based self-evaluation process *do not differ* with the job grades.

To get a deeper insight about the practice of self appraisal system across the job grades in the selected IT companies varying in employee strength. A sub hypothesis is made:

H0  There is no opinion difference among the respondents from various job grades in the selected IT companies about the scope of self appraisal in performance appraisal

H1  There is opinion difference among the respondents from various job grades in the selected IT companies about the scope of self appraisal in performance appraisal

The table 5.110 and the figure 5.43 depict the response of the employees in various job grades under the selected IT companies varying in workforce size. The responses obtained from the selected IT companies show a positive trend in response in both the organizations.
Table 5.110 Frequency of the responses to analyze the scope of self evaluation in the appraisal process across the various job grades in the sampled IT companies varying in size

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job Grade</th>
<th>EP1</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>Above 15,000</td>
<td>Jr. Executive</td>
<td>Count</td>
<td>3 (2%)</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>Count</td>
<td>6 (6%)</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Count</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>Count</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Count</td>
<td>9 (6%)</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Jr. Executive</td>
<td>Count</td>
<td>7 (6%)</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>Count</td>
<td>2 (2%)</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Count</td>
<td>2 (3%)</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>Count</td>
<td>0 (0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Count</td>
<td>11 (6%)</td>
</tr>
</tbody>
</table>

Source: Primary Data

During the personal interview the researcher has perceived the idea that the self appraisal process is practiced in all selected IT companies, where in the big companies with workforce above 15,000 is structured and well planned, but in the small and medium companies the self evaluation is done on personal level. As the numbers of workers are less in the selected SMEs, the personal evaluations are done on continuous basis in the form of discussions with the supervisor. It transpires from the figure that the non executives in the selected small and medium sized organization are mostly disagreeing with the scope of self evaluation for them during appraisal process.
A chi-square test is done to understand that whether the opinions of the respondent vary with the job grades and the company size across the sampled IT companies’ understudy. The table below depicts clearly that critical chi square value for the big companies (with employee strength above 15000) as 18.662 with p value 0.097 > 0.05 and in the medium and small companies (with workforce below 15000), the critical chi- square value 14.431, with p value 0.274 > 0.05. So, in both the cases H1 is rejected and H0 accepted.
Table 5.111 Chi-square test statistics to analyze the scope of self evaluation in the appraisal process across the various job grades in the sampled IT companies varying in size

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Pearson Chi-Square 18.662&lt;sup&gt;a&lt;/sup&gt; 12</td>
<td>.097</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases 335</td>
<td>12</td>
<td>.274</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Pearson Chi-Square 14.431&lt;sup&gt;b&lt;/sup&gt; 12</td>
<td>.274</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases 298</td>
<td>12</td>
<td>.274</td>
</tr>
</tbody>
</table>

Source: Primary Data

So, there is no opinion difference among the respondents from various job grades in the selected IT companies about the scope of self appraisal in performance appraisal.

To understand the opinion of the sampled IT executives for various job grades in big and SME organizations, a one parameter non parametric chi-square test is done for each job grades in the companies varying in size to study the main hypothesis:

H₀ Employees do not have the scope of self evaluation in the appraisal process

H₁ Employees do have the scope of self evaluation in the appraisal process

The table 5.111A shows that all the p values in each cell is less than 0.000, so, as p < 0.000, H₀ is rejected and H₁ accepted.
Table 5.111A. One parameter chi square table to study the practice of self appraisal scope in PAS for different job grades in companies with varying employee strength in West Bengal

<table>
<thead>
<tr>
<th>Above 15,000</th>
<th>Below 15,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Executive</td>
<td>Senior Executive</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>112.042^a</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.3.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 59.6.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.

Source: Primary Data

Scope of self evaluation from performance appraisal systems

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

So, the following inferences can be drawn from the above chi square table for the selected IT companies, which substantiate table 5.111. The above findings apparently transpire that the employees have a scope of self evaluation after performance appraisal systems in all the sampled IT companies.
5.3.11 Role of HR department in appraisal practice

Role of HR department in the performance appraisal of the employees has always been an issue of discussion. Several researches opined that involvement of line function is more important for implementation of an effective employee appraisal process. Supervisor/immediate boss are the best person to monitor and evaluate the subordinate’s performance. But without the active participation of the HR department successful implementation of appraisal decision is almost impossible. In the modern organizations, HR department takes an active role to facilitate the process of appraisal and its’ successful implementation. The modern IT and the other sophisticated organization today are using e-performance management system. The HR department facilitates the administration of performance appraisal system through the management of HRIS. Through the questionnaire administration and personal survey in the selected IT companies, the researcher perceived that the HR department receive and review work plan competence, monitor and implement development interventions, keep documentation of individual interim and final performance review reports, facilitate feedback and record the findings. Facilitate appeals and initiate increments, incentives decisions, promotion, reward, recognition, etc. The HR department not only expedite and smoothen the appraisal process, but also provide the development oriented culture, promote the dyadic relation between boss and supervisor.

To study the role of HR managers in the selected IT companies, the respondents were asked a question “The HR department also takes active role in my performance assessment” using a Likert type scale, where the satisfaction
level was distributed: 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree. The following hypothesis is formed:

**Hypotheses No. – 15**

H0  HR department does not take an active role in the appraisal process
H1  HR department takes an active role in the appraisal process

The table 5.112 and fig, 5.44 provide the response pattern of the executives from the selected IT companies to study the role of HR department in the performance appraisal practice.

| Table 5.112. Frequency distribution and contingency table of the responses obtained from the selected sample IT companies on the variable describing the role of HR department |
|---|---|---|---|---|---|
| Valid | Frequency | Percent | Cumulative Percent | Expected N | Residual |
| Strongly Disagree | 13 | 2.1 | 2.1 | 126.6 | -113.6 |
| Disagree | 72 | 11.4 | 13.4 | 126.6 | -54.6 |
| Neutral | 201 | 31.8 | 45.2 | 126.6 | 74.4 |
| Agree | 264 | 41.7 | 86.9 | 126.6 | 137.4 |
| Strongly Agree | 83 | 13.1 | 100.0 | 126.6 | -43.6 |
| Total | 633 | 100.0 | | | |

Source: Primary data

**Fig. 5.44.** Response pattern of the executives from the selected sample IT companies on the variable describing the role of HR department

Source: Primary data
It transpires from the above table as well as from the figure that majority (more than 54%) of the executives accept that the HR department takes an active role in appraisal process. They also expressed satisfaction over the HR role.

**Table 5.113. Test statistics for the variable obtained from responses from the selected sample IT companies on the variable describing the role of HR department**

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>333.343a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary data

The critical chi square value calculated from the contingency table 5.112 is 333.343. The p value is 0.000 < 0.05, resulting in rejection of null hypothesis.

So, the null hypothesis H0 is rejected: HR department does not take an active role in the appraisal process

The alternative hypothesis H1 is accepted: HR department take an active role in the appraisal process

To have an in depth knowledge about the role of HR department in appraisal process, in the companies varying in workforce size, a frequency of the responses from the selected companies with employee strength above/ below 15000 are presented in the table 5.114 and in the figure 5.44. To test the role of HR department in the companies with different workforce size, a sub hypothesis is made:

H0 HR department does not take an active role in the appraisal process in all companies based on the size

H1 HR department takes an active role in the appraisal process in all
companies based on the size

It transpires from the figure that describes a clear positive response from the executives, who administered the questionnaire from the companies with diverse workforce size.

Table 5.114. Frequency distribution and contingency table of the responses obtained from the selected sample IT companies in West Bengal varying in the workforce size on the variable describing the role of HR department

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>EP3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>Above 15,000</td>
<td></td>
<td>4 (1.2%)</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td>9 (3%)</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Primary data

Fig. 5.45 Responses pattern in the selected sample IT companies varying in the workforce size on the variable describing the role of HR department

Source: Primary data
The figure clearly reveals that majority (more than 48%) of the executives in the both the companies having workforce size above or below 15,000, accept an active participation of the HR department in the administration of performance appraisal process.

To test the hypothesis and to understand if there is any statistical difference in the opinions of the executives as to whether the HR department is taking any active role or not, in the companies differing in employee strength, a chi-square test is done on the variables for each of the selected company, differing in employee strength. The critical chi-square value calculated is 17.975 with the p value is 0.001 < 0.05.

<table>
<thead>
<tr>
<th>Table 5.115. Test statistics for chi-square test to analyze the role of HR department in the selected sample IT companies varying in the workforce size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Pearson Chi-Square</td>
</tr>
<tr>
<td>N of Valid Cases</td>
</tr>
<tr>
<td>a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.12.</td>
</tr>
</tbody>
</table>

So, H0 is rejected and H1 accepted.

It can be concluded that HR department takes an active role in the appraisal process in all companies irrespective of their size

5.3.12 Joint Goal Setting in appraisal practice

Goal setting in the performance appraisal process is the initial stage, in almost all sophisticated companies today. The modern organizations are emphasising more and more involvement of the employees in the appraisal process starting from the goal setting process to self evaluation and feedback
A large number of researchers have advocated for a systematic performance appraisal process that promotes clear communication of corporate goals, expected performance from the incumbent over the period, discussion over the uncertainties to achieve the performance and also the performance criteria to be measured to evaluate incumbent’s performance level. During the administration of questionnaire and the interview the researcher has got the perception that in the selected IT companies, that most of the big/medium sized IT houses are apparently using a highly systematic and sophisticated performance appraisal system, where goal setting is an initial stage, and is generally known as ‘Goal Seek’. The incumbents are communicated the corporate goal translated in terms of individual goals set by the middle level management and HR department through computer based software. The incumbent then discuss the goals with the immediate boss and fix the goals mutually. The KRAs are set jointly to work upon throughout the years. The executives from selected small IT companies reported that though they don’t have such systematic goal setting process, but the goals are set mutually, in an informal way.

To understand the practice of joint goal setting in the selected IT companies the executives are asked a question “The goals are jointly set and understand by me and my supervisor” and the following research hypothesis is made to test:

**Hypotheses No. – 16**

H0  Performance goals are not jointly set by the team leader and workers
H1  Performance goals are jointly set by the team leader and workers
The table 5.116 discusses the frequency distribution table of the responses obtained from the administration of questionnaire from the executives of the selected IT companies.

Table 5.116. Frequency distribution and contingency table of the responses obtained from the selected sample IT companies to analyze the practice of joint goal setting

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>36</td>
<td>5.7</td>
<td>5.7</td>
<td>126.6</td>
<td>-90.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>111</td>
<td>17.5</td>
<td>23.2</td>
<td>126.6</td>
<td>-15.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>197</td>
<td>31.1</td>
<td>54.3</td>
<td>126.6</td>
<td>70.4</td>
</tr>
<tr>
<td>Agree</td>
<td>217</td>
<td>34.3</td>
<td>88.6</td>
<td>126.6</td>
<td>90.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>72</td>
<td>11.4</td>
<td>100.0</td>
<td>126.6</td>
<td>-54.6</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td></td>
<td>126.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

It transpires from the table 5.116, and figure 5.46, that majority of the responses (more than 45%) of the executives from all the selected IT companies accept that the goals are jointly set with the team leader/ immediate boss in performance appraisal process. The table 5.117 illustrates the descriptive statistics for the variable under study to analyze the mean (3.28) and standard
deviation (1.060) of the variable which also depicts an inclination towards a positive response.

| G3 | 633 | 3.28 | 1.060 | 1 | 5 |

Source: Primary data

The table 5.118 provides the test statistics to analyze the response obtained from the selected sample IT companies to understand whether there is any statistical difference in the opinions obtained from the selected IT companies.

| Chi-Square | 194.006<sup>a</sup> |
| df | 4 |
| Asymp. Sig. | .000 |

<sup>a</sup> 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary Data

The critical Chi- square value as calculated by one parameter non parametric chi – square test is 194.006, and the p value calculated is 0.000< 0.05, resulting in rejection of null hypothesis.

So, the null hypothesis H0 rejected: Performance goals are not jointly set by the team leader and workers

The alternative hypothesis H1 is accepted: Performance goals are jointly set by the team leader and workers
To get an in depth understanding as to whether the joint goal setting practice prevalent in the companies is differed with the workforce size, a cross tabulation is done with the variable (G3) showing the practice of joint goal setting across the companies varied in workforce size. A sub hypothesis is made to study this proposition:

H0: Joint goal setting is not practiced in all selected IT companies based on their employee strength

H1: Joint goal setting is practiced in all selected IT companies irrespective of their employee strength

**Table: 5119. Frequency distribution to analyze the responses obtained from the selected sample IT companies varying in workforce size to analyze the practice of joint goal setting**

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Count</td>
<td>15 (4.5%)</td>
<td>49 (14.6%)</td>
<td>102 (30.4%)</td>
<td>137 (40.9%)</td>
<td>32 (9.6%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>19.1</td>
<td>58.7</td>
<td>104.3</td>
<td>114.8</td>
<td>38.1</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Count</td>
<td>21 (7.0%)</td>
<td>62 (20.8%)</td>
<td>95 (31.9%)</td>
<td>80 (26.8%)</td>
<td>40 (13.4%)</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>16.9</td>
<td>52.3</td>
<td>92.7</td>
<td>102.2</td>
<td>33.9</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>36</td>
<td>111</td>
<td>197</td>
<td>217</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>36.0</td>
<td>111.0</td>
<td>197.0</td>
<td>217.0</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

The table 5.119 and subsequently the figure 5.47, illustrates that more than 40% of the executives in the selected companies with workforce below or above 15,000, agree the practice of joint goal setting during performance appraisal in the companies. Though a slightly higher percentage of responses in the selected companies with workforce below 15,000, disagree the practice of joint goal
setting in their companies, but the overall response pattern shows a trend towards agree the research question.

![Figure 5.47: Frequency distribution to analyze the responses obtained from the selected sample IT companies varying in workforce size to analyze the practice of joint goal setting](image)

**Source: Primary data**

To test as to whether there is any statistical difference in the opinions of the executives from the selected IT companies varying in size on the research question of practice of joint goal setting in the concerned companies, a chi-square test is performed.

**Table: 5.120. Test statistics to analyze the responses obtained from the selected sample IT companies varying in workforce size to analyze the practice of joint goal setting**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>16.526*</td>
<td>4</td>
<td>.002</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>16.656</td>
<td>4</td>
<td>.002</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>4.362</td>
<td>1</td>
<td>.037</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.95.

**Source: Primary Data**
The chi-square value calculated from the responses is 16.526, with p value 0.002 < 0.05, results in rejecting the null hypothesis.

So, null hypothesis $H_0$ is rejected that: Joint goal setting is not practiced in all selected IT companies based on their employee strength.

Alternative hypothesis $H_1$ is accepted that: Joint goal setting is practiced in all selected IT companies irrespective of their employee strength.

A micro view on the responses obtained from the selected IT companies are arranged job grade wise for the two groups of the companies separated on the basis of employee strength. The following table provides the frequency distribution of the responses from the selected IT companies according to job grades in two groups of companies.

$H_0$ There is no opinion difference among the respondents from various job grades in the selected IT companies about the scope of joint goal setting in performance appraisal.

$H_1$ There is opinion difference among the respondents from various job grades in the selected IT companies about the scope of joint goal setting in performance appraisal.

The table 5.121 below shows the response patterns of the respondents from each job grades and each of the companies under study, grouped on the basis of employee strength (above/ below 15000).
Table: 5.121. Frequency of the responses obtained across the job grades from the selected sample IT companies in varying in workforce size to analyze the practice of joint goal setting

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>7 (4.9%)</td>
<td>24 (16.7%)</td>
<td>45 (31.3%)</td>
<td>53 (36.8%)</td>
<td>15 (10.4%)</td>
<td>144</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>5 (5.2%)</td>
<td>14 (14.6%)</td>
<td>24 (25.0%)</td>
<td>45 (46.9%)</td>
<td>8 (8.3%)</td>
<td>96</td>
</tr>
<tr>
<td>Manager</td>
<td>1 (1.5%)</td>
<td>10 (15.4%)</td>
<td>20 (30.8%)</td>
<td>27 (41.5%)</td>
<td>7 (10.8%)</td>
<td>65</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>2 (6.7%)</td>
<td>1 (3.3%)</td>
<td>13 (43.3%)</td>
<td>12 (40.0%)</td>
<td>2 (6.7%)</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>49</td>
<td>102</td>
<td>137</td>
<td>32</td>
<td>335</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>7 (6.3%)</td>
<td>28 (25%)</td>
<td>36 (32.1%)</td>
<td>26 (23.2%)</td>
<td>15 (13.4%)</td>
<td>112</td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>6 (6.9%)</td>
<td>15 (17.2%)</td>
<td>31 (35.6%)</td>
<td>27 (31.0%)</td>
<td>8 (9.2%)</td>
<td>87</td>
</tr>
<tr>
<td>Manager</td>
<td>6 (9.2%)</td>
<td>13 (20.0%)</td>
<td>18 (27.7%)</td>
<td>15 (23.1%)</td>
<td>13 (20.0%)</td>
<td>65</td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>2 (5.9%)</td>
<td>6 (17.6%)</td>
<td>10 (29.4%)</td>
<td>12 (35.3%)</td>
<td>4 (11.8%)</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>62</td>
<td>95</td>
<td>80</td>
<td>40</td>
<td>298</td>
</tr>
</tbody>
</table>

Source: Primary Data

Fig. 5.48. Responses obtained across the job grades from the selected sample IT companies in varying in workforce size to analyze the practice of joint goal setting

Source: Primary data
It transpires from the above figure that the percentage of agree and strongly agree occupies majority of the cells, though the percentage of respondents agreeing that there is a scope of joint goal setting is more in the selected IT companies, with employee strength above 15,000 than those selected companies with workforce size less than 15,000. The managerial cadre in the small and medium companies shows a larger proportion of responses disagreeing with the research question.

A one way ANOVA is conducted on the responses from each of the group of companies with different employee strength (above/ below 15000) and the result is tabulated in the table 5.122.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Sum of Squares (Between Groups)</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15000</td>
<td>0.865</td>
<td>3</td>
<td>0.288</td>
<td>0.290</td>
<td>0.832</td>
</tr>
<tr>
<td>Within Groups</td>
<td>328.705</td>
<td>331</td>
<td>0.993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>329.570</td>
<td>334</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15000</td>
<td>1.049</td>
<td>3</td>
<td>0.350</td>
<td>0.274</td>
<td>0.844</td>
</tr>
<tr>
<td>Within Groups</td>
<td>374.428</td>
<td>294</td>
<td>1.274</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>375.477</td>
<td>297</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The above table 5.122 shows that in the group of companies with employee strength above 15000, the p value is 0.832 > 0.05, and in the companies with employee strength below 15000, the p value is 0.844 > 0.05. So, it is understood that there is no opinion difference among the employees from various job grades (junior executives, senior executives, managers and even non
IT executives) in each of the group of companies understudy. So, H1 rejected and Ho accepted.

There is *no opinion difference* among the respondents from various job grades in the selected IT companies about the scope of joint goal setting in performance appraisal.

To understand as to whether there is any statistical difference in the opinions of the sample executives who has administered questionnaire, from each of the different job grades in the selected IT companies varying in the employee strength, on the main research question related to joint goal setting practice, a one parameter chi-square testing is done for each job grades in both group of organizations. The hypothesis to be tested:

H0  Performance goals are not jointly set by the team leader and workers

H1  Performance goals are jointly set by the team leader and workers

The table 5.122A illustrates the test statistics for the chi-square analysis.

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
<th>Non IT executive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
<td>Manager</td>
</tr>
<tr>
<td>Chi-Square df</td>
<td>53.361&lt;sup&gt;a&lt;/sup&gt;</td>
<td>54.313&lt;sup&gt;b&lt;/sup&gt;</td>
<td>33.385&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.8.

Source: Primary Data
The chi-square value calculated from the table 5.122A shows that the p values for all the job grades are $0.000 < 0.05$, Hence the null hypothesis is rejected for all sample units except the managerial cadre in small/medium companies with workforce less than 15000.

So the results in the table 5.122 is substantiated by testing a one parameter chi-square testing individually for each selected group of IT companies based on their employee strength in the table 5.122A on the research hypothesis:

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

5.3.13 Scope of employee participation in decision making

The fierce competitive environment, fast changing technology and the inclusion of more and younger and highly educated workforce has forced the modern organizations to be more flexible towards the maintenance of employee relationship and promote a culture of partnership and collaboration among the workforce and also with the top level management of the organizations. Employee participation is the process that provides employee’s scope to be a part of management decision making whenever required. The concept of ‘Human Resource Management’ advocates for integration of the employees to corporate goals and thus creating a delighted pool of employees through a series of complex
activities like, delegation and decentralization of decision. The process facilitates a two way communication, and ensure the involvement of the employees in the decision making process, which relates to his interest. Being a project based industry; the companies are highly dependent on their talented workforce. The researcher perceived the idea during the personal interview that as the workforce is highly educated and technically sound, these companies promote the participation of the employees in decision making. The executives also informed the as the ideas given by the employees are given weightage and importance; motivate employees as they feel a part of the organization and a sense of ‘faith’ is created.

To understand the practice the respondents from the selected IT companies in West Bengal were asked a question: “Improved scope to Participate in organization decision making after performance appraisal systems” using a Likert type scale where 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree. The following hypothesis is made to test the research question:

**Hypotheses No. – 17**

H0  Performance appraisal does not facilitate employee participation in decision making

H1  Performance appraisal facilitates employee participation in decision making

The following table provides the frequency distribution of the responses obtained on the research question from the field of survey, from the selected IT companies in West Bengal.
It reveals from the table and figure that a significantly large number (42.2%) of executives in over all the selected IT companies in West Bengal, accept that their views and ideas are accepted towards the development of projects. They also expressed their satisfaction over the practice.

The mean of the variable as calculated in the table 5.124 below is 3.28 with standard deviation 1.019, shows an inclination towards positive response accepting the research hypothesis.
The table 5.125 calculates the one parameter chi – square test statistics to understand whether there is any statistical difference in the opinions of the respondents obtained from the field study in the selected IT companies in West Bengal.

<table>
<thead>
<tr>
<th>Table: 5.125 Chi- square test statistics to analyze the practice of employee participation in the selected IT companies in West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary data

The chi- square value calculated is 229.551, with p value 0.000 < 0.05, resulting in rejection of null hypothesis.

So, the null hypothesis H<sub>0</sub> is rejected that: Performance appraisal does not facilitate employee participation in decision making

Alternative hypothesis H<sub>1</sub> is accepted: Performance appraisal facilitates employee participation in decision making

To analyze the practice of employee participation in the selected companies grouped on the basis of employee strength above/ below 15000, to analyze whether there is any difference in employee participation practice or not. To study the practice across the selected companies varying in employee strength above/ below 15000, a sub hypothesis is made:

H<sub>0</sub> Employee participation in decision making process is not practiced in all selected IT companies

H<sub>1</sub> Employee participation in decision making process is practiced in all selected IT companies
Table: 5.126 Frequency distribution and contingency table to calculate chi-square to analyze the practice of employee participation in the selected IT companies with employees above/below 15000 in West Bengal

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Count</td>
<td>10</td>
<td>39</td>
<td>137</td>
<td>105</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.0</td>
<td>11.6</td>
<td>40.9</td>
<td>31.3</td>
<td>13.1</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Expected Count</td>
<td>15.3</td>
<td>56.1</td>
<td>122.3</td>
<td>103.2</td>
<td>38.1</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>19</td>
<td>64</td>
<td>94</td>
<td>93</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>6.4</td>
<td>22.5</td>
<td>31.5</td>
<td>30.2</td>
<td>9.4</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>13.7</td>
<td>48.5</td>
<td>108.7</td>
<td>93.2</td>
<td>33.9</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>29</td>
<td>103</td>
<td>231</td>
<td>198</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>29</td>
<td>103</td>
<td>231</td>
<td>198</td>
<td>72</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.126 and the figure 5.50 clearly describes that over 40% respondents from the selected IT companies with employee strength above/below 15000, accept that employee propositions are valued and given leverage. The IT executives during personal interview admitted that innovative technical ideas are valued in the respective projects.
The following table 5.127 indicates the chi-square test statistics value to analyze whether there is any statistical opinion difference among the respondents in the selected IT companies with employee strength above / below 15,000.

<table>
<thead>
<tr>
<th>Table: 5.127 Chi-square to analyze the practice of employee participation in the selected IT companies with employees above/ below 15000 in West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
</tr>
<tr>
<td>Pearson Chi-Square</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
</tr>
<tr>
<td>N of Valid Cases</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.65.

Source: Primary Data

The critical chi-square test statistics calculated is 20.811, and the p value calculated is 0.001 < 0.05, resulting in rejection of null hypothesis.

So, null hypothesis H0 is rejected: Employee participation in decision making process is not practiced in all selected IT companies

Alternative hypothesis is accepted H1: Employee participation in decision making process is practiced in all selected IT companies

The section tries to get a more microscopic view on the responses across the job grades in the selected IT Company with employee strength above/ below 15000. A sub hypothesis is made:

H0: The employee participation in decision making process do not vary depending on job grades in the selected IT companies with employee strength above/ below 15000

H1: The employee participation in decision making process vary depending on job grades in the selected IT companies with employee strength above/ below 15000
The following table 5.128 organizes the responses across the job grades for each group of selected company varied in employee strength above/ below 15000. A cross tabulation is done with variable analyzing the research question with the job grades and then by company size.

**Table: 5.128 Frequency distribution and contingency table to calculate chi-square to analyze the practice of employee participation across the job grades in the selected IT companies with employees above/ below 15000 in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Above 15,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jr. Executive</strong></td>
<td>Count</td>
<td>6</td>
<td>13</td>
<td>67</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4.2</td>
<td>9.0</td>
<td>46.5</td>
<td>27.8</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>4.3</td>
<td>16.8</td>
<td>58.9</td>
<td>45.1</td>
<td>18.9</td>
</tr>
<tr>
<td><strong>Sr. Executive</strong></td>
<td>Count</td>
<td>1</td>
<td>10</td>
<td>38</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1.0</td>
<td>10.4</td>
<td>39.6</td>
<td>32.3</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>2.9</td>
<td>11.2</td>
<td>39.3</td>
<td>30.1</td>
<td>12.6</td>
</tr>
<tr>
<td><strong>Manager</strong></td>
<td>Count</td>
<td>2</td>
<td>9</td>
<td>24</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.1</td>
<td>13.8</td>
<td>36.9</td>
<td>33.8</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>1.9</td>
<td>7.6</td>
<td>26.6</td>
<td>20.4</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Non IT Executive</strong></td>
<td>Count</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.3</td>
<td>23.3</td>
<td>26.7</td>
<td>40.0</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>0.9</td>
<td>3.5</td>
<td>12.3</td>
<td>9.4</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Count</td>
<td>10</td>
<td>39</td>
<td>137</td>
<td>105</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>10</td>
<td>39</td>
<td>137</td>
<td>105</td>
<td>44</td>
</tr>
<tr>
<td><strong>Below 15,000</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jr. Executive</strong></td>
<td>Count</td>
<td>8</td>
<td>27</td>
<td>41</td>
<td>25</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>7.1</td>
<td>24.1</td>
<td>36.6</td>
<td>22.3</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>7.1</td>
<td>25.2</td>
<td>35.3</td>
<td>33.8</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Sr. Executive</strong></td>
<td>Count</td>
<td>3</td>
<td>12</td>
<td>28</td>
<td>33</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.4</td>
<td>13.8</td>
<td>32.2</td>
<td>37.9</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>5.5</td>
<td>19.6</td>
<td>27.4</td>
<td>26.3</td>
<td>8.2</td>
</tr>
<tr>
<td><strong>Manager</strong></td>
<td>Count</td>
<td>5</td>
<td>15</td>
<td>18</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>7.7</td>
<td>23.1</td>
<td>27.7</td>
<td>33.8</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>4.1</td>
<td>14.6</td>
<td>20.5</td>
<td>19.6</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Non IT Executive</strong></td>
<td>Count</td>
<td>3</td>
<td>10</td>
<td>7</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>8.8</td>
<td>29.4</td>
<td>20.6</td>
<td>38.2</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>2.2</td>
<td>7.3</td>
<td>10.7</td>
<td>10.6</td>
<td>3.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Count</td>
<td>19</td>
<td>67</td>
<td>94</td>
<td>90</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>19</td>
<td>67</td>
<td>94</td>
<td>90</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: Primary Data
It transpires from the above table 5.128 and the figure 5.51 that majority of the responses agree with the practice of employee participation in almost all job grades in both the companies with employee strength above/ below 15000.

As 6 cells (30.0%) have expected count less than 5. The minimum expected count is .90, for the companies with employee strength above 15000, and 3 cells (15.0%) have expected count less than 5. The minimum expected count is 2.17, from the companies with employee strength below 15000, so Pearson chi square test is not permissible, so a one way ANOVA is conducted for based on the job grades in each of the group of companies with different employee strength. The table 5.129 below calculates the ANOVA to compare the mean value of the responses among various job grades from each group of

---

**Fig. 5.51 Response pattern to analyze the practice of employee participation in the selected IT companies with employees above/ below 15000 in West Bengal**
companies to analyze as to whether the opinion related to the research question differ across the job grades in the selected companies with varying workforce size.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.805</td>
<td>3</td>
<td>.935</td>
<td>1.019</td>
<td>.384</td>
</tr>
<tr>
<td>Within Groups</td>
<td>303.595</td>
<td>331</td>
<td>.917</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>306.400</td>
<td>334</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>5.223</td>
<td>3</td>
<td>1.741</td>
<td>1.881</td>
<td>.133</td>
</tr>
<tr>
<td>Within Groups</td>
<td>272.190</td>
<td>294</td>
<td>.926</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>277.413</td>
<td>297</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The p value calculated for the selected companies with employee strength above or below 15000, are .384 > .05, and .133 > .05. Hence in both the cases the alternative hypothesis H1 is rejected.

So, alternative hypothesis H1 is rejected: The employee participation in decision making process vary depending on job grades in the selected IT companies with employee strength above/ below 15000.

The null hypothesis H0 is accepted: The employee participation in decision making process do not vary depending on job grades in the selected IT companies with employee strength above/ below 15000.

The working hypothesis is further tested for each job grades in each selected companies:

H0  Performance appraisal does not facilitate employee participation in decision making

H1  Performance appraisal facilitates employee participation in decision making
One parameter chi square test is done for each job grades in the selected companies differed in size. The result shows p value < 0.05, for each of the job grades from both the group of selected IT companies with employee strength above/ below 15000. Hence H0 is rejected and H1 accepted that Performance appraisal facilitates employee participation in decision making.

Table 5.12A Chi-square test statistics to analyze the practice of employee participation in each of the job grades in the selected IT companies with employees above/ below 15000 in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>85.792^a</td>
<td>4.785^b</td>
</tr>
<tr>
<td>Senior Executive</td>
<td>47.854^b</td>
<td>28.000^c</td>
</tr>
<tr>
<td>Manager</td>
<td>31.750^c</td>
<td>36.391^d</td>
</tr>
<tr>
<td>Non IT executive</td>
<td>18.308^e</td>
<td>24.594^f</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.8.

Source: Primary Data

So, from the above results substantiate the result of the table 5.131.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.008</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.007</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
5.3.14 Linkage between performance rewards and appraisal reports

According to Herzberg’s two factor theory, amongst the two factors that creates the foundation of satisfaction or no satisfaction of a person in the job/work place, the factor that lead to satisfaction state of mind from a ‘no satisfaction’ state connected to job related matters is ‘motivator’ according to him. Reward is the motivator according to Herzberg’s theory that motivates an employee to give his best in the job, by satisfying his self esteem need. Performance reward can be monetary or can be non monetary. A structured and systematic reward system ensures a bias free organizational culture resulting in a positive reinforcement to recognize the effort of the employees. Reward systems not only help the organizations to attract best talents from the market but also to retain them in long term.

The executives mainly from the selected big and medium IT companies in West Bengal reported that reward system is performance based and is practiced across the job grades. The rewards are given to the employee based on its’ performance, future potential, criticality of his job and market value/importance to the company.

To understand the reward policy, the respondents were asked a question: “Appraisal data are used as rewards, recognition, and encouragement of the high performers” using a Likert type scale (where 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree) and the following hypothesis is made to test the research question:
Hypotheses No. – 18

H0  Performance rewards do not depend on the Performance Appraisal report

H1  Performance rewards depend on the Performance Appraisal report

To study the above hypothesis and to analyse the linkage between performance rewards and appraisal report, the following is the frequency distribution table is made.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14</td>
<td>2.2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>104</td>
<td>16.4</td>
<td>16.4</td>
<td>18.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>194</td>
<td>30.6</td>
<td>30.6</td>
<td>49.3</td>
</tr>
<tr>
<td>Agree</td>
<td>262</td>
<td>41.4</td>
<td>41.4</td>
<td>90.7</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>59</td>
<td>9.3</td>
<td>9.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

The following table 5.130 provides the descriptive information of the variable, where the mean value is 3.39, with standard deviation 0.942, indicating a slight positive trend of the opinions.

<table>
<thead>
<tr>
<th>APP3</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>633</td>
<td>3.39</td>
<td>.942</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
The table 5.130 and the figure 5.52 transpire more than 50% of the respondents accept that reward system is appraisal based.

To understand that as to whether there is any opinion difference among the respondents from the selected IT companies related to the research question is shown in the table.

Table 5.132 Chi square test statistics to analyze the practice of reward practice in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>320.973a</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary data

The critical chi square value calculated in the table 5.134, is 320.973, with p value 0.000 < 0.05, so Ho is rejected and H1 is accepted.

So, Performance rewards *depends* on the Performance Appraisal report
To understand as to whether there is any opinion difference among the respondents related to the research question showing the linkage between performance appraisal and the reward on the basis of age, gender, educational qualification, and working experience in the current companies, collected from the administration of questionnaire from the overall sampled IT companies in West Bengal, a one-way ANOVA is done. To understand the opinion patterns a sub hypothesis is made:

**H0**: The opinions of the respondents about linkage between appraisal and reward decisions do not vary with the age, gender, qualification and experience

**H1**: The opinions of the respondents about linkage between appraisal and reward decisions vary with the age, gender, qualification and experience

| Table 5.133 Descriptive values of the variable analyzing the linkage between appraisal and reward decisions based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal |
| Linkage between the appraisal and reward decisions | N | Mean | Std. Deviation |
| Age | | | |
| Up to 30 | 467 | 3.38 | .944 |
| Above 30 - 40 | 144 | 3.49 | .924 |
| Above 40 | 22 | 3.09 | .971 |
| Gender | | | |
| Male | 417 | 3.40 | .925 |
| Female | 216 | 3.38 | .977 |
| Qualification | | | |
| Graduate | 479 | 3.33 | .953 |
| PG | 154 | 3.58 | .884 |
| Work experience in the current company | | | |
| Less than 2 years | 229 | 3.41 | .939 |
| 2-5 yrs | 273 | 3.31 | .947 |
| 5-10 yrs | 110 | 3.55 | .925 |
| More than 10 yrs | 21 | 3.52 | .928 |

Source: Primary data
The above table 5.134 shows the descriptive values of the variable showing the opinion patterns of the respondents about linkage between appraisal and reward decisions, as obtained from the field study.

**Table 5.134. ANOVA table to analyze the linkage between appraisal and reward decisions based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.377</td>
<td>2</td>
<td>1.688</td>
<td>1.908</td>
<td>.149</td>
</tr>
<tr>
<td>Within Groups</td>
<td>557.461</td>
<td>630</td>
<td>.885</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>560.837</td>
<td>632</td>
<td>.885</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.019</td>
<td>1</td>
<td>.019</td>
<td>.021</td>
<td>.885</td>
</tr>
<tr>
<td>Within Groups</td>
<td>560.819</td>
<td>631</td>
<td>.889</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>560.837</td>
<td>632</td>
<td>.889</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>7.051</td>
<td>1</td>
<td>7.051</td>
<td>8.034</td>
<td>.005*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>553.786</td>
<td>631</td>
<td>.878</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>560.837</td>
<td>632</td>
<td>.878</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.941</td>
<td>3</td>
<td>1.647</td>
<td>1.864</td>
<td>.134</td>
</tr>
<tr>
<td>Within Groups</td>
<td>555.896</td>
<td>629</td>
<td>.884</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>560.837</td>
<td>632</td>
<td>.884</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
* indicates item significant at the level of 5% significance level

The table shows that the opinions related to linkage between reward decisions and appraisal process do not vary with the gender, and age, or with the working experience as the test results show p value > 0.05 for all these levels (hence, H1 rejected and H0 accepted) but the qualification of the respondents show a significant difference in opinion among the groups as the p value shows a value < 0.05. The researcher during the personal survey gathered the information that rewards in some cases, is influenced if the incumbent has high technical knowledge. The employees who are on – the – job, if acquire higher
technical/managerial degree results in rewards in the companies. The responses from the employees are also very much understood by the diagrammatic representation below which clears the findings.

![Diagram showing response patterns of employees on the practice of appraisal based reward system based on the qualification.](image)

**Fig. 5.53 Response patterns of the employees on the practice of appraisal based reward system based on the qualification**

So, it is clear that *there is no opinion difference* among the respondents on the practice of appraisal based reward system based on age, gender and working experience.

To get a deep insight into the research question as to whether the practice of performance rewards vary with the size of the selected companies in West Bengal, a cross tabulation is done with the variable and the employee strength of the selected IT companies grouped into two categories based on the employee strength above/ below 15000.

A sub hypothesis is tested:
H₀ Rewards do not depend on the Performance Appraisal report for all companies size based on the employee strength

H₁ Rewards depend on the Performance Appraisal report for all companies size based on the employee strength

### Table 5.135 Frequency distribution table to analyze the practice of reward practice with the size of the company in the selected IT companies with employees above/below 15000 in West Bengal

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Above 15,000</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>Above 15,000</td>
<td>4</td>
<td>51</td>
<td>106</td>
<td>151</td>
<td>23</td>
<td>335</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1.2</td>
<td>15.2</td>
<td>31.6</td>
<td>45.1</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>7.4</td>
<td>55</td>
<td>102.7</td>
<td>138.7</td>
<td>31.2</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>10</td>
<td>53</td>
<td>88</td>
<td>111</td>
<td>36</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.4</td>
<td>17.8</td>
<td>29.5</td>
<td>37.2</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>6.6</td>
<td>49</td>
<td>91.3</td>
<td>123.3</td>
<td>27.8</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>104</td>
<td>194</td>
<td>262</td>
<td>59</td>
<td>633</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>14</td>
<td>104</td>
<td>194</td>
<td>262</td>
<td>59</td>
</tr>
</tbody>
</table>

Source: Primary Data

### Figure 5.54 Response pattern to analyze the practice of reward practice with the size of the company in the selected IT companies with employees above/below 15000 in West Bengal

Source: Primary data
It transpires from the figure that a significantly large number (more than 49%) of respondents from selected small and medium sized IT companies (with employee strength below 15000),

To understand whether there is any statistical difference in the opinions of these two groups of selected IT companies or not, a chi square test is done, with expected values as calculated in the above table 5.135.

<table>
<thead>
<tr>
<th>Table 5.136 Chi-Square Tests statistics to analyze the practice of reward practice with the size of the company in the selected IT companies with employees above/below 15000 in West Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
</tr>
<tr>
<td>Pearson Chi-Square</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
</tr>
<tr>
<td>N of Valid Cases</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.59. Source: Primary data

The critical value calculated is 11.127 with p value 0.025 < 0.05, rejecting the null hypothesis. So, the null hypothesis (H0) is rejected, and H1 accepted.

**Rewards depends** on the Performance Appraisal report for all companies’ size irrespective of the employee strength

To get an in depth study of the responses further, across the various job grades in the two groups of selected IT companies, a cross tabulation of the variable across the job grades in the selected IT companies with employee strength above/below 15000. The proposition is tested based on the sub hypothesis:
Ho: The performance report based reward system do not vary depending on job grades in the selected IT companies with employee strength above/ below 15000

H1: The performance report based reward system vary depending on job grades in the selected IT companies with employee strength above/ below 15000

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>2</td>
<td>20</td>
<td>50</td>
<td>62</td>
<td>10</td>
<td>144</td>
</tr>
<tr>
<td>1.40%</td>
<td>13.90%</td>
<td>34.70%</td>
<td>43.10%</td>
<td></td>
<td>6.90%</td>
<td></td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>2</td>
<td>22</td>
<td>28</td>
<td>39</td>
<td>5</td>
<td>96</td>
</tr>
<tr>
<td>2.10%</td>
<td>22.90%</td>
<td>29.20%</td>
<td>40.60%</td>
<td></td>
<td>5.20%</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>0</td>
<td>6</td>
<td>18</td>
<td>33</td>
<td>8</td>
<td>65</td>
</tr>
<tr>
<td>0</td>
<td>9.23</td>
<td>27.69</td>
<td>50.77</td>
<td></td>
<td>12.31</td>
<td></td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>0</td>
<td>3</td>
<td>10</td>
<td>17</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>0</td>
<td>10%</td>
<td>33.30%</td>
<td>56.70%</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>51</td>
<td>106</td>
<td>151</td>
<td>23</td>
<td>335</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Executive</td>
<td>5</td>
<td>21</td>
<td>29</td>
<td>39</td>
<td>18</td>
<td>112</td>
</tr>
<tr>
<td>4.50%</td>
<td>18.80%</td>
<td>25.90%</td>
<td>34.80%</td>
<td></td>
<td>16.10%</td>
<td></td>
</tr>
<tr>
<td>Sr. Executive</td>
<td>3</td>
<td>15</td>
<td>27</td>
<td>33</td>
<td>9</td>
<td>87</td>
</tr>
<tr>
<td>3.40%</td>
<td>17.20%</td>
<td>31%</td>
<td>37.90%</td>
<td></td>
<td>10.30%</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>1</td>
<td>11</td>
<td>25</td>
<td>23</td>
<td>5</td>
<td>65</td>
</tr>
<tr>
<td>1.50%</td>
<td>16.90%</td>
<td>38.50%</td>
<td>35.40%</td>
<td></td>
<td>7.70%</td>
<td></td>
</tr>
<tr>
<td>Non IT Executive</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>16</td>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>2.90%</td>
<td>17.60%</td>
<td>20.60%</td>
<td>47.10%</td>
<td></td>
<td>11.80%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>53</td>
<td>88</td>
<td>111</td>
<td>36</td>
<td>298</td>
</tr>
</tbody>
</table>

Source: Primary data
The table and the figure above clearly showing an upward trend of satisfaction regarding the reward practice in their respective organizations from junior executive’s → senior executive’s → managers, for both the group of companies irrespective of their employee strength, as depicted in the figure as well as the table. The non executives also indicated a high satisfaction level regarding the reward practice.

The above sub hypothesis is tested using a chi-square test in the table 5.137, to test the responses obtained from each group of job grades in both of the group of companies with different employee strength (above/ below 15000).

Source: Primary data
The critical chi – square value calculated is 15.916, with the p value 0.195 > 0.05, for the selected companies with employee strength above 15000, whereas the chi- square value is 8.275, with the p value 0.763 >0.05. So, the alternative hypothesis is rejected and the null hypothesis accepts for both the groups of companies.

So, the performance report based reward policy do not vary depending on job grades in the selected IT companies with employee strength above/ below 15000.

Looking into each job grades for both the selected group of IT companies, one parameter chi square test is done for each category to check the above result in a micro level, for the original hypothesis:

H0  Performance rewards do not depend on the Performance Appraisal report
H1  Performance rewards depend on the Performance Appraisal report
### Table 5.13A: Chi-square test statistics to analyze the practice of appraisal based reward system for each of the job grades in the selected IT companies with employees above/ below 15000 in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
<th>Non IT executive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
<td>Manager</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>93.778^{a}</td>
<td>50.771^{b}</td>
<td>28.108^{c}</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.3.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.

All p values calculated for each job grades are less than 0.05, so we reject the null hypothesis for each level and accept H1. This also substantiates the results of the table 5.138.

So, Performance rewards depend on the Performance Appraisal report, for each job grades as well as all companies irrespective of their size.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.007</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
5.3.15 **Scope of long term development from appraisal practice**

Being knowledge based industry, the workforce in the IT industry is young dynamic and growth hungry. As gathered from the field study that these executives are not always motivated by the monetary gains and salary incentives etc., but the opportunity towards career growth, motivates them more. The companies provide different kinds of training program to accommodate technical changes and project needs. Some of the organizations during personal survey indicated that they provide their employees off-shore training facilities, by sending them to their parent company abroad. The on-site experiences enrich the employees and help them in future growth. Some of the companies indicated that they often involve their employees in their corporate social responsibility programs, which help them to improve their leadership capabilities, decision making skills etc. Many of the big organizations are giving their employees scope for higher studies. They are facilitating the executives by providing them learning centres, as well as own universities. But such number is only a few. A significantly large number of executives also expressed their dissatisfaction related to the policy. According to them, companies generally arrange the trainings mainly based on the project need.

**Hypotheses No. – 19**

H0  Performance appraisal does not facilitate long term development

H1  Performance appraisal facilitates long term development

To analyze the linkage between long term development and performance appraisal, the frequencies of response obtained from the administration of questionnaire from the selected IT, are organized in the table 5.139 below. The
table also calculates the expected frequencies, considering an equal probability (0.5) of answering in any point of the Likert type scale to the research question under one parameter chi- square testing, as the data consists of responses from the selected IT companies varied in work force size (from employee strength 50 - 15,000 in West Bengal).

Table: 5.139. Frequency distribution table to analyze the linkage between scope of long term development and performance appraisal in the selected IT companies with employees above/ below 15000 in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>19</td>
<td>3.0</td>
<td>3.0</td>
<td>126.6</td>
<td>-107.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>105</td>
<td>16.6</td>
<td>19.6</td>
<td>126.6</td>
<td>-21.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>197</td>
<td>31.1</td>
<td>50.7</td>
<td>126.6</td>
<td>70.4</td>
</tr>
<tr>
<td>Agree</td>
<td>228</td>
<td>36.0</td>
<td>86.7</td>
<td>126.6</td>
<td>101.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>84</td>
<td>13.3</td>
<td>100.0</td>
<td>126.6</td>
<td>-42.6</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td>100.0</td>
<td>126.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The following table 5.140 demonstrates the descriptive statistics for the variable under study, with mean and standard deviation calculated 3.40 and 1.009 showing a slight inclination towards agree (4) the linkage.

Table: 5.140 Descriptive Statistics of the variable analyzing linkage between scope of long term development and performance appraisal in the selected IT companies with employees above/ below 15000 in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEA10</td>
<td>633</td>
<td>3.40</td>
<td>1.009</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Primary data

To understand as to whether there is any statistical opinion difference among the respondents on the research question showing linkage between the
performance appraisal practice and the scope of long term growth in the selected IT companies in West Bengal, the one parameter chi-square testing is done.

Table 5.14. Chi square test statistics of the variable analyzing linkage between scope of long term development and performance appraisal in the selected IT companies with employees above/ below 150,000 in West Bengal

| Chi-Square | 229.836<sup>a</sup> |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary Data

The chi square value calculated is 229.836, and the p value is 0.000 < 0.05, rejecting the null hypothesis.

The alternative hypothesis H1 is accepted: Performance appraisal facilitates long term development

To understand as to whether there is any opinion difference among the respondents related to the research question showing the linkage between performance appraisal and the long term development scope on the basis of age, gender, educational qualification, and working experience in the current companies, collected from the administration of questionnaire from the overall sampled IT companies in West Bengal, a one-way ANOVA is done. To understand the opinion patterns a sub hypothesis is made:

H<sub>0</sub>: The opinions of the respondents about linkage between appraisal and long term development decisions do not vary with the age, gender, qualification and experience
H1: The opinions of the respondents about linkage between appraisal and long term development decisions vary with the age, gender, qualification and experience

Table 5.142. Descriptive values of the variable analyzing the linkage between appraisal and long term development decisions based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Linkage between the appraisal and long term development decisions</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>3.36</td>
<td>1.017</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>3.56</td>
<td>.930</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>3.18</td>
<td>1.259</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.43</td>
<td>.995</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.35</td>
<td>1.036</td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>3.39</td>
<td>1.002</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>3.44</td>
<td>1.035</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>3.41</td>
<td>.959</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>3.36</td>
<td>1.044</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.49</td>
<td>1.011</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>3.33</td>
<td>1.111</td>
</tr>
</tbody>
</table>

Source: Primary data

The table 5.143 shows the descriptive values of the variable showing the opinion patterns of the respondents about linkage between appraisal and long term development decisions, as obtained from the field study.
Table 5.143 ANOVA table to analyze the linkage between appraisal and long term development decisions based on age, gender, qualification, work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Source: Primary data</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>5.210</td>
<td>2</td>
<td>2.605</td>
<td>2.570</td>
<td>.077</td>
</tr>
<tr>
<td>Within Groups</td>
<td>638.670</td>
<td>630</td>
<td>1.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>643.880</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.902</td>
<td>1</td>
<td>.902</td>
<td>.886</td>
<td>.347</td>
</tr>
<tr>
<td>Within Groups</td>
<td>642.978</td>
<td>631</td>
<td>1.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>643.880</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Qualification</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.357</td>
<td>1</td>
<td>.357</td>
<td>.350</td>
<td>.554</td>
</tr>
<tr>
<td>Within Groups</td>
<td>643.523</td>
<td>631</td>
<td>1.020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>643.880</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Work experience in the current company</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.598</td>
<td>3</td>
<td>.533</td>
<td>.522</td>
<td>.668</td>
</tr>
<tr>
<td>Within Groups</td>
<td>642.282</td>
<td>629</td>
<td>1.021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>643.880</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table shows that the opinions related to linkage between long term development decisions and appraisal process do not vary with the gender, and age, working experience as well as educational qualifications, as the test results show p value > 0.05 for all these levels (hence, H1 rejected and H0 accepted). It is gathered by the researcher that the IT companies (small or big) in West Bengal are providing a congenial climate for long term developments. During the personal interview it was observed a great number of people with post graduation are pursuing or aspiring for doctoral degrees, whereas a significantly large number of graduate executives reported that they are pursuing post graduation in technical or management streams, generally part time basis or distance mode. They also indicated that the big companies are having their own learning centers,
which promotes the higher education and specific skill building training. Almost every big company reported that they have in-house libraries promoting self learning for their employees.

The study is carried out further to understand the linkage between scope of long term development and performance appraisal reports in the companies diverse in employee strength above/ below 15000. The following table 5.144 provides the frequency distribution table for the opinions organized through a cross tabulation between the variable under study and the size of the selected IT companies based on the employee strength. The table also calculates the expected frequencies to calculate chi-square to test the association.

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Count</td>
<td>6</td>
<td>40</td>
<td>109</td>
<td>131</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>1.8</td>
<td>11.9</td>
<td>32.5</td>
<td>39.1</td>
<td>14.6</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>10.1</td>
<td>55.6</td>
<td>104.3</td>
<td>120.7</td>
<td>44.5</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Count</td>
<td>13</td>
<td>65</td>
<td>88</td>
<td>97</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4.4</td>
<td>21.8</td>
<td>29.5</td>
<td>32.6</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>8.9</td>
<td>49.4</td>
<td>92.7</td>
<td>107.3</td>
<td>39.5</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>19</td>
<td>105</td>
<td>197</td>
<td>228</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>19</td>
<td>105</td>
<td>197</td>
<td>228</td>
<td>84</td>
</tr>
</tbody>
</table>

Source: Primary Data
The table 5.144 and the figure above transpire a majority of the responses accepting the linkage between the scopes of long term development from appraisal report.

The following table 5.145 calculates the chi – square to test the difference in opinion related to linkage between scope of long term development and performance appraisal in the selected IT companies based on employees strength above/ below 15000 in West Bengal.

**Table 5.145. Chi square test statistics to analyze the difference in opinion related to linkage between scope of long term development and performance appraisal in the selected IT companies based on employees strength above/ below 15000 in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>16.066</td>
<td>4</td>
<td>.003</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>16.163</td>
<td>4</td>
<td>.003</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>11.565</td>
<td>1</td>
<td>.001</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.94.

Source: Primary Data
The critical chi-square value calculated is 16.066 with p value 0.003 < 0.05, rejecting the null hypothesis that: Performance appraisal does not facilitate long term development depending on the company’s employee strength.

The alternative hypothesis H1 is accepted: Performance appraisal facilitates long term development irrespective of company size.

The study is carried further to understand whether there is any opinion difference between various job grades in the companies diverse in employee strength or not. A micro view of the responses across the job grades in each selected group of companies is calculated. A sub hypothesis is made to study the comparison.

H0: The scope of performance based long term development do not vary depending on job grades in the selected IT companies with employee strength above/ below 15000

H1: The scope of performance based long term development vary depending on job grades in the selected IT companies with employee strength above/ below 15000

To understand the comparison, a cross tabulation is done on the variable across the job grades for the selected IT companies diverse in employee strength (above/ below 15000). The table 5.146 also provides the expected values that are used in calculating the chi – square testing further.
The table 5.146 and the figure below reveal the acceptance of the scope of long term development from the performance appraisal report, only the non IT executives’ part in the small IT companies denied a systematic practice of development in the companies.
As 6 cells (30.0%) have expected count less than 5. The minimum expected count is 0.54, for the companies with employee strength above 15000, and 5 cells (25.0%) have expected count less than 5. The minimum expected count is 1.48. The minimum expected count is 2.17, from the companies with employee strength below 15000, so Pearson chi square test is not permissible, so a one way ANOVA is conducted for based on the job grades in each of the group of companies with different employee strength. The table 5.147 below calculates the ANOVA to compare the mean value of the responses among various job grades from each group of companies to analyze as to whether the opinion related
to the research question differ across the job grades in the selected companies with varying workforce size.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15000</td>
<td>3.294</td>
<td>3</td>
<td>1.098</td>
<td>1.236</td>
<td>.297</td>
</tr>
<tr>
<td>Within Groups</td>
<td>294.186</td>
<td>331</td>
<td>.889</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>297.481</td>
<td>334</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15000</td>
<td>1.639</td>
<td>3</td>
<td>.546</td>
<td>.608</td>
<td>.610</td>
</tr>
<tr>
<td>Within Groups</td>
<td>264.294</td>
<td>294</td>
<td>.899</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>265.933</td>
<td>297</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The p value calculated for the selected companies with employee strength above or below 15000, are 0.297 > 0.05, and 0.610 > 0.05. Hence in both the cases the alternative hypothesis H1 is rejected.

So, The scope of performance based long term development do not vary depending on job grades in the selected IT companies with employee strength above/ below 15000

To get a micro view in each job grades and substantiate the above result, one parameter chi square was performed for each group of job grades in each of the group of companies varied in size, and the main hypothesis is tested:

H0 Performance appraisal does not facilitate long term development

H1 Performance appraisal facilitates long term development
Table 5.147A. Chi-Square Tests to analyze the difference in opinion at each individual job grades level related to linkage between scope of long term development and performance appraisal across the job grades in the selected IT companies based on employees strength above/ below 15000 in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>73.569(^a)</td>
<td>39.313(^b)</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.0.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 8.5.

Source: Primary data

As the p values are less than the 0.05, then the H0 is rejected and H1 accepted for each of the job grades from both the group of companies, and also substantiate the findings of table 5.149.

So, Performance appraisal facilitates long term development for each job grades and each of the companies irrespective of their size.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.001</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.199</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.022</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
5.3.16 Employee empowerment and performance appraisal system

The complex HR practice that facilitates the employees of the organization to take part in the strategic decision making and in the other issues related to the individual interest by decentralization and delegation of ‘power’ to the employees at lower levels of the organizational hierarchy is ‘employee empowerment’. The top level management delegates authority, responsibility and power to the lower level employees to take decisions related to his/her job and thus motivate employees to use their own energy, understanding, skill and competence to perform the individual job more effectively and efficiently. The empowerment practice improves the individual motivation as their contributions are recognized and rewarded. The individual’s are motivated to perform better when they understand that their contributions are counted and also the importance of his work to achieve greater organizational goal. The empowerment practice increases the feeling of togetherness with the team as well as the organization and also creates a sense of belongingness among the workers. As the IT companies are working with a group of knowledge workers with specific skills, it is evident that these people can contribute a lot towards the effective and efficient completion of the projects. During the personal survey it is understood by the researcher through the interaction with the executives from different portfolios, that the innovation and individual suggestions are given weightage and importance by their bosses and also by the top level management through joint communication with the supervisor.

To understand the linkage between employee empowerment practice and performance appraisal, the following research question was asked with a
Likert type scale (where 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree) to the respondents from the sampled IT companies in West Bengal: “Performance appraisal process provides sufficient empowerment to take decision for my job” and the following hypothesis was made.

**Hypotheses No. – 20**

H0  Performance appraisal does not facilitate empowerment of the employees

H1  Performance appraisal facilitates empowerment of the employees

The following table provides the response patterns of the sampled executives to understand the linkage between employee empowerment practice and performance appraisal systems.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Expected N</th>
<th>Residuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>21</td>
<td>3.3</td>
<td>126.6</td>
<td>-123.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>119</td>
<td>18.8</td>
<td>126.6</td>
<td>-107.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>173</td>
<td>27.3</td>
<td>126.6</td>
<td>-99.3</td>
</tr>
<tr>
<td>Agree</td>
<td>238</td>
<td>37.6</td>
<td>126.6</td>
<td>-89</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>82</td>
<td>13.0</td>
<td>126.6</td>
<td>-113.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>633</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data
It transpires from the above table 5.148 and the figure that, a majority (50.6%) of the respondents in all the selected IT companies in West Bengal, admits that they have sufficient scope of empowerment. During the personal survey, the researcher gathered that the expert decision/suggestion of an incumbent related to the projects he/she is continuing with, is accepted mostly and also the proactive behavior is given weightage in the appraisal system. Being a knowledge worker, the employees are also empowered to choose the future project, he/she wants to join. The incumbent is empowered often to decide about the process to be followed to complete his/her assignment related to the project.

The following table 5.149 provides the descriptive of the variable showing the linkage between appraisal and empowerment practice. The mean value (3.38) calculated with standard deviation 1.035, indicates a positive inclination towards the acceptance of the linkage.
The following table provides the one parameter chi-square test statistics to analyze the linkage between employee empowerment practice and performance appraisal systems considering the expected value as 126.6 for each cell, accepting the equal probability of answering to the research question at any of the point in the Likert type scale. The footnote is reporting the appropriateness of the p value.

**Table: 5.150 Chi-square test statistics to analyze the linkage between empowerment practice and performance appraisal practice in the sampled IT companies in West Bengal**

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>219.283a</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>

* a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary Data

The calculated critical value of the chi-square test statistics in the table is 219.283, with the p value 0.000 < 0.05, and also 0.000 < 0.01. So the p value indicates to reject the null hypothesis even at 1% level and accepting the alternative hypothesis.

So, H1 accepted: Performance appraisal facilitates empowerment of the employees

To understand as to whether there is any opinion difference among the respondents related to the research question showing the linkage between performance appraisal and the empowerment decisions on the basis of age,
gender, educational qualification, and working experience in the current
companies, collected from the administration of questionnaire from the overall
sampled IT companies in West Bengal, a one-way ANOVA is done. To
understand the opinion patterns a sub hypothesis is made:

$H_0$: The opinions of the respondents about linkage between appraisal and
empowerment decisions do not vary with the age, gender, qualification and
experience

$H_1$: The opinions of the respondents about linkage between appraisal and
empowerment decisions vary with the age, gender, qualification and
experience

The table shows the descriptive values of the variable showing the opinion
patterns of the respondents about linkage between appraisal and empowerment
decisions, as obtained from the field study.

<table>
<thead>
<tr>
<th>Linkage between the appraisal and</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>3.36</td>
<td>1.010</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>3.51</td>
<td>1.071</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>3.09</td>
<td>1.269</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.35</td>
<td>1.034</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.44</td>
<td>1.037</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>3.31</td>
<td>1.019</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>3.60</td>
<td>1.057</td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>3.36</td>
<td>0.997</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>3.30</td>
<td>1.049</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.66</td>
<td>1.034</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>3.19</td>
<td>1.078</td>
</tr>
</tbody>
</table>

Source: Primary data
Table 5.152 ANOVA table to analyze the linkage between appraisal and empowerment decisions based on age, gender, qualification, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.440</td>
<td>2</td>
<td>2.220</td>
<td>2.079</td>
<td>.126</td>
</tr>
<tr>
<td>Within Groups</td>
<td>672.805</td>
<td>630</td>
<td>1.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>677.245</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.972</td>
<td>1</td>
<td>.972</td>
<td>.907</td>
<td>.341</td>
</tr>
<tr>
<td>Within Groups</td>
<td>676.272</td>
<td>631</td>
<td>1.072</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>677.245</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>10.136</td>
<td>1</td>
<td>10.136</td>
<td>9.587</td>
<td>.002*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>667.109</td>
<td>631</td>
<td>1.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>677.245</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>11.445</td>
<td>3</td>
<td>3.815</td>
<td>3.604</td>
<td>.013*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>665.800</td>
<td>629</td>
<td>1.059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>677.245</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
* indicates item significant at the level of 5% significance level

The table 5.152 shows that the opinions related to linkage between empowerment decisions and appraisal process do not vary with the gender, and age, as the test results show p value > 0.05 for all these levels (hence, H1 rejected and H0 accepted) but the qualification and the working experience in the current company of the respondents show a significant difference in opinion among the groups as the p value shows a value < 0.05. The researcher during the personal survey gathered the information that empowerment is generally executives with higher working experience and more educational qualification enjoys the empowerment in their jobs. The diagrammatic representation below clears the findings.
The above figure 5.59 clearly shows that the respondents with higher qualification agree more (58.4% post graduates agree the practice in comparison of 48% graduates) on the practice of appraisal linked employee empowerment practices in their respective companies, selected under study in West Bengal.

The figure below 5.60 also diagrammatically proves that empowerment decisions are dependent on the working experience of the respondents in their respective companies. It clearly shows the trend that as the working experience of the respondents are increasing; they enjoy more empowerment in their respective positions. 59% respondents having more than 5 years of working experience accept that they are empowered in their job, whereas 49% senior executives and 47% junior executives from the sampled IT companies in West Bengal, accepts the practice at their respective positions.
Fig. 5.60 Response patterns to analyze the opinion difference about linkage between appraisal and empowerment decisions based on working experience of the respondents in the current company, as obtained from the field survey in the selected IT companies.

![Graph showing response patterns]

**Working experience in the current companies**

Source: Primary data

To understand the difference in the appraisal based empowerment practice in the selected IT companies on the basis of their size, the following sub hypothesis is made:

H0: Employee empowerment decisions are not based on performance appraisal on the basis of the company size

H1: Employee empowerment decisions are based on performance appraisal for all the selected companies irrespective of size

**Table 5.153 Distribution of the observed and expected frequencies to analyze the linkage between appraisal and empowerment decisions based on the employee strength of the selected IT companies in West Bengal**

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>8 (2.4%)</td>
<td>54 (16.1%)</td>
<td>85 (25.4%)</td>
<td>135 (40.3%)</td>
<td>53 (15.8%)</td>
<td>335</td>
</tr>
<tr>
<td>Expected Count</td>
<td>11.1</td>
<td>63.0</td>
<td>91.6</td>
<td>126.0</td>
<td>43.4</td>
<td>335.0</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>13 (4.4%)</td>
<td>65 (21.8%)</td>
<td>93 (31.2%)</td>
<td>98 (32.9%)</td>
<td>29 (9.7%)</td>
<td>298</td>
</tr>
<tr>
<td>Expected Count</td>
<td>9.9</td>
<td>56.0</td>
<td>81.4</td>
<td>112.0</td>
<td>38.6</td>
<td>298.0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>119</td>
<td>173</td>
<td>238</td>
<td>82</td>
<td>633</td>
</tr>
<tr>
<td>Expected Count</td>
<td>21.0</td>
<td>119.0</td>
<td>173.0</td>
<td>238.0</td>
<td>82.0</td>
<td>633.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
The above table and the figure transpire that considerably high percentage of responses (56.1% in the companies with employee strength above 15000 and 44.3% below 15000) from the selected IT companies grouped on the basis of employee strength; agree that employee empowerment decisions are based on appraisal system, though a declining trend is shown towards acceptance of the linkage between empowerment and appraisal decisions from the big companies to the medium and small companies. The researcher were reported by the respondents during the personal interaction with them that, small companies, especially, the companies with less than 100 employee strength, are more directed by the owners, leaving a little space for empowerment to the employees, predominantly junior IT executives, more particularly, junior non IT executives.

The table 5.154 below calculates the test statistics to analyze as to whether the empowerment decision is linked to performance appraisal decisions or not, based on the employee strength of the selected IT companies.

Source: Primary data
The above table calculated the critical chi – square value as 11.463 and the p value 0.022 < 0.05, suggesting rejection of H0 and acceptance of H1. So, 

H1 is accepted: Employee empowerment decisions are based on performance appraisal for all the selected companies irrespective of size.

To explore a micro view on the research question to study the opinion difference between the respondents in various job grades across the selected companies with different workforce size on the linkage between empowerment decisions and performance appraisal, the following sub hypothesis are made:

H0: The opinions of the respondents from the sampled IT companies in West Bengal about linkage between appraisal process and employee empowerment practice, do not differ with their job grades in the selected IT companies varying in size.

H1: The opinions of the respondents from the sampled IT companies in West Bengal about linkage between appraisal process and employee empowerment practice, differ with their job grades in the selected IT companies varying in size.
The table 5.155 and the figure below clearly transpires a positive increase in percentage of responses agreeing the linkage between the empowerment decisions and performance appraisal report from the junior IT executive cadre to the managerial cadre in both the group of selected IT companies. Only the non IT executive cadre in the selected companies with employee strength below 15000, a higher percentage of respondents disagreeing with the appraisal linked empowerment practice in their companies for their cadre. The figure also clearly substantiate that the respondents enjoy empowerment in decision making more towards the higher positions.
Source: Primary data

To understand whether there is any statistical difference among the opinions of the employees a chi-square test is done.

Table 5.156 Chi-Square Tests statistics analyzing the linkage between empowerment decision and the performance appraisal based on job grades across selected IT companies in West Bengal on the basis of employee Strength

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Pearson Chi-Square Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>5.124(^a)</td>
<td>12</td>
<td>.954</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>15.449(^b)</td>
<td>12</td>
<td>.218</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

The table 5.156 shows the p values for both groups of companies are more than 0.05 (p value for the companies with employee strength 15000, is 0.954 > 0.05 and for companies with employee strength less than 15000, p value 0.218 > 0.05). So H1 is rejected and Ho accepted.

It can be concluded that the opinions of the respondents from the sampled IT companies in West Bengal about linkage between appraisal process and employee empowerment practice, do not differ with their job grades in the selected IT companies varying in size.
To explore a micro view on the research question across the job grades in the selected companies differing in employee strength, a one parameter chi-square test is done for each job grades under the two groups of selected companies differing in workforce size. The following table calculates the chi-square test statistics for each individual respondent from each job grades and each group of selected IT companies on the basis of employee strength, and the working hypothesis is tested:

**H0**  Performance appraisal does not facilitate empowerment of the employees  
**H1**  Performance appraisal facilitates empowerment of the employees

**Table 5.156A One parameter chi-square test statistics showing the linkage between empowerment decision and the performance appraisal based on each job grades in the selected different IT companies in West Bengal grouped on the basis of employee Strength**

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Junior Executive</td>
<td>Senior Executive</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>48.986(^a)</td>
<td>41.813(^b)</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 19.2.
c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.
e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 6.8.

*** significant even at 1% level  
Source: Primary data

The above results clearly establish the relationship between employee empowerment and performance appraisal for all job grades and in each of the group of companies varied in employee strength, which also substantiate table 5.156, that there is no opinion difference among the respondents from each job grades for each group of companies with employee strength above/ below 15000.
Linkage between employee empowerment and performance appraisal

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

5.3.17 Role of Line function

The Frontline managers who interact with the employees on a day – to – day basis is responsible towards attainment of organizational objectives through the completion of projects efficiently. The supervisors are responsible for regular monitoring of the performance outcomes of the lower level of the employees, providing them technical support through prompt guidance, and the administration of performance appraisal in the modern organizations is the responsibility of the line managers.

To understand the role of line managers in the performance appraisal the following research question was asked “Performance ratings are given by supervisor” with a Likert type scale (where 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree) to the respondents from the sampled IT companies in West Bengal and the following hypothesis is made:

Hypotheses No. – 21

H0 Line function of the organization does not take an active role in the appraisal process
H1 Line function of the organization takes an active role in the appraisal process
The following table 5.157 provides the response patterns of the sampled executives to understand the role of line managers in performance appraisal systems.

**Table. 5.157 Response pattern showing the role of line managers in performance appraisal in the sampled IT companies in West Bengal**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>9</td>
<td>1</td>
<td>126.6</td>
<td>-117.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>75</td>
<td>12</td>
<td>126.6</td>
<td>-51.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>233</td>
<td>37</td>
<td>126.6</td>
<td>105.4</td>
</tr>
<tr>
<td>Agree</td>
<td>232</td>
<td>37</td>
<td>126.6</td>
<td>105.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>84</td>
<td>13</td>
<td>126.6</td>
<td>-42.6</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

**Fig.5.63. Response pattern showing the role of line managers in performance appraisal in the sampled IT companies in West Bengal**

Source: Primary data

It transpires from the table 5.157 and the figure 5.63 above that 50% of the respondents agree that the line managers play an active role in performance appraisal report. The researcher during the interaction with the executives in the sampled IT companies, gathered the information that the line managers play a vital role in performance planning, joint goal setting, performance review, and providing feedback to the incumbent, helping in future career planning.
To understand as to whether there is any statistical difference in the opinions of the respondents, a one parameter chi – square testing is done with an equal probability to fix any of the point in the Likert type scale in the table 5.158.

| Table:5.158 Test Statistics to analyze the role of line managers role in performance appraisal in sampled IT companies in West Bengal |
|-------------------|-----------------|
| Chi-Square        | 321.779<sup>a</sup> |
| df                | 4               |
| Asymp. Sig.       | .000            |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary Data

The above table provided the critical chi- square value as 321.779, with the p value as 0.000 < 0.05, which suggest rejection of the H0 and acceptance of H1.

So, H1 accepted: Line function of the organization takes an active role in the appraisal process

To understand whether there is any opinion difference among the respondents on the basis of age, gender, and working experience in current companies, a sub hypothesis is made:

H<sub>0</sub> There is no opinion difference among the respondents related to role of line managers in performance appraisal on the basis of age, gender, working experience

H<sub>1</sub> There is opinion difference among the respondents related to role of line managers in performance appraisal on the basis of age, gender, working experience
Table 5.159 Opinions of respondents about the role of line managers in performance appraisal on the basis of age, gender, work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Role of line managers</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>3.47</td>
<td>.915</td>
</tr>
<tr>
<td>Above 30 - 40</td>
<td>144</td>
<td>3.56</td>
<td>.883</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>3.27</td>
<td>1.120</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>3.49</td>
<td>.912</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>3.48</td>
<td>.925</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>3.48</td>
<td>.887</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>3.44</td>
<td>.918</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.64</td>
<td>.926</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>3.29</td>
<td>1.102</td>
</tr>
</tbody>
</table>

Source: Primary data

Table 5.160 ANOVA table to analyze the opinions of respondents about the role of line managers in performance appraisal on the basis of age, gender, work experience in the current company as obtained from the field survey in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.773</td>
<td>2</td>
<td>.886</td>
<td>1.057</td>
<td>.348</td>
</tr>
<tr>
<td>Within Groups</td>
<td>528.335</td>
<td>630</td>
<td>.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>530.107</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.022</td>
<td>1</td>
<td>.022</td>
<td>.026</td>
<td>.872</td>
</tr>
<tr>
<td>Within Groups</td>
<td>530.086</td>
<td>631</td>
<td>.840</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>530.107</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the current</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>3.918</td>
<td>3</td>
<td>1.306</td>
<td>1.561</td>
<td>.198</td>
</tr>
<tr>
<td>Within Groups</td>
<td>526.190</td>
<td>629</td>
<td>.837</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>530.107</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data
* indicates item significant at the level of 5% significance level
The table 5.160 shows that the opinions related to role of line managers in appraisal process do not vary with the gender, and age, and working experience as the test results show p value > 0.05 for all these levels (hence, H1 rejected and H0 accepted). So, H0 is accepted that there is no opinion difference among the respondents related to role of line managers in performance appraisal on the basis of age, gender, working experience.

To understand the difference in the appraisal based empowerment practice in the selected IT companies on the basis of their size, the following sub hypothesis is made:

H0: Line function of the organization does not take an active role in the appraisal process in all companies based on the employee strength

H1: Line function of the organization takes an active role in the appraisal process irrespective of company size

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Agree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>3</td>
<td>30</td>
<td>145</td>
<td>120</td>
<td>37</td>
<td>335</td>
</tr>
<tr>
<td>%</td>
<td>1</td>
<td>9</td>
<td>43</td>
<td>36</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>4.8</td>
<td>39.7</td>
<td>123.3</td>
<td>122.8</td>
<td>44.5</td>
<td>335.0</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>6</td>
<td>45</td>
<td>88</td>
<td>112</td>
<td>47</td>
<td>298</td>
</tr>
<tr>
<td>%</td>
<td>2</td>
<td>15</td>
<td>30</td>
<td>38</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Expected Count</td>
<td>4.2</td>
<td>35.3</td>
<td>109.7</td>
<td>109.2</td>
<td>39.5</td>
<td>298.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>9</td>
<td>75</td>
<td>233</td>
<td>232</td>
<td>84</td>
<td>633</td>
</tr>
<tr>
<td>Expected Count</td>
<td>9.0</td>
<td>75.0</td>
<td>233.0</td>
<td>232.0</td>
<td>84.0</td>
<td>633.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
The above table 5.161 as well as the figure 5.64 transpires clear descriptions of the responses agreeing with the research question that the line managers take active role in the performance appraisal system in both the selected companies grouped on the basis of employee strength. More surprisingly, the intervention of the line managers are observed more (54%) in the case of selected medium and small IT companies rather in the selected big (47%) IT companies. During the personal survey the respondents from big organizations informed that these companies follow a project structure and the employee performances managed and also the administrative decisions are influenced by multi layered management.

To understand whether there is any statistical difference in the role of line managers in the selected companies differentiated on the basis of employee strength, a chi-square analysis is done based on the above expected and observed frequencies.
Table 5.162 Chi-Square test statistics to analyze the role of line managers in the performance appraisal of the selected IT companies based on the employee strength in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>17.307a</td>
<td>4</td>
<td>.002</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>17.432</td>
<td>4</td>
<td>.002</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.151</td>
<td>1</td>
<td>.697</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 4.24.

Source: Primary Data

The critical value calculated is 17.307, with p value 0.002 < 0.05, which resulted in rejecting the null hypothesis (H0) and accepting the alternative hypothesis (H1) that is “Line function of the organization takes an active role in the appraisal process irrespective of company size”.

To get a more micro view of the responses on the role of line managers in performance appraisal based on the job grades and the company size based on employee strength, the following table is formed with the observed and expected frequencies. A sub hypothesis is tested.

H0: The opinions of the respondents from the sampled IT companies in West Bengal about role of line managers in performance appraisal do not differ with their job grades in the selected IT companies varying in size.

H1: The opinions of the respondents from the sampled IT companies in West Bengal about role of line managers in performance appraisal differ with their job grades in the selected IT companies varying in size.
Table 5.163 Showing role of line managers in performance appraisal based on job grades across selected IT companies in West Bengal on the basis of employee Strength

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job grades</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Jr. Executive</td>
<td>Count</td>
<td>3</td>
<td>7</td>
<td>65</td>
<td>53</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>2</td>
<td>5</td>
<td>45</td>
<td>37</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>1.3</td>
<td>12.9</td>
<td>62.3</td>
<td>51.6</td>
<td>15.9</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>Count</td>
<td>0</td>
<td>14</td>
<td>42</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>0</td>
<td>15</td>
<td>44</td>
<td>31</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>0.9</td>
<td>8.6</td>
<td>41.6</td>
<td>34.4</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Count</td>
<td>0</td>
<td>6</td>
<td>24</td>
<td>26</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>0</td>
<td>9</td>
<td>37</td>
<td>40</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>0.6</td>
<td>5.8</td>
<td>28.1</td>
<td>23.3</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>Count</td>
<td>0</td>
<td>3</td>
<td>14</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>0</td>
<td>10</td>
<td>47</td>
<td>37</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>0.3</td>
<td>2.7</td>
<td>13.0</td>
<td>10.7</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Count</td>
<td>3</td>
<td>30</td>
<td>145</td>
<td>120</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>3.0</td>
<td>30.0</td>
<td>145.0</td>
<td>120.0</td>
<td>37.0</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Jr. Executive</td>
<td>Count</td>
<td>1</td>
<td>18</td>
<td>30</td>
<td>44</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>1</td>
<td>16</td>
<td>27</td>
<td>39</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>2.3</td>
<td>16.9</td>
<td>33.1</td>
<td>42.1</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>Count</td>
<td>3</td>
<td>13</td>
<td>27</td>
<td>31</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>3</td>
<td>15</td>
<td>31</td>
<td>36</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>1.8</td>
<td>13.1</td>
<td>25.7</td>
<td>32.7</td>
<td>13.7</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Count</td>
<td>1</td>
<td>7</td>
<td>21</td>
<td>25</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>2</td>
<td>11</td>
<td>32</td>
<td>38</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>1.3</td>
<td>9.8</td>
<td>19.2</td>
<td>24.4</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>Count</td>
<td>1</td>
<td>7</td>
<td>10</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td></td>
<td>3</td>
<td>21</td>
<td>29</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>0.7</td>
<td>5.1</td>
<td>10.0</td>
<td>12.8</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Count</td>
<td>6</td>
<td>45</td>
<td>88</td>
<td>112</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td></td>
<td>6.0</td>
<td>45.0</td>
<td>88.0</td>
<td>112.0</td>
<td>47.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
The above table 5.163 and the figure 5.65 depicts that every respondents from each of the job grades and company with work force size, accepts the role of line managers in performance appraisal. The following table 5.164 calculates the chi-square test statistics to understand the research question in each of the group of selected companies with different sized work force.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Pearson Chi-Square</td>
<td>12.858a</td>
<td>12</td>
<td>.379</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td>335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Pearson Chi-Square</td>
<td>4.660b</td>
<td>12</td>
<td>.968</td>
</tr>
<tr>
<td></td>
<td>N of Valid Cases</td>
<td>298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 6 cells (30.0%) have expected count less than 5. The minimum expected count is .27.

b. 4 cells (20.0%) have expected count less than 5. The minimum expected count is .68.

Source: Primary Data
To explore a micro view on the research question across the job grades in the selected companies differing in employee strength, a one parameter chi-square test is done for each job grades under the two groups of selected companies differing in workforce size. The following table calculates the chi-square test statistics for each individual respondent from each job grades and each group of selected IT companies on the basis of employee strength, and the working hypothesis is tested:

**H0** Line function of the organization does not take an active role in the appraisal process  
**H1** Line function of the organization takes an active role in the appraisal process

| Table 5.164A One parameter chi-square test statistics showing the role of line managers in the performance appraisal based on job grades across selected IT companies in West Bengal on the basis of employee strength |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                 | Above 15000     |                 | Below 15000     |                 |                 | Non IT executive |                 |
| Chi-Square      | Junior Executive| Senior Executive| Manager         | Junior Executive| Senior Executive| Manager         | Non IT executive |
|                 | 111.139a        | 27.333b         | 19.246c         | 45.232d         | 30.069e         | 30.154f         | 33.031g         |
| df              | 4               | 3               | 3               | 4               | 4               | 4               | 4               |
| Asymp. Sig.     | .000***         | .000***         | .000***         | .000***         | .000***         | .000***         | .000***         |

- a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
- b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.
- c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.3.
- d. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
- e. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
- f. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
- g. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.

*** significant even at 1% level

Source: Primary data
So, the above table clearly transpires that the roles of line managers are very important in the appraisal process and in the entire selected IT companies understudy in West Bengal for each job grades, and this substantiate the findings of table 5.166.

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

### 5.3.18 Employee motivation from appraisal system

To attain the business excellence in the face of volatile and highly competitive market, and to provide value addition in service to the clients, the internal customers, i.e., the employees must be committed and contented. A motivated employee pool always improves the organizational health. Performance appraisal is a tool to improve the individual employees’ performance. Different HR outcomes are linked to the appraisal process. The performance appraisal compares the employees with each other and promotion decisions, salary increment, salary incentives decisions are fixed, and on the other side the report provides the information about the development need for individuals, identification of competence level and help in career progression. The process motivates employee through the continuous interaction with the supervisors through regular monitoring of performances. The dyadic relation
improves individual performance and thus employee motivation through performance coaching, feedback. But the practice of performance appraisal at the same time generates fear of punitive measures for poor performance report. Ambiguous, improper, biased performance appraisal system generates grievance among the employee pool. Appraisal politics, uncertain communication about the performance expectation from the incumbent also causes loss of faith of the employees on the process and also on the management practice.

The researcher during field survey observed that the selected IT companies emphasize on a structured and systematic practice of performance appraisal systems and hence the sound performance management systems. The section aimed to study whether the performance appraisal system can motivate the employees or not in the sampled IT companies. To understand this proposition, a research question, following research question was asked “I feel motivated after performance appraisal” with a Likert type scale (where 1= strongly disagree, 2=disagree, 3=neutral, 4= agree, 5=strongly agree) to the respondents from the sampled IT companies in West Bengal and the following hypothesis is made:

**Hypotheses No. – 22**

H0       Performance appraisal process does not motivate people

H1       Performance appraisal process motivates people

To test the overall response pattern, the following table is prepared with the observed frequencies and the expected frequencies to conduct a one parameter chi-square testing. The following figure substantiates the table.
Table 5.165 Distribution of overall responses obtained from the field study of sampled IT companies to analyze the linkage between performance appraisal and employee motivation

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Expected N</th>
<th>Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>52</td>
<td>8.2</td>
<td>126.6</td>
<td>-74.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>178</td>
<td>28.1</td>
<td>126.6</td>
<td>51.4</td>
</tr>
<tr>
<td>Neutral</td>
<td>198</td>
<td>31.3</td>
<td>126.6</td>
<td>71.4</td>
</tr>
<tr>
<td>Agree</td>
<td>164</td>
<td>25.9</td>
<td>126.6</td>
<td>37.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>41</td>
<td>6.5</td>
<td>126.6</td>
<td>-85.6</td>
</tr>
<tr>
<td>Total</td>
<td>633</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

Figure 5.66 Distribution of overall responses obtained from the field study of sampled IT companies to analyze the linkage between performance appraisal and employee motivation

Source: Primary data

It transpires from the table 5.165 and the figure above that 54% of the respondents agree that they feel motivated through the administration of performance appraisal report. The researcher during the interaction with the executives in the sampled IT companies gathered the information that almost every company strives to practice a systematic and sound performance appraisal system. The continuous monitoring, joint goal setting, and the appraisal applications motivates the employees.
To understand as to whether there is any statistical difference in the opinions on the respondents from the field study of sampled IT companies regarding motivation from performance appraisal practices or not, a one parameter chi – square testing is done with an equal probability to fix any of the point in the Likert type scale.

### Table 5.166 Test Statistics to analyze the overall responses obtained from the field study of sampled IT companies to analyze the linkage between performance appraisal and employee motivation

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>174.022&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

<sup>a</sup> 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 126.6.

Source: Primary Data

The above table provided the critical chi- square value as 321.779, with the p value as 0.000 < 0.05, which suggest rejection of the H0 and acceptance of H1.

**So, H1 accepted: Performance appraisal process motivates people**

To understand whether there is any opinion difference among the respondents on the basis of age, gender, qualification and working experience in current companies, a sub hypothesis is made:

**H0** There is no opinion difference among the respondents related to motivation from performance appraisal process on the basis of age, gender, working experience

**H1** There is opinion difference among the respondents related to motivation from performance appraisal process on the basis of age, gender, working experience
Table 5.167 Opinions of respondents about the motivation from performance appraisal on the basis of age, gender, work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th>Motivation from appraisal</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30</td>
<td>467</td>
<td>2.93</td>
<td>1.075</td>
</tr>
<tr>
<td>Above 30 – 40</td>
<td>144</td>
<td>3.01</td>
<td>1.024</td>
</tr>
<tr>
<td>Above 40</td>
<td>22</td>
<td>2.68</td>
<td>.995</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>417</td>
<td>2.96</td>
<td>1.048</td>
</tr>
<tr>
<td>Female</td>
<td>216</td>
<td>2.92</td>
<td>1.088</td>
</tr>
<tr>
<td>Qualification</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>479</td>
<td>2.91</td>
<td>1.072</td>
</tr>
<tr>
<td>PG</td>
<td>154</td>
<td>3.05</td>
<td>1.025</td>
</tr>
<tr>
<td>Less than 2 years</td>
<td>229</td>
<td>2.89</td>
<td>1.101</td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>273</td>
<td>2.95</td>
<td>1.059</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>110</td>
<td>3.04</td>
<td>.967</td>
</tr>
<tr>
<td>More than 10 yrs</td>
<td>21</td>
<td>2.95</td>
<td>1.161</td>
</tr>
</tbody>
</table>

Source: Primary data

Table 5.168. ANOVA table to analyze opinions of respondents about the motivation from performance appraisal on the basis of age, gender, qualification and work experience in the current company in the selected IT companies in West Bengal

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.265</td>
<td>2</td>
<td>1.133</td>
<td>1.006</td>
<td>.366</td>
</tr>
<tr>
<td>Within Groups</td>
<td>709.687</td>
<td>630</td>
<td>1.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>711.953</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.230</td>
<td>1</td>
<td>.230</td>
<td>.204</td>
<td>.652</td>
</tr>
<tr>
<td>Within Groups</td>
<td>711.723</td>
<td>631</td>
<td>1.128</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>711.953</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualifications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>711.953</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>2.131</td>
<td>1</td>
<td>2.131</td>
<td>1.894</td>
<td>.169</td>
</tr>
<tr>
<td>Total</td>
<td>709.822</td>
<td>631</td>
<td>1.125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work experience in the current company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.593</td>
<td>3</td>
<td>.531</td>
<td>.470</td>
<td>.703</td>
</tr>
<tr>
<td>Within Groups</td>
<td>710.360</td>
<td>629</td>
<td>1.129</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>711.953</td>
<td>632</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data

The table shows that p value > 0.05 for all these levels, hence, H1 rejected and Ho accepted. So,
Ho is accepted that there is no opinion difference among the respondents related to motivation in performance appraisal on the basis of age, gender, qualification and working experience.

To understand the difference in the respondent’s motivation level, in the selected IT companies on the basis of their size, the following sub hypothesis is made:

H0: Employees are not motivated from performance appraisal based on the company size
H1: Employees are motivated from performance appraisal irrespective of the company size

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Count</td>
<td>15</td>
<td>71</td>
<td>126</td>
<td>101</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>4</td>
<td>21</td>
<td>38</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>27.5</td>
<td>94.2</td>
<td>104.8</td>
<td>86.8</td>
<td>21.7</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Count</td>
<td>37</td>
<td>107</td>
<td>72</td>
<td>63</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>12</td>
<td>36</td>
<td>24</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>24.5</td>
<td>83.8</td>
<td>93.2</td>
<td>77.2</td>
<td>19.3</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>52</td>
<td>178</td>
<td>198</td>
<td>164</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>52.0</td>
<td>178.0</td>
<td>198.0</td>
<td>164.0</td>
<td>41.0</td>
</tr>
</tbody>
</table>

Source: Primary Data

Figure 5.67 Response pattern showing the motivation from the performance appraisal of the selected IT companies based on the employee strength in West Bengal

Source: Primary data
The above table 5.169 as well as the figure 5.67 transpires clear descriptions of the responses related to the research question whether the executives feel motivated from the performance appraisal system in both the selected companies grouped on the basis of employee strength. It is clear that in both the selected group of companies, the patterns of responses are more or less same. But, it also shows that respondents from the big companies understudy (employee strength above 15000) with workforce size more than 15000 express that they are more motivated (37%) in comparison with the executives in selected medium and small companies (employee strength below 15000), where the responses agreeing with the research question is low (27%). During the personal survey, the researcher understood, that the big companies’ emphasize a lot on promoting a systematic performance management system for their executives, but small organizations do not have any systematic appraisal system, which causes discontentment among the workers. The use of appraisal system for the punitive purpose is also a source of grievance among the workers. There is grievance about the execution process of the performance appraisal system, which is also causing demotivation amongst the executives in more or less every company. Though the sophisticated IT companies tried a lot to reduce the error/bias in the appraisal system, still the study it is understood that the system is still suffering from its complexity, process errors, rater’s bias, over emphasis on the tool, etc in the big and medium sized companies; whereas in the small companies are facing trouble non-systematic, unstructured, faulty administration of the appraisal tool, which are sometimes even not related with the final HR outcomes.
To understand whether there is any statistical difference in the executive’s opinion related to motivation from appraisal in the selected companies differentiated on the basis of employee strength, a chi-square analysis is done. The following table 5.170 calculates the critical chi-square value based on the above expected and observed frequencies.

Table 5.170 Chi-Square test statistics to analyze the opinions of the executives about motivation in the performance appraisal of the selected IT companies based on the employee strength in West Bengal

<table>
<thead>
<tr>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38.308a</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>633</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Primary Data*

The critical value calculated is 38.308, with p value 0.002 < 0.01 (at 1% level), which resulted in rejecting the null hypothesis (H0) and accepting the alternative hypothesis (H1) that is “Employees are motivated from performance appraisal irrespective of the company size”.

To get a more micro view of the responses on the motivation in performance appraisal based on the job grades and the company size based on employee strength, the following table is formed with the observed and expected frequencies. A sub hypothesis is tested

**H0**: The opinions of the respondents from the sampled IT companies in West Bengal about motivation in performance appraisal do not differ with their job grades in the selected IT companies varying in size.

**H1**: The opinions of the respondents from the sampled IT companies in West Bengal about motivation in performance appraisal differ with their job grades in the selected IT companies varying in size.
Table 5.171. Showing opinions related to motivation in performance appraisal based on job grades across selected IT companies in West Bengal on the basis of employee Strength

<table>
<thead>
<tr>
<th>Employee strength</th>
<th>Job grades</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td>Jr. Executive</td>
<td>Count 8</td>
<td>27</td>
<td>59</td>
<td>41</td>
<td>9</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>6</td>
<td>19</td>
<td>41</td>
<td>28</td>
<td>6</td>
<td>144.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>6.4</td>
<td>30.5</td>
<td>54.2</td>
<td>43.4</td>
<td>9.5</td>
<td>144.0</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>Count 5</td>
<td>24</td>
<td>31</td>
<td>30</td>
<td>6</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>5</td>
<td>25</td>
<td>32</td>
<td>31</td>
<td>6</td>
<td>96.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>4.3</td>
<td>20.3</td>
<td>36.1</td>
<td>28.9</td>
<td>6.3</td>
<td>96.0</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Count 1</td>
<td>17</td>
<td>27</td>
<td>17</td>
<td>3</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>2</td>
<td>26</td>
<td>42</td>
<td>26</td>
<td>5</td>
<td>65.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>2.9</td>
<td>13.8</td>
<td>24.4</td>
<td>19.6</td>
<td>4.3</td>
<td>65.0</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>Count 1</td>
<td>3</td>
<td>9</td>
<td>13</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3</td>
<td>10</td>
<td>30</td>
<td>43</td>
<td>13</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>1.3</td>
<td>6.4</td>
<td>11.3</td>
<td>9.0</td>
<td>2.0</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Count 15</td>
<td>71</td>
<td>126</td>
<td>101</td>
<td>22</td>
<td>335</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>15.0</td>
<td>71.0</td>
<td>126.0</td>
<td>101.0</td>
<td>22.0</td>
<td>335.0</td>
</tr>
<tr>
<td>Below 15,000</td>
<td>Jr. Executive</td>
<td>Count 15</td>
<td>40</td>
<td>22</td>
<td>26</td>
<td>9</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>13</td>
<td>36</td>
<td>20</td>
<td>23</td>
<td>8</td>
<td>112.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>13.9</td>
<td>40.2</td>
<td>27.1</td>
<td>23.7</td>
<td>7.1</td>
<td>112.0</td>
</tr>
<tr>
<td></td>
<td>Sr. Executive</td>
<td>Count 14</td>
<td>29</td>
<td>18</td>
<td>20</td>
<td>6</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>16</td>
<td>33</td>
<td>21</td>
<td>23</td>
<td>7</td>
<td>87.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>10.8</td>
<td>31.2</td>
<td>21.0</td>
<td>18.4</td>
<td>5.5</td>
<td>87.0</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>Count 3</td>
<td>27</td>
<td>18</td>
<td>14</td>
<td>3</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>5</td>
<td>42</td>
<td>28</td>
<td>22</td>
<td>5</td>
<td>65.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>8.1</td>
<td>23.3</td>
<td>15.7</td>
<td>13.7</td>
<td>4.1</td>
<td>65.0</td>
</tr>
<tr>
<td></td>
<td>Non IT Executive</td>
<td>Count 5</td>
<td>11</td>
<td>14</td>
<td>3</td>
<td>1</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>15</td>
<td>32</td>
<td>41</td>
<td>9</td>
<td>3</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>4.2</td>
<td>12.2</td>
<td>8.2</td>
<td>7.2</td>
<td>2.2</td>
<td>34.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Count 37</td>
<td>107</td>
<td>72</td>
<td>63</td>
<td>19</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
<td>37.0</td>
<td>107.0</td>
<td>72.0</td>
<td>63.0</td>
<td>19.0</td>
<td>298.0</td>
</tr>
</tbody>
</table>

Source: Primary Data
Source: Primary data

The above table 5.171 and the figure 5.68 depicts that every respondents from each of the job grades and company with work force size, accepts the motivation in performance appraisal. The following table 5.172 calculates the chi-square test statistics to understand the research question in each of the group of selected companies with different sized work force. The critical value for the big companies with workforce above 15,000, the critical value calculated is 12.055, and for small and medium companies, it is 15.286. The p values are more than 0.05 in both the cases.
Table 5.172 Chi-Square Tests showing the opinions of executives related to motivation in performance appraisal based on job grades across selected IT companies in West Bengal on the basis of employee strength

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>Pearson Chi-Square</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td>12.055&lt;sup&gt;a&lt;/sup&gt;</td>
<td>12</td>
<td>.441</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>335</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td>15.286&lt;sup&gt;b&lt;/sup&gt;</td>
<td>12</td>
<td>.226</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

So, H1 rejected and H0 accepted: The opinions of the respondents from the sampled IT companies in West Bengal about motivation in performance appraisal do not differ with their job grades in the selected IT companies varying in size.

To explore a micro view on the research question across the job grades in the selected companies differing in employee strength, a one parameter chi – square test is done for each job grades under the two groups of selected companies differing in workforce size. The following table calculates the chi – square test statistics for each individual respondent from each job grades and each group of selected IT companies on the basis of employee strength, and the working hypothesis is tested:

H<sub>0</sub> Performance appraisal process does not motivate people

H<sub>1</sub> Performance appraisal process motivates people
### Table 5.172A One Parameter Chi-square Test Statistics Showing the Motivation in the Performance Appraisal Based on Job Grades Across Selected IT Companies in West Bengal on the Basis of Employee Strength

<table>
<thead>
<tr>
<th></th>
<th>Above 15000</th>
<th>Below 15000</th>
<th>Non IT executive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>65.583&lt;sup&gt;a&lt;/sup&gt;</td>
<td>34.104&lt;sup&gt;b&lt;/sup&gt;</td>
<td>17.406&lt;sup&gt;f&lt;/sup&gt;</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000***</td>
<td>.000***</td>
<td>.000***</td>
</tr>
</tbody>
</table>

- a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 28.8.
- b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.
- c. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.3.
- d. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.4.
- e. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.
- f. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 13.0.
- g. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 12.8.

**significant even at 1% level  ** significant at 5% level

Source: Primary data

<table>
<thead>
<tr>
<th>Employee Strength</th>
<th>P value</th>
<th>Ho</th>
<th>H1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Below 15,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Executive</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Senior Executives</td>
<td>0.000</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Managers</td>
<td>0.003</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
<tr>
<td>Non IT executives</td>
<td>0.002</td>
<td>Rejected</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

So, the above results of the table substantiate the results in table 5.172, that there is no opinion difference among the executives about the motivation from the administration of appraisal in the sampled IT companies and at each level the executives admitted that administration and application of performance appraisal motivates the employees.
In the above deliberation the researcher has made an in-depth study on the “research objectives” and tested the hypothesis. The findings are as follows:

1. **Objective**: To evaluate the effectiveness of Performance Appraisal techniques used in selected IT companies

To study the effectiveness of appraisal system the regularity/irregularity, the linkage between performance appraisal and feedback intervention, and the scope of self evaluation in performance appraisal system, scope of joint goal setting, and role of line and staff function in performance appraisal systems were investigated. The linkage of performance appraisal with the innovative HR practices like empowerment decisions, scope for the employees to participate in decision making, were also tested. To make a comparative study in all these dimensions, the all sampled IT companies were grouped into two parts based on their employee strength. A comparative study is also made on the basis of gender, age, educational qualification, working experience in the current company and also based on the job grades to understand the opinions of the respondents about these hypotheses.

The study found that there is no opinion difference across the age, gender, qualification, age, company employee strength as well as in each job grades from each group of companies related to the above practice in appraisal process. Appraisal system is regularly practiced in all sampled IT companies big or small, though there are differences in frequencies (big companies reported four goal seek – self appraisal sessions, whereas the small companies reported annual appraisal systems), approaches (big companies follow systematic e-performance management system, small companies still using managerial observation), etc.,
which was informed by some of the executives during personal interview. Though there are no statistical differences in the opinions of the executives related to the above hypotheses, but in practice there is a difference in the administration of joint goal setting and scope of self appraisal, feedback system in the sampled IT companies. In all of the above cases, most of the IT executives in the small companies and many of the executives from medium and big companies also, have expressed their dissatisfaction during the personal interview.

2. **Objective**: To find out the linkage between the Performance Appraisal System and Career Planning and Development

To find out the linkage between performance appraisal and career planning and development the hypotheses to study showing linkage between performance appraisal, and the other growth oriented interventions like: training need identification, career planning, long term development scope, employee motivation, employee participation in decision making, empowerment practices, etc., are tested.

The study apparently found that career planning and development, training need identification, long term development, empowerment decisions and employee participation scope in the decision making is linked to the performance appraisal. These decisions are not different based on the job grades, age, and gender of the executives. Even, apparently it is found that the decisions have linkage with the performance appraisal system even in the small companies. It was found after the administration of questionnaire that qualification has a significant association/ influence on training need identification, reward administration, and on empowerment decisions. It is understood from the
findings and also from the personal interview that executives with higher academic degrees are preferred for top level posts and fast upward movements in the hierarchy in the sampled IT companies.

Though the above deliberation are showing the linkage between the growth decisions for the executives and the performance appraisal in all sampled IT companies, irrespective of their size, the executives during personal interview have expressed their annoyance over the administration procedure of these decisions, particularly in the medium and small sized companies.

3. **Objective**: To find out the impact of Performance Appraisal System on promotion and discipline management

To find out the linkage between performance appraisal and promotion and disciplinary management, the hypotheses to study showing linkage between performance appraisal, and the other decisional areas related to pecuniary measures like: salary increment, salary incentives, promotions, fast track promotions and punitive measures etc., are tested.

The study found that there is no significant difference in the practice of these result areas irrespective of employee strength of the sampled IT companies. The study apparently shows that there is a linkage between performance appraisal and the pecuniary decisions. The study also establishes that age, gender, working experience, qualification has no bearing on the promotion, salary administration, and punitive decisions. Only, the fast track promotion decisions show a significant association with qualification and experience of the executives. 72% of executives admitted that the punitive decisions are taken on
the basis of performance appraisal, which creates fear and demotivation among
the employees in the sampled IT companies in West Bengal.

Though there is a clear linkage between the pecuniary and punitive
decisions with performance appraisal; the executives from most of the sampled
IT companies have expressed a different opinion related to the administration of
these decision areas.

Now, it is pertinent to study that how the administration of HR decisions
based on performance appraisal ratings, influence the employee motivations, as
well as affect the individual attitudes, team performance, organizational culture
and finally influence the organizational financial portfolio. To have an in-depth
idea about the internal linkage/association between the pecuniary measures,
punitive decisions, reward administration, autonomy and empowerment
decisions, innovative climates, etc., with employee motivation the following
section has conducted a factor analysis followed by structural equation modelling
and an ordinal logistic regression.

5.4 Factor Analysis (Exploratory)

The most widely used multivariate technique to reduce data in statistical
methods is the “Factor Analysis”. Factor analysis is a process of expressing the
observed variables as a function of a number of possible derived dimensions. The
tool is used to reduce the data redundancy. The method is an extension of
“principal component analysis”. The prime purpose of the factor analysis is to
describe the covariate relationships among many variables in terms of fewer
underlying but unobservable random quantities called “factors”. The factor
analysis helps to cluster those variables having a high correlation within. Factor analysis helps to explore the data pattern, helps to test the hypotheses in a more efficient way.

Exploratory factor analysis and Confirmatory factor analysis are the two parts of the technique. Exploratory factor analysis is generally data driven and focuses to discover the factor structure of a construct and examine the reliability of those constructs. Confirmatory factor analysis confirms the fit to the hypothesized structure to the observed data.

To reduce 106 numbers of items to a workable number of factors to understand the underlying patterns of the responses, a factor analysis using SPSS 17 software is done. The factors identified in this way are generally the outcome of how the respondents seem to be responding in terms of various related items. The variables cluster under a factor according to the response patterns. The factor analysis followed the path: reliability analysis → measurement of correlation matrix → with principal component analysis → varimax rotation to obtain orthogonal/ independent factors.

**KMO and Bartlett’s test:** The KMO and Bartlett’s Test measures the strength of relationship among the variables. The KMO measures the sample adequacy, which should be greater than 0.5 for a satisfactory factor analysis to proceed further. The Bartlett’s test is another indication of close mutual relations among the variables. This tests the null hypotheses that the correlation matrix is an identity matrix. But if the non diagonal elements are zero, as is in the case of the identity matrix, there should be no relations between a variable and the other variables in the correlation matrix table. So it is justified to reject the null
hypotheses, as the correlation matrix is an identity matrix, so as to obtain a strong association among the variables.

<table>
<thead>
<tr>
<th>Table: 5.173 KMO and Bartlett's Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Sig.</td>
</tr>
</tbody>
</table>

Source: Primary data

In the study, as the table shows the KMO value is 0.948, which is more than 0.5, and hence justifies the sample adequacy for further calculations. The Bartlett’s test gave the value of the chi-square as 40778.223 with degrees of freedom 5565. The associated probability is .000 which is less than 0.05 and even 0.001. Hence rejecting the null hypotheses, it can be concluded that the correlation matrix is not an identity matrix. The homogeneity of the data is confirmed by Student’s t-Test. The null hypothesis is accepted with “t” values are under the acceptance zone.

**Communalities:** The annexure-1 shows the commonalities shows how many variants in the variable have been accounted for by the extracted factors, i.e., how good the variable is explained by the extracted factor. High communalities advocates for reliability of the factor analysis. The un-rotated and the rotated factor matrices are examined for significant factor loadings and adequate communalities. The highest 80.3% of the variance is accounted for in the variable APP1. Over 70% variance are accounted for in the variables: G2, AI1, AI2, EP3, RM7, APP2, APP3, APP6, App7, APP8, MOT3, MOT4, MP2, MP6, MP7, SR1, SR2, SR4, MPOL4, MPOL6, OCC6, OCC7, OCC8, EEA1. More than

**Total variance explained:** Eigenvalue is the standardized variance associated with a particular factor. The sum of eigenvalues cannot exceed the number of variable under study. The total eigenvalues represents the total amount of variance extracted by the factor solution. The table in the annexure - 2 provides the information about the factors extractable from the analysis along with their eigenvalues and the percentage of variance attributable to each variable and the cumulative variance of the factor and the previous factor. The table shows that the first 20 variables account for 67.744% of the total variance explained.

**Component matrix and rotated component matrix:** The factor loadings in either the un-rotated or rotated factor matrices represent the degree of association (correlation) of each variable with each factor. The component matrix extracts factors from the variables under study. The varimax rotated component analysis shows the total amount of variance extracted. The 106 variables are extracted into 21 factors to work with. Rotation on the component matrix reduces the number of factors on which the variables under study has high loading. After rotation 19 factors are extracted from the rotated matrix.
5.4.1 Team factor (Factor 1)

The first factor extracted after factor analysis is the team factor comprises the following items: the Team commitment towards organizational goal (EEA8), Membership of the team (TM1), Culture of openness and honesty within team (TM2), Satisfaction with the team spirit (TM3), Easy and informal Communication between the team members (TM4), Encouragement to diverse arguments or positive conflicts within team (TM5), High coordination between team mates (TM6), Team proactive nature to the organizational goal (TM7), Mutual respect (TM9). The researcher understood through discussion with the executives during the interview, being a project based industry; there is an immense importance of team. The activities (software program writing, etc) are highly inter-correlated among the team members. So, inter team cooperation and coherence is highly desirable to achieve the business excellence in the part of the company. The table below 5.174 shows the internal relationship/association between the items.

<p>| Table: 5.174 Inter item Correlations for factor 1 (Team factor) |
|---|---|---|---|---|---|---|---|---|---|</p>
<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>SD</th>
<th>Factor1</th>
<th>EEA8</th>
<th>TM1</th>
<th>TM2</th>
<th>TM3</th>
<th>TM4</th>
<th>TM5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEA8</td>
<td>3.52</td>
<td>.994</td>
<td>.678**</td>
<td></td>
<td></td>
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<td></td>
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<td>TM1</td>
<td>3.46</td>
<td>.894</td>
<td>.734**</td>
<td>.598**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TM2</td>
<td>3.57</td>
<td>1.056</td>
<td>.751**</td>
<td>.656**</td>
<td>.663**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TM3</td>
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<td>.932</td>
<td>.733**</td>
<td>.487**</td>
<td>.523**</td>
<td>.512**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TM4</td>
<td>3.47</td>
<td>1.008</td>
<td>.691**</td>
<td>.629**</td>
<td>.602**</td>
<td>.647**</td>
<td>.533**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TM5</td>
<td>3.44</td>
<td>.866</td>
<td>.709**</td>
<td>.553**</td>
<td>.621**</td>
<td>.645**</td>
<td>.514**</td>
<td>.547**</td>
<td></td>
</tr>
<tr>
<td>TM6</td>
<td>3.54</td>
<td>1.006</td>
<td>.712**</td>
<td>.571**</td>
<td>.574**</td>
<td>.628**</td>
<td>.639**</td>
<td>.639**</td>
<td>.524**</td>
</tr>
<tr>
<td>TM7</td>
<td>3.45</td>
<td>.916</td>
<td>.745**</td>
<td>.611**</td>
<td>.655**</td>
<td>.609**</td>
<td>.629**</td>
<td>.608**</td>
<td>.563**</td>
</tr>
<tr>
<td>TM9</td>
<td>3.47</td>
<td>.944</td>
<td>.778**</td>
<td>.584**</td>
<td>.629**</td>
<td>.610**</td>
<td>.638**</td>
<td>.607**</td>
<td>.613**</td>
</tr>
</tbody>
</table>

**significant at 1% level
Source: Primary Data
All the correlations of the items with the factors are significant at 1% level and inter-correlations within the items are also calculated showing significant relationship. All items are showing a factor loading of more than 69%.

5.4.2 Supervisory factor (Factor 2)

The next factor extracted is a combination of nine items, which indicates towards the factor ‘Supervisor’. Supervisor’s interest and confidence in appraisal process (EP7), Clear communication of expectation by the team leader/ project leader (SR1), Trusts between employee and the team leader/ project leader (SR2), Continuous Mentoring by team leader (SR3), Authenticity of judgment by team leader (SR4), Careful observation of individual competency (SR5).

The table 5.175 below show the association of each item with the factor, and each other a significant relationship at 1% level.

| Table: 5.175 Inter item Correlations for factor 2 (Supervisor factor) |
|-----------------|--------|--------|--------|--------|--------|--------|--------|
| Factor 2        | SR1    | SR2    | SR3    | SR4    | SR5    | SR6    | SR7    |
| SR1 3.35        | .956   | .735** |        |        |        |        |        |
| SR2 3.48        | 1.045  | .713** | .630** |        |        |        |        |
| SR3 3.42        | .909   | .670** | .479** | .417** |        |        |        |
| SR4 3.35        | 1.074  | .736** | .618** | .650** | .517** |        |        |
| SR5 3.34        | .920   | .697** | .637** | .596** | .453** | .567** |        |
| SR6 3.44        | 1.008  | .704** | .566** | .611** | .561** | .595** | .525** |
| SR7 3.32        | .935   | .732** | .586** | .539** | .586** | .616** | .544** | .516** |
| SR8 3.33        | 1.025  | .726** | .627** | .689** | .514** | .671** | .601** | .583** | .564** |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data
5.4.3 Goal Setting (Factor 3)

Seven items grouped together after conducting the exploratory factor analysis on the responses obtained from the executives through administration of questionnaires. They are: G1 (*Clear Communication of* corporate plan and business goals), G2 (*Self acceptance* of the goal), G3 (*Mutual goals* setting), G4 (*Acceptance* of individual *KRA criteria*), G5 (Discussions over *constraints to achieve KRA’s*), G6 (*Scope to assert* for support to understand the KRA’s), G7 (*Promoting* performance through *Goal setting process*), MP1 (*Communication of changing* intermediary Goals and expectations by top management) and MP3 (*Regular review of* Goals and performances achievement).

The correlation matrix is showing association of each variable with each other and also with the factor 3. Each of the correlation coefficients is showing significant relationship with each other.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>G1</th>
<th>G2</th>
<th>G3</th>
<th>G4</th>
<th>G5</th>
<th>G6</th>
<th>G7</th>
<th>MP1</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3.12</td>
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<td>.767**</td>
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<td></td>
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<tr>
<td>G2</td>
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<td>1.126</td>
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<td>.592**</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>G3</td>
<td>3.28</td>
<td>1.060</td>
<td>.713**</td>
<td>.517**</td>
<td>.546**</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>G4</td>
<td>3.24</td>
<td>1.005</td>
<td>.676**</td>
<td>.555**</td>
<td>.585**</td>
<td>.453**</td>
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</tr>
<tr>
<td>G5</td>
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<td>1.037</td>
<td>.711**</td>
<td>.544**</td>
<td>.645**</td>
<td>.549**</td>
<td>.522**</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>G6</td>
<td>3.27</td>
<td>1.045</td>
<td>.751**</td>
<td>.617**</td>
<td>.626**</td>
<td>.644**</td>
<td>.583**</td>
<td>.545**</td>
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</tr>
<tr>
<td>G7</td>
<td>3.35</td>
<td>.957</td>
<td>.725**</td>
<td>.585**</td>
<td>.627**</td>
<td>.593**</td>
<td>.538**</td>
<td>.517**</td>
<td>.566**</td>
<td></td>
<td></td>
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<tr>
<td>MP1</td>
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<td>.908</td>
<td>.612**</td>
<td>.526**</td>
<td>.513**</td>
<td>.511**</td>
<td>.474**</td>
<td>.503**</td>
<td>.541**</td>
<td>.446**</td>
<td></td>
</tr>
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<td>.996</td>
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<td>.541**</td>
<td>.529**</td>
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<td>.465**</td>
<td>.528**</td>
<td>.520**</td>
<td>.483**</td>
<td>.522**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data
5.4.4 Review method (Factor 4)

The factor 4 comprises eight items: \textit{RM1 (Reliable feedback system)}, \textit{RM2 (Proper Attention and time} spent in review discussions), \textit{RM3 (Careful Performance Review discussions)}, \textit{RM4 (Open communication} in review discussions), \textit{RM5 (Identification of individual developmental need)}, the \textit{counselling} on mistakes (RM6), \textit{Exercise SWOT} analysis for future project (RM8), Identification of \textit{Competency area} (RM9). The inter item correlations are as in the table 5.177, showing a significant relationship.

<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>Factor 4</th>
<th>RM1</th>
<th>RM2</th>
<th>RM3</th>
<th>RM4</th>
<th>RM5</th>
<th>RM6</th>
<th>RM8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.32</td>
<td>.879</td>
<td>.679***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.37</td>
<td>1.041</td>
<td>.662**</td>
<td>.437**</td>
<td></td>
<td></td>
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<td>3.32</td>
<td>1.016</td>
<td>.656**</td>
<td>.386**</td>
<td>.455**</td>
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</tr>
<tr>
<td>3.29</td>
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<td>.462**</td>
<td>.551**</td>
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<td>3.33</td>
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<td>.623**</td>
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<td>.462**</td>
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<tr>
<td>3.40</td>
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<td>.655**</td>
<td>.468**</td>
<td>.542**</td>
<td>.554**</td>
<td>.460**</td>
<td>.420**</td>
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<td>3.31</td>
<td>1.006</td>
<td>.663**</td>
<td>.451**</td>
<td>.586**</td>
<td>.504**</td>
<td>.601**</td>
<td>.567**</td>
<td>.497**</td>
<td></td>
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<td>.476**</td>
<td>.572**</td>
<td>.493**</td>
<td>.560**</td>
<td>.479**</td>
<td>.519**</td>
<td>.484**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.5 Perceived Financial Portfolio (Factor 5)

The factor 5 provides the factor consisting of the items: \textit{Market share} (FP1), \textit{Return on investment} (FP2), \textit{on time Project delivery} (FP3), \textit{efficient utilization of Capacity} (FP4), \textit{Customer Satisfaction} (FP5), \textit{Quality of workforce} (FP6), and \textit{Quality service providence} (FP7). The factor 5 indicates the perception of the respondent’s about financial performance
and business excellence. The internal association between the items are as follows:

| Table: 5.178 Inter item Correlations for factor 5 (Perceived financial portfolio) |
|---------------------------------|---|---|---|---|---|---|
| Factor 5                        | FP1 | FP2 | FP3 | FP4 | FP5 | FP6 |
| FP1                             | 3.50 | .883 | .728" |      |      |      |
| FP2                             | 3.66 | .975 | .688" | .534" |      |      |
| FP3                             | 3.46 | .847 | .625" | .388" | .387" |      |
| FP4                             | 3.52 | .968 | .670" | .512" | .572" | .426" |
| FP5                             | 3.43 | .925 | .696" | .573" | .577" | .455" | .508" |
| FP6                             | 3.60 | .938 | .647" | .520" | .594" | .573" | .515" | .430" |
| FP7                             | 3.52 | .873 | .728" | .554" | .578" | .499" | .598" | .540" | .476" |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.6 Fairness and justice (Factor 6)

The factor 6 comprises of six components: Consistency in evaluation process (EP6), Fairness and accuracy in rating (MP2), Awareness of information of individual appraisal file (MP6), Scope of appeal (MP7), Right of speaking mind without fear of negative consequences (EEA7), Transparent Organization practice and policies (NFP6). The facto 6 indicates the justice and fairness in the practice of performance appraisal system in the selected IT companies in West Bengal. During personal interview the executives especially in the big companies admitted that they have a structured system of appeal against the performance appraisal process limitations, right to know the information in their individual appraisal file, etc. The inter correlations/ associations between the items are shown in the table:
<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>Factor 6</th>
<th>EP6</th>
<th>MP2</th>
<th>MP6</th>
<th>MP7</th>
<th>EEA7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 6</td>
<td></td>
<td>EP6</td>
<td>MP2</td>
<td>MP6</td>
<td>MP7</td>
<td>EEA7</td>
<td></td>
</tr>
<tr>
<td>EP6</td>
<td>3.18</td>
<td>1.034</td>
<td>.678**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP2</td>
<td>3.07</td>
<td>1.106</td>
<td>.734**</td>
<td>.644**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP6</td>
<td>3.17</td>
<td>1.124</td>
<td>.720**</td>
<td>.605**</td>
<td>.737**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP7</td>
<td>3.03</td>
<td>1.056</td>
<td>.686**</td>
<td>.582**</td>
<td>.673**</td>
<td>.685**</td>
<td></td>
</tr>
<tr>
<td>EEA7</td>
<td>3.02</td>
<td>.979</td>
<td>.741**</td>
<td>.617**</td>
<td>.709**</td>
<td>.648**</td>
<td>.665**</td>
</tr>
<tr>
<td>NFP6</td>
<td>3.31</td>
<td>1.034</td>
<td>.677**</td>
<td>.625**</td>
<td>.733**</td>
<td>.683**</td>
<td>.643**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.7 **Learning culture (Factor 7)**

The six items: Promotion of Continuous learning (APP4), Promotion of self learning and development (MOT5), Relevance of Training and Development decisions with the skill requirement (MPOL1), Regularity in Mentoring and guidance (MPOL2), Frequent Development Opportunity (NFP4), Scope of long term development (EEA10), creates the factor “learning culture”. The previous section of hypothesis testing confirmed the application of performance appraisal towards identification of training need and promotion of long term development in the sampled IT companies in West Bengal. During the personal interview with the executives the respondents confirmed a great association between performance appraisal and facilitation of growth.

The table provides the inter-correlation between the items and also the factor constituted by the items.
### Table 5.180: Inter-item Correlations for Factor 7 (Learning culture)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Factor 7</th>
<th>APP4</th>
<th>MOT5</th>
<th>MPOL1</th>
<th>MPOL2</th>
<th>NFP4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 7</td>
<td>3.40</td>
<td>1.009</td>
<td>1</td>
<td>.712**</td>
<td>.703**</td>
<td>.423**</td>
<td>.417**</td>
<td>.529**</td>
</tr>
<tr>
<td>APP4</td>
<td>3.44</td>
<td>1.000</td>
<td>.712**</td>
<td>1</td>
<td>.719**</td>
<td>.573**</td>
<td>.417**</td>
<td>.522**</td>
</tr>
<tr>
<td>MOT5</td>
<td>3.58</td>
<td>1.132</td>
<td>.703**</td>
<td>.719**</td>
<td>1</td>
<td>.561**</td>
<td>.468**</td>
<td>.565**</td>
</tr>
<tr>
<td>MPOL1</td>
<td>3.37</td>
<td>.921</td>
<td>.423**</td>
<td>.573**</td>
<td>.561**</td>
<td>1</td>
<td>.482**</td>
<td>.506**</td>
</tr>
<tr>
<td>MPOL2</td>
<td>3.50</td>
<td>1.045</td>
<td>.417**</td>
<td>.468**</td>
<td>.482**</td>
<td>.506**</td>
<td>1</td>
<td>.571**</td>
</tr>
<tr>
<td>NFP4</td>
<td>3.46</td>
<td>1.020</td>
<td>.522**</td>
<td>.565**</td>
<td>.529**</td>
<td>.506**</td>
<td>.571**</td>
<td>1</td>
</tr>
<tr>
<td>EEA10</td>
<td>3.40</td>
<td>1.009</td>
<td>.539**</td>
<td>.529**</td>
<td>.522**</td>
<td>.506**</td>
<td>.571**</td>
<td>.539**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

#### 5.4.8 Individual factor (Factor 8)

The items: *Membership of the organization* (EEA1), *Generating a feeling of motivation* to see the success of the company (EEA2), *Employee involvement* in the decisions that is related to them (EEA3), *Reference to friends* to join this company (EEA4), *Desiring to serve* this company till retirement (EEA5), *Comfortable to share feelings, opinion* within team (TM8) creates a feeling of organizational citizenship behaviour among the individual employees. The committed and contented workforce shows the membership behaviour towards the organization. During personal interview the researcher gathered that as the IT success of the companies depends on their knowledge reservoir, and the specific skill sets are rare in the labour market, the companies try to promote the organizational citizenship behaviour among their employee through focussing on the competence management and innovative HR practices. The correlation matrix shows the association of the variables with each other.
Table: 5.181 Inter item Correlations for factor 8 (Individual factor)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Factor 8</th>
<th>EEA1</th>
<th>EEA2</th>
<th>EEA3</th>
<th>EEA4</th>
<th>EEA5</th>
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<tr>
<td>Factor 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEA1</td>
<td>3.22</td>
<td>.983</td>
<td>.704**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEA2</td>
<td>3.36</td>
<td>1.059</td>
<td>.689**</td>
<td>.565**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEA3</td>
<td>3.23</td>
<td>.945</td>
<td>.671**</td>
<td>.520**</td>
<td>.483**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEA4</td>
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<td>.986</td>
<td>.628**</td>
<td>.567**</td>
<td>.586**</td>
<td>.490**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEA5</td>
<td>2.97</td>
<td>1.032</td>
<td>.744**</td>
<td>.658**</td>
<td>.610**</td>
<td>.643**</td>
<td>.542**</td>
<td></td>
</tr>
<tr>
<td>TM8</td>
<td>3.37</td>
<td>.994</td>
<td>.605**</td>
<td>.572**</td>
<td>.555**</td>
<td>.515**</td>
<td>.537**</td>
<td>.573**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.9 Evaluation (Factor 9)

The factor 9 consists of items: Scope for self evaluation (EP1), Rating on personality factor and attributes (EP2), Efficiency in evaluation performance level (EP4), Evaluation of behaviour beyond job description (EP5), and regular monitoring of performance (EP8), Review of implementation of Development plan (MP4). The items clubbed together under this factor directs towards the procedural facet of the performance appraisal during evaluating the incumbents performance. The correlation matrix shows a high internal association within the variables.

Table: 5.182 Inter item Correlations for factor 9 (Evaluation factor)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP1</td>
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<td>.592**</td>
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<td></td>
</tr>
<tr>
<td>EP2</td>
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<td>.720**</td>
<td>.474**</td>
<td></td>
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<td>EP4</td>
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<td>.640**</td>
<td>.470**</td>
<td>.479**</td>
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<td></td>
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</tr>
<tr>
<td>EP5</td>
<td>3.25</td>
<td>.941</td>
<td>.639**</td>
<td>.457**</td>
<td>.557**</td>
<td>.386**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP8</td>
<td>3.27</td>
<td>.956</td>
<td>.690**</td>
<td>.470**</td>
<td>.574**</td>
<td>.438**</td>
<td>.564**</td>
<td></td>
</tr>
<tr>
<td>MP4</td>
<td>3.34</td>
<td>1.002</td>
<td>.667**</td>
<td>.451**</td>
<td>.557**</td>
<td>.451**</td>
<td>.489**</td>
<td>.510**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data
5.4.10 Organizational Culture (Factor 10)

The unique characteristic of IT industry is its multinational nature. The industry integrated the remote part of Indian villages with the sophisticated foreign multinational countries through the chain of knowledge workers. Hence, the IT companies need to promote sensitivity to different cultures and also need to promote an organizational environment under international legal setting conducive to maintain a harmonious relationship among the workers. The factor 10 includes the items: treating employees as resources regardless of race and gender bias (OCC1), Culture of positive confrontation (OCC3), Get together programs for employee family member arranged by company (OCC4), Organizational supports towards team building activity (OCC5), Job security and stability in the organization (NFP1), Positive work environment (NFP3). Thus a congenial organizational culture can create a loyal work force across the borders. The inter item correlations are:

| Table: 5.183 Inter item Correlations for factor 10 (Organizational Culture factor) |
|---------------------------------|---|---|---|---|---|
| Factor 10 | OCC1 | OCC3 | OCC4 | OCC5 | NFP1 |
| OCC1      | .721** |        |        |        |      |
| OCC3      | .681** | .480** |        |        |      |
| OCC4      | .611** | .510** | .452** |        |      |
| OCC5      | .663** | .602** | .489** | .577** |      |
| NFP1      | .644** | .576** | .483** | .510** | .534** |
| NFP3      | .604** | .466** | .523** | .438** | .371** | .454** |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.11 Recognition and Reward (Factor 11)

Every IT company whether small or big in employee strength reported that they have a systematic performance reward system to retain and attract best
talents from the market. Use of appraisal data for *rewards, recognition* of the high performers (APP3), *Encouragement* for Good works (OCC2), *Career growth opportunity* (NFP2), *overseas opportunities* (NFP5), *Clear communication* of *Career goals* (NFP7), these five factors grouped together under the factor 11. These variables indicate the recognition/ rewards/ opportunities obtained by the incumbent from their organization based on appraisal report. The correlation with the factor 11 shows a high factor loading/ association.

| Table: 5.184 Inter item Correlations for factor 11 (Reward/ Recognition factor) |
|---------------------------------|-----|-----|-----|-----|-----|-----|
| Mean   | SD   | Factor 11 | APP3 | OCC2 | NFP2 | NFP5 |
| Factor 11 |
| APP3  | 3.39 | .942 | .714** |
| OCC2  | 3.35 | 1.051 | .709** | .515** |
| NFP2  | 3.34 | 1.040 | .687** | .503** | .637** |
| NFP5  | 3.35 | .935 | .677** | .517** | .569** | .476** |
| NFP7  | 3.33 | .944 | .770** | .627** | .588** | .593** | .564** |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.12 Job/ task derivatives (Factor 12)

The factor 12 encompasses five items focusing on job and job related issues: use of appraisal in *job redesign decisions* (APP2), *focus on individual competence building* through improvement in job knowledge (MOT1), Identification of *skill set* for allocation of job (MP8), *and independence* to use skills and abilities in job (EEA6), use of *appraisal feedback* in improving job performance (EEA9). During personal survey the researcher observed that these companies are working on a time bound projects requiring specific technical skill, which varies from one project to another; hence,
the job nature and the requisite skill sets keep changing from one project to another. This creates a problem for the incumbent to cope to keep pace with change in job demand. Also the HR departments face problems to identify and develop the job – fit person. Hence regular monitoring of performance and also coaching on-job is not a mere ritual but a regular practice.

The table below show the inter item correlations:

| Table: 5.185 Inter item Correlations for factor 12 (Job/ task derivatives factor) |
|---------------------------------|--------|------------------|----------------|----------------|----------------|----------------|----------------|
| Factor 12                        | Mean   | SD               | Factor 12 | APP2 | MOT1 | MP8   | EEA6          |
| APP2                            | 3.56   | 1.070            | 0.707**   |      |      |       |               |
| MOT1                            | 3.69   | 1.002            | 0.722**   | 0.536** |      |       |               |
| MP8                             | 3.45   | 0.985            | 0.647**   | 0.577** | 0.536** |      |               |
| EEA6                            | 3.48   | 1.064            | 0.663**   | 0.618** | 0.570** | 0.614** |       |
| EEA9                            | 3.42   | 0.979            | 0.673**   | 0.646** | 0.512** | 0.550** | 0.606**       |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.13 Pecuniary agreements (Factor 13)

The sophisticated IT industry has created its’ image in the Indian labor market as one of the great pay masters. The pay packets, incentive schemes, huge monetary reward, fast career movements, is attracting the young generation to build their careers in IT/ ITes/ BPO sectors. It is discussed in the previous section of hypothesis testing that the major implications of performance appraisal are linked to these decisions. Use of appraisal data for incentive schemes decisions (APP5), career advancement scope (MOTI2), promotions decisions (MPOL3), salary and increment decisions administration (MPOL5), fast track promotion (MPOL7) are the five items constructs the factor. The correlation matrix showing the factor loadings of each variable are as under:

Page 1 490
The factor 14 comprises four variables: *employee participation* in management (MOT3), *autonomy* in doing the job (MPOL6), *empowerment to choose* the job (OCC8), *management’s belief* in employee empowerment (NFP8). Being knowledge based industry; the IT companies are emphasizing on the employee empowerment practices to use their intellect and innovative ideas towards better application and also as a motivational tool. The linkage between performance appraisal and the reward system is established in the previous section of hypothesis testing. The inter-correlations among the variables are as shown below:

<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>Factor 14</th>
<th>APP5</th>
<th>MOT2</th>
<th>MPOL3</th>
<th>MPOL5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 14</td>
<td></td>
<td>NFP8</td>
<td>.720**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFP8</td>
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<td>.992</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCC8</td>
<td>3.38</td>
<td>1.035</td>
<td>.754**</td>
<td>.624**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPOL6</td>
<td>3.36</td>
<td>1.034</td>
<td>.712**</td>
<td>.637**</td>
<td>.662**</td>
<td></td>
</tr>
<tr>
<td>MOT3</td>
<td>3.28</td>
<td>1.019</td>
<td>.778**</td>
<td>.612**</td>
<td>.669**</td>
<td>.579**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data
5.4.15 Punitive Decisions (Factor 15)

Negative ratings on mistakes in challenging and risky job (APP7), Disciplinary processes & procedures (MPOL4), Excusing mistakes in a risky job are (OCC7) are the variables grouped under the factor 15. During the field survey a huge number of employees expressed their fear and dissatisfaction related to this factor. The employee whose performance reports are consecutively poor (four appraisal reports as reported by the HR peoples in some of the organizations), are treated as the “back benchers”, as punitive measures. These people loss privileges, they are not assigned challenging and important projects and finally lead to retrenchment decisions. These items were reverse coded. The correlation matrix for the variables under the factor and corresponding factor loadings are as below:

| Table: 5.188 Inter item Correlations for factor 15 (Punitive Decisions) |
|-----------------------------|-----------------------------|--------------------------|---------------------|---------------------|
| Mean | SD | Factor 15 | APP7 | MPOL4 |
| Factor 15 | | | | |
| APP7 | 3.20 | 1.035 | .867** | |
| MPOL4 | 3.07 | 1.148 | .853** | .690** |
| OCC7 | 3.18 | 1.021 | .821** | .577** | .551** |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633
Source: Primary Data

5.4.16 Acceptance in the team (Factor 16)

The factor 16 consists of three variables/ items: promotion of mutual relationship and trust (RM7), influence of appraisal system on individual and team behavior (APP6), acceptance in the team (MOT4). Due to project based nature the teams working under a project, dissolve after the
project is over, and a new team is formed to work in a different project. So, acceptance within a team is a vital concern for the individual as well as the organization. The team leader plays a crucial role here, to minimize the politics and provide a congenial climate to the team members. Sometime the teams work across the border, the cross cultural issues are then taken into considerations to make the inter-cultural conflicts manageable. The factor loading show a high correlation of the items with the factor.

| Table: 5.189 Inter item Correlations for factor 16 (Acceptance in the team) |
|-----------------|-----------------|-----------------|-----------------|
| Factor 16 | Mean | SD | RM7 | APP6 | MOT4 |
| RM7 | 3.16 | 1.020 | .737"" |  |
| APP6 | 3.30 | 1.039 | .765"" | .661"" |
| MOT4 | 2.83 | 1.106 | .827"" | .590"" | .588"" | 1 |

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.17 Role of line and staff (Factor 17)

Active role of HR Department (EP3), proactive implementation of appraisal data by HR department (APP1), performance ratings made by supervisor (MP5) - these three items constructed the item role of line and staff functions in performance appraisal. In the previous section of hypothesis testing the role of the line and staff members in performance appraisal are proved, and also during the personal survey in most cases the executives expressed their satisfaction related to this. The variables under the factor are showing a high factor loading and inter- correlations among the variables. The table below shows the correlation matrix:
Table: 5.190 Inter item Correlations for factor 17 (Role of line and staff function)

<table>
<thead>
<tr>
<th>Factor 17</th>
<th>EP3</th>
<th>APP1</th>
<th>MP5</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP3</td>
<td>3.52</td>
<td>.929</td>
<td>.796**</td>
</tr>
<tr>
<td>APP1</td>
<td>3.35</td>
<td>.869</td>
<td>.819** .646**</td>
</tr>
<tr>
<td>MP5 MP5</td>
<td>3.48</td>
<td>.916</td>
<td>.461** .529** 1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.18 **Innovation oriented culture (Factor 18)**

The three items: positive rating on Innovation (APP8), practice of encouraging the Innovative Ideas (OCC6), management’s belief in innovation (FP8) Action (Factor 19) under the factor 18 are indicating towards innovation oriented culture in the sampled IT companies in West Bengal. As gathered from the study that the IT companies are very much promoting and practicing innovation at their operating level. The correlation between the factor and the variables are as shown below:

Table: 5.191 Inter item Correlations for factor 18 (Innovation orientation)

<table>
<thead>
<tr>
<th>Factor 18</th>
<th>APP8</th>
<th>OCC6</th>
<th>FP8</th>
</tr>
</thead>
<tbody>
<tr>
<td>APP8</td>
<td>3.42</td>
<td>.966</td>
<td>.767**</td>
</tr>
<tr>
<td>OCC6</td>
<td>3.48</td>
<td>.995</td>
<td>.791** .647**</td>
</tr>
<tr>
<td>FP8</td>
<td>3.56</td>
<td>.940</td>
<td>.679** .556** .560** 1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed), N = 633

Source: Primary Data

5.4.19 **Top management’s support (Factor 19)**

The factor 19 comprised of three items allocation of sufficient resources towards the process and method (AI1), prompt Guidance on process knowledge (AI2), appropriate action plan (AI3), points towards the facilities and guidance provided by the top level management during the
implementation of the jointly set goals and actual performance. The executives in most cases expressed their satisfaction related to this factor. The correlation matrix is showing a high inter correlation among the variables.

| Table: 5.192 Inter item Correlations for factor 19 (Top management’s support) |
|---------------------------------|-------|-------|-------|
| Factor 19                      |       |       |       |
| AI1                             | 1     | .742" | .731" | .697" |
| AI2                             | .906  | 1     | .559" | .495" |
| AI3                             | .972  | .731" | 1     | .526" |
| Al3                             | .956  | .697" | .495" | 1     |

**Correlation is significant at the 0.01 level (2-tailed), N = 633**

Source: Primary Data

These factors are used further in the next section to test the variables in the proposed models and their causal relations.

5.5 Confirmatory factor analysis and Structural Equation Modelling

Behavioral science, dealing with data/variables linked to qualitative attributes like attitude/satisfaction/opinions of the respondents, aspire to develop a mathematical model that can provide a structural view of the causal relations between these variables and also probabilistic estimations of these variables. CFA (Confirmatory factor analysis) is a part of structural equation modelling, which provides a measurement model that depicts the relations between the observed variables/items/indicators with the latent variable/factors.

Two confirmatory and subsequently structural equation modelling is conducted on the final data to i) conceptualize the effect of performance appraisal

\[\text{Brown, 2006}\]
implication on employee motivation mediated by the innovation oriented culture and ii) the effect of performance appraisal system on individual, team and organizational factors which in turn affect the perceived financial portfolios of the organization. This section tries to identify the relational effects of the factors obtained from the administration of questionnaires.

The following are the fit indices under confirmatory model, which informs about how far the observed variables can define their relations with the latents and finally test whether the model is acceptable or not.

5.5.1 The Goodness of Fit index:

One of the most commonly reported measures under CFA is a “Goodness of fit index”. These measures provide the basis of acceptance/rejection of the predictive model, by reporting the degree of approximation and an estimation of errors\(^5\). There are various goodness-of-fit statistics; most commonly used statistics is \(\chi^2\). In this case if the \(p > 0.05\), indicates that the null hypothesis is accepted: sample and model-implied variance-covariance matrices do not differ, and hence the model is retained; in contrary, if the \(p\) value < 0.05, implies a rejection of the null hypothesis, that, there is a difference between the predictive model and the model implied, which means the sample variances cannot satisfactorily reproduce the model estimates. But in applied research the \(\chi^2\) is not the only the index of goodness-of-fit, as in the case of large sample size, \(\chi^2\) probability values, very often summarily rejects the null hypothesis, even if there is a little/no difference between the sample and the model estimated matrices.

\(^5\) (Prudon, 2013)
Hence, for large sample size only $\chi^2$ measure is a misfit. So, the acceptance/rejection of the model depends on Root- mean- square- error- approximation (RMSEA), Comparative – fit – index (CFI), Normed- fit- index (NFI), Goodness of fit index (GFI) values alongside with $\chi^2$.

- Goodness of fit (GFI) and Adjusted goodness of fit (AGFI) index – Goodness of fit index measures the fitness between the variance and covariance matrix of the hypothesized model and the observed model. Adjusted goodness of fit is a correction over GFI by adjusting the degrees of freedom. Generally, the values of GFI and AGFI ranges from 0 – 1, with higher values indicating more goodness- of- fit of the model. The values above 0.90 is generally taken as a measure for the good- fit model\(^6\).

- Root- mean- square error approximation (RMSEA): The index is also identified as discrepancy/ degrees of freedom. RMSEA is an “approximation of errors”, suggesting the extent of model fit by measuring discrepancy in the hypothesized model and the model estimated. Though the value of the RMSEA is unbounded, but the RMSEA value “0” or near to zero indicates a best – fit model. RMSEA value range 0 – 0.05 indicates the model is the best fit, the value range 0.05 – 0.08 indicates moderately fit model, and RMSEA > 0.08, indicates a poor fit model\(^7\).

- Comparative – fit- index (CFI) - The measure is also known as an incremental fit index. This measure addresses the issue of discrepancy between

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\(^6\) (Doll, Raghunathan, Lim, & Gupta, 1995)

\(^7\) (Browne & Cudek, 1993)
data and the hypothesized model. CFI has a range of values from 0 to 1; CFI > 0.90, indicates the good fit model.

- Normed – fit – Index (NFI): NFI measures the fitness of the estimated model with the hypothesized model by scaling the $\chi^2$ value 0 to 1, and larger the value of NFI indicates a better model\(^8\). NFI values analyze the difference between the $\chi^2$ values of the estimated model with the value of the hypothesized model and NFI = 0.90 or more indicates a good –fit model\(^9\).

**5.5.2 A study on the effect of performance appraisal implications on the employee motivation from the performance appraisal systems: a mediating effect of innovation oriented culture:**

Performance is the outcome of the work. A thorough understanding of the literatures has proved the immense importance of performance appraisal to sharpen and integrate the individual performance with the organizational objectives to achieve expected results through the measurement and control of the day to day activities of the incumbent. The administrative significance of PAS arises out of some decision making in the area of compensation, promotion, elevation, development, career progression and also punitive action. The evaluative purpose encompasses increment decisions, incentives, bonuses, and in long term promotion decisions, identification of poor performers, determination of termination, retrenchment. The use of performance appraisal is greatly made

\(^8\) (Bentier & Bonett, 1980)
\(^9\) (Harvey, Billings, & Nilan, 1985)
on development of the employee competence through the identification of strength and weaknesses and providing feedback.

Being a project based industry and working with multidimensional, multilevel projects serving global clients with variable demand, swift inter project and inter team transfers of employees and rapid changes in usage of technological know-how are inevitable. The perishable nature of talent due to fast changing technology, acquisition, maintenance and utilization of skills occupies the pivotal importance in the industry, differentiating itself from the other industries.

Through the administration of questionnaires and personal interview the researcher gathered that performance appraisal vis-à-vis performance management has occupied a central HR role in the IT companies, whether small or big. Testing the hypothesis has also indicated the linkage between salary administration, promotion policy, existence of a fast track promotion system, career planning process, a systematic competence management system, performance reward system, etc., and performance appraisal report of the individual. The executives from the sampled IT companies focussed the PAS as an effective motivating tool for retention and development of the individual. The secondary data, provided by the company indicates maintenance and promoting of a structured, systematic, performance management system linked to reward system with a well designed career planning and progression, in the context of individual growth, development and retention.

In these two subsequent sections, the researcher tried to study the relations between the performance outcomes and the employee motivation from
performance appraisal systems. An exploratory model is tested in this section to address the question of whether the visible aspects of performance appraisal outcomes like pecuniary scope, punitive decisions, developmental agreements, job variables, innovation oriented culture, reward system, and autonomy and empowerment have an effect on the levels of motivation from performance appraisal.

A seven factor model is proposed after extensive study of the literatures and the understanding obtained from the field study in the sampled IT companies, in order to find out the linkage between the seven factors and employee motivation.

![Diagram](image-url)  
*Figure. 5.69 Linkage between the seven factors and employee motivation*
The theoretical understanding is tested by “Structural Equation Modelling technique”, a statistical tool that helps the researchers to test their theoretical propositions in terms of interrelationship between the variables under a multivariate situation. It further guides the researchers to identify the influences of each variable on the desirable outcome construct. Today in behavioural science, the method is immensely being used by the researchers to observe the effect of qualitative variables on the desired outcome visibly and mathematically.

5.5.2.1 Confirmatory factor analysis for the seven factor model: (The measurement model)

In this study the “outcome of importance” is the employee motivation from performance appraisal system. Here the proposed model hypothesizes the existence of seven latent factors which together comprises visible aspects of performance outcome, which in turn are assumed to influence the employee motivation from performance appraisal. It is observed during field survey that the major implications / outcome of a performance appraisal report in the sampled IT companies are pecuniary agreements, learning culture, job/ task derivatives, punitive decisions, reward administration, innovation orientation, autonomy and empowerment, which are considered to be the latent variables of performance outcome. Out of these seven factors, five factors (pecuniary agreements, learning culture, job/ task derivatives, punitive decisions, autonomy and empowerment,) are observed in the model as exogenous variables (the variables whose variability is determined by the other factors outside the causal model). Reward administration, innovation orientation and motivation from
performance appraisal systems (PAS) are treated as endogenous variable (whose variability is determined by the other variables within the model).

The figure 5.69 represents path diagram to represent the structural model by AMOS 18 software. The observed variables are represented in squares; latent variables are represented by circles. Small circles attached to the observed variables are the measurement error terms, generally denoted as “ε” for a group of variables x and δ or γ for other variables. The figure below is the representation of the proposed model by AMOS 17.

The model comprises seven latent variables defined in terms of observed variables. The measurement model allows the explorations of a variety of relationships between the variables through direct or indirect paths in the model. The full structural model will describe how the motivation from performance appraisal system is directly/ indirectly by the exogenous and endogenous variables. The descriptions of the variables, their inter- correlations are measured and discussed in the previous section of factor analysis, and the values of each of the variables are obtained from the administration of questionnaire.

Mathematically speaking, the outcome of the performance appraisal is a multidimensional construct influenced by the initial seven fundamental and unified factors (pecuniary agreements, learning culture, job/ task derivatives, punitive decisions, reward administration, innovation orientation, autonomy and empowerment), and assumed that in turn the performance outcomes to influence employee motivation from performance appraisal system.
The proposed model is translated by AMOS into a mathematical model with two parts - the measurement model (that specifies the relationship between observed variables and their underlying hypothesized constructs) and the structural equation modeling (that estimates inter correlation among the latent variables). The measurement model is confirmatory in nature, where mathematically the relationship between the observed variables and the latent variables are defined as the latent variables are dependent on the observed variables. At this stage the interrelationship between the latent variables and their physical observed variables are defined, which help the researchers to test the latent variables for their relationship within the model and help them to understand and build theory. The following is a measurement model (fig. 5.4.4) to test the relationship between the variables under study. The hypothesized model is verified through confirmatory factor analysis as well as through path analysis. The confirmatory factor analysis is done with 36 observed variables, 47 unobserved variables, 44 exogenous variables and 39 endogenous variables and 527 distinct sample moments. Number of distinct parameters to be estimated is 114. Degrees of freedom (527 - 114): 413. In the model CMIN $\chi^2$ value is 729.438, with degrees of freedom 413 and a probability level 0.000. In the covariance structure modeling root mean square error approximation (RMSEA = 0.035 for this model) has been recognized as one of the most informative criteria. The RMSEA value informs that the model is best fit model as the value lies below 0.05. NFI and CFI values are 0.923 and 0.965 respectively, and these values indicate that the model fits the data well in the sense that the hypothesized model adequately described the sample data. The NFI and CFI in this model is above
0.9 indicates a model good fit. The estimates of direct and indirect effects of variables are tested through t tests, and all parameters found to be significant (p < 0.001). So it can be concluded that the model fairly accounts for the variables observed in the data.

All the standardized regression weights that shows the inter relationship between the latent variables and their observed variables, are significant at 1% level.

<table>
<thead>
<tr>
<th>Table 5.193 showing the Standardized Regression Weights of the latent variables and the observed variables for seven factors linkage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latent Variables</td>
</tr>
<tr>
<td>Learning culture</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Job derivatives</td>
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<tr>
<td></td>
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<tr>
<td>Pecuniary Agreements</td>
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<tr>
<td></td>
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<tr>
<td>Reward administration</td>
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<td></td>
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<td>Autonomy and empowerment</td>
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<td>Innovation orientation</td>
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<tr>
<td></td>
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<tr>
<td>Punitive Decisions</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

Source: Primary Data

All the regression weights of the observed variables are showing significant relationship with their latent variables.

All the intercepts of the variables show a significant value at 1% level (table: 5.196) to justify the model fit. The correlations within the latent variables are also showing (Table 5.197) a significant interrelationship, as shown in the
tables; the figure 5.70 is showing the confirmatory path analysis. The measurement model shows that the specifications are confirmatory. The relationship between the observed variables and the latents are defined and the observed variables are sufficient to describe the latent variables.

Figure 5.70 The linkage between the seven decisional dimensions to ascertain employee motivation
Table: 5.194 Intercepts of the observed variables showing significant relationship with each other for seven factors linkage

<table>
<thead>
<tr>
<th>Estimate</th>
<th>APP4</th>
<th>MOT 5</th>
<th>MPO L1</th>
<th>MPO L2</th>
<th>NFP4</th>
<th>EEA1</th>
<th>APP2</th>
<th>MOT 1</th>
<th>MP8</th>
<th>EEA6</th>
<th>EEA9</th>
<th>MOT 3</th>
<th>MPO L6</th>
<th>OCC8</th>
<th>NFP8</th>
<th>APP5</th>
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</tr>
<tr>
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<td>92.1</td>
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<td>85.5</td>
<td>84.7</td>
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<td>82.2</td>
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<td>p</td>
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<td>***</td>
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</table>

Intercepts of the observed variables

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<th>MPO L5</th>
<th>MPO L7</th>
<th>APP3</th>
<th>OCC2</th>
<th>NFP2</th>
<th>NFP5</th>
<th>NFP7</th>
<th>APP7</th>
<th>MPO L4</th>
<th>OCC7</th>
<th>APP8</th>
<th>OCC6</th>
<th>FP8</th>
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<td>3.5</td>
<td>3.4</td>
<td>3.5</td>
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<td>S.E.</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<td>0.0</td>
<td>0.0</td>
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</tr>
<tr>
<td>C.R.</td>
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<td>80.2</td>
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<td>90.2</td>
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<tr>
<td>p</td>
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<td>***</td>
<td>***</td>
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</table>

Source: Primary Data

Table: 5.195 Correlation Matrix showing inter relationship among the latent Variables for seven factors linkage

<table>
<thead>
<tr>
<th>Learning culture</th>
<th>Job derivatives</th>
<th>Pecuniary Agreements</th>
<th>Reward administration</th>
<th>Autonomy and empowerment</th>
<th>Innovation orientation</th>
<th>Punitive Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Culture</td>
<td>0.521***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job derivatives</td>
<td>0.28***</td>
<td>0.326***</td>
<td></td>
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<tr>
<td>Pecuniary Agreements</td>
<td>0.449***</td>
<td>0.469***</td>
<td>0.308***</td>
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<tr>
<td>Reward administration</td>
<td>0.485***</td>
<td>0.53***</td>
<td>0.287***</td>
<td>0.472***</td>
<td></td>
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<tr>
<td>Autonomy and empowerment</td>
<td>0.367***</td>
<td>0.519***</td>
<td>0.283***</td>
<td>0.411***</td>
<td>0.508***</td>
<td></td>
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<tr>
<td>Innovation orientation</td>
<td>-0.027***</td>
<td>-0.031***</td>
<td>-0.122***</td>
<td>-0.067***</td>
<td>-0.033***</td>
<td>-0.079***</td>
</tr>
</tbody>
</table>

*** significant at 1% level

Source: Primary data
Performance appraisal in the software industry plays a vital role for all the HR activities. The measurement model confirms the linkage between the seven factors. The CFA for model 1 also establishes the high correlation with the job derivatives like: job design and change, the learning culture (self development, long term development), innovative work climate, and pecuniary agreements (salary increments/ incentives/ promotions). The latent variable “learning culture” is mostly influenced by the promotion of continuous learning (APP4) and scope for long term development (EEA10). The promotion of self learning and development (MOT5) is little influencing/ creating the learning culture, as the regression weight is comparatively low (0.597). Empowerment to choose the job in a project (OCC8) (regression weight 0.834) helps to create the autonomy and empowerment facilitating organizational culture. The covariates of the latent variables show the relation between these seven factors. It is established from the table 5.198 and the figure above that there is a high association between job derivatives and learning culture. The relation establishes that based on the skill required for the project, the trainings are arranged in the sampled IT companies. The association between autonomy and empowerment $\leftrightarrow$ job derivative (0.53), job derivative $\leftrightarrow$ innovation oriented culture (0.519), autonomy and empowerment $\leftrightarrow$ innovation oriented culture (0.508) are found to be very high. Whereas, the learning culture $\leftrightarrow$ innovation orientation (0.367), is much less associated, which shows the trainings given to the employees are generally based on the requirement of skill for the particular project, and a little less emphasis is given on the trainings, which help the employees to “think out of the box”. The effect of innovation orientation culture, autonomy and empowerment
and learning culture shows less association with the pecuniary agreements. It indicates that the decisions relating to salary increments, incentives, promotion decisions are not considerably affected by these variables. Punitive decisions taken on the basis of appraisal show a negative association with the other factors.

As the measurement model fits well, it suggests proceeding for structural equation modelling. The model is made to test the relational linkage between the seven factors and the employee motivation from performance appraisal systems. The regression weights are recalculated. According to the measurement model, the innovation culture is constructed by other latent variables: learning culture, job derivatives, autonomy and empowering organizational structure. Now, it is pertinent to ascertain the mediation of innovation oriented culture, reward, punitive decisions is influencing the employees’ motivation.

The confirmatory factor analysis is done with 32 observed variables, 42 unobserved variables, 39 exogenous variables and 35 endogenous variables and 560 distinct sample moments. Number of distinct parameters to be estimated is 103. Degrees of freedom (560 - 103): 457. In the model CMIN $\chi^2$ value is 1335.620, with degrees of freedom 457 and a probability level 0.000. In the covariance structure modelling root mean square error approximation (RMSEA) = 0.05 for this model informs that the model is best fit model as the value = 0.05. NFI and CFI values are 0.910 and 0.918 respectively, and these values indicate that the model fits the data well in the sense that the hypothesized model adequately described the sample data. The NFI and CFI in this model is above 0.9 indicates a model good fit. The estimates of direct and indirect effects of
variables are tested through t tests, and all parameters found to be significant (p < 0.001).

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
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<tr>
<td>Autonomy and empowerment</td>
<td></td>
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<tr>
<td>Innovation oriented culture</td>
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<td>0.045</td>
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<tr>
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*** significant at 1 % level          ** significant at 5% level

Source: Primary Data
So it can be concluded that the model fairly accounts for the variables observed in the data. The regression weights show a significant relationship ($p < 0.05$) among

---

**Figure. 5.71 Linkage between the seven factors mediated through innovation oriented culture on employee motivation**
all factors except the punitive factor with employee motivation which proves that punitive measures have no significant relationship with employee motivation. Calculating the total effects of the seven factors on employee motivation, it is understood that the innovation oriented culture influence the employee motivation most whereas the pecuniary decisions are showing less association with employee motivation.

The descriptions of the variable used in this study are as follows:

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<th>Variables</th>
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5.5.3 A study on the effect of performance appraisal on perceived financial portfolio of the organization mediated through individual attitude, team performance and organizational performance

Several researches have proved that the organizational performance is directly affected by the organizational culture, citizenship behavior of the employees, and the team performance. The premises of performance appraisal have been discussed elaborately in the conceptual part of the thesis. The organizational citizenship behavior concept advocates in favor of creating a strong sense of belongingness among the employees with the organization, which drives the employee to feel as a part of the company. Employees with strong sense of “we” feeling for the organization, advocates in favor of the organization, proactively perform the job beyond his/her job description. The IT companies focus individual units to motivate them as also for better utilization of individual capacity. “Individualized goal seek” program at the outset of performance appraisal, individualistic training and career planning, helps the HR department to deploy them to the projects (“even for Onsite projects”), where the person fits best. The HR executives from the sampled IT companies informed that they are practicing several innovative HR practices in the sphere of competence and performance management, so that they can build the contented workforce. They are providing employees’ autonomy on – the- job by creating self autonomous groups, providing learning and growth orientation, etc. Thus they are trying to reduce the employee turnover and retain the best talents with them.
Teams form a very important unit in the IT companies. It is observed, that in the IT companies under a single vertical, several small projects run. Each small unit consists of five to ten people forms group led by the team leader who works under the project leader. These teams generally work as self managed groups where a sense of mutuality, cohesiveness, cross cultural sensitivity, sharing of knowledge to form well knit groups and hence they keep a close watch on the team dynamics.

IT companies put effort to promote a corporate culture to provide a congenial, growth centric environment by promoting cooperation, friendliness and in developing a strong s relationship. The organizations try to enhance the level of individual motivation by creating a positive work environment, flexibility in work schedule, encouraging excellent performance and innovative ideas, and ensuring job security to the aspirants.

The field study gives the idea that performance appraisal system framework consists of three parts: goal setting → performance review and monitoring → feedback system.

This section has made an attempt to study the effect of performance appraisal on the individual attitude, team performance and organizational culture in the sampled IT companies and their total effect on the performance of the organization as a whole, as perceived by the respondents during administration of questionnaire.
The confirmatory factor analysis is done with total 68 variables out of which 31 are observed variables and 37 are unobserved variables, out of such variables 36 are exogenous variables and 32 are endogenous variables. These create 527 distinct sample moments. Number of distinct parameters to be estimated is 103. Degrees of freedom \((527 – 103)\): 424. In the model CMIN \(\chi^2\) value is 1274.772, with degrees of freedom 424 and a probability level 0.000. In the covariance structure modelling root mean square error approximation (RMSEA) is 0.05 for this model informs that the model is best fit model as the value is 0.05. The NFI and CFI values are 0.805 and 0.837 respectively, and these values indicate that the model fits the data well in the sense that the hypothesized model adequately described the sample data. The NFI and CFI comes nearly to 0.9 indicates of acceptance of the inter-relationship between the variables. The estimates of direct and indirect effects of variables are tested through t tests, and all parameters are found to be significant \((p < 0.001)\). So it can be concluded that the model fairly accounts for the variables observed in the data. All the observed variables show a significant relationship with their latent variables as shown in the table 5.202. All the intercepts of the observed variables calculated show a significant value at 1% level (Table 5.198). Each of the latent variables also shows a significant relationship, with each other (Table 5.199). The correlation between performance appraisal systems and individual attitude is showing a significantly high correlation.

Through the structural model the inter-item regression weights are calculated (Table 5.200). The table shows that performance appraisal system, individual attitude, team performance and organizational culture have significant
relation with the perceived financial portfolios of the organization at 5% level. The team performance and the organizational culture show a strong association with the perceived financial portfolios (PFP). The table depicts that there is a negligible effect of performance appraisal directly on the financial performance. But performance appraisal positively and significantly affects the individual and team performance.

Both of these studies show that the IT companies are following a structured system performance appraisal and a systematic practice of performance appraisal can undoubtedly affect individual attitude, team performance and organizational culture as a whole, which can lead to improve the organizations financial performance. The low regression weights are pointing towards less satisfaction of the executives in the sampled IT companies related to the administration of the process, which also lowers the effect of appraisal practice reinforcing the individual, team and organizational performance in some cases.
### Table 5.197 Intercepts of the observed variables showing significant relationship with each other for linkage between PAS – Organizational performance

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<th>TM6</th>
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<th>TM9</th>
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### Table 5.198. Correlation Matrix showing interrelationship among the latent Variables for linkage between PAS – Organizational performance

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*** significant at 1% level

Source: Primary data
### Table: 5.199 Standardized regression weights and standard errors with significance level for linkage between PAS – Organizational performance

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<td>0.06</td>
<td>7.243</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Primary Data

### Table: 5.200: Inter – factor Covariance’s for model 2

<table>
<thead>
<tr>
<th>Team</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team</td>
<td>0.258</td>
<td>0.027</td>
<td>9.441</td>
<td>***</td>
</tr>
<tr>
<td>Individual</td>
<td>0.27</td>
<td>0.029</td>
<td>9.189</td>
<td>***</td>
</tr>
<tr>
<td>Organization culture</td>
<td>0.256</td>
<td>0.027</td>
<td>9.508</td>
<td>***</td>
</tr>
</tbody>
</table>

*** significant at 1% level

Source: Primary data
Figure: 5.72 Linkage between Performance appraisal systems, individual attitude, team performance organizational culture and Organizational performance
The descriptions of the variables used in the study are as under

<table>
<thead>
<tr>
<th>Factors</th>
<th>Variables</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEAM Performance (Team)</td>
<td>EEA8</td>
<td>Team commitment towards organizational goal</td>
</tr>
<tr>
<td></td>
<td>TM1</td>
<td>Membership of the team</td>
</tr>
<tr>
<td></td>
<td>TM2</td>
<td>Culture of openness and honesty within team</td>
</tr>
<tr>
<td></td>
<td>TM3</td>
<td>Satisfaction with the team spirit</td>
</tr>
<tr>
<td></td>
<td>TM4</td>
<td>Easy and informal Communication between the team members</td>
</tr>
<tr>
<td></td>
<td>TM5</td>
<td>Encouragement to diverse arguments or positive conflicts within team</td>
</tr>
<tr>
<td></td>
<td>TM6</td>
<td>High coordination between team mates</td>
</tr>
<tr>
<td></td>
<td>TM7</td>
<td>Team pro active nature to the organizational goal</td>
</tr>
<tr>
<td></td>
<td>TM9</td>
<td>Mutual respect</td>
</tr>
<tr>
<td>Financial Portfolio (Financial Performance)</td>
<td>FP1</td>
<td>Market share</td>
</tr>
<tr>
<td></td>
<td>FP2</td>
<td>Return – on – investment</td>
</tr>
<tr>
<td></td>
<td>FP3</td>
<td>On time Project delivery</td>
</tr>
<tr>
<td></td>
<td>FP4</td>
<td>Efficient utilization of Capacity</td>
</tr>
<tr>
<td></td>
<td>FP5</td>
<td>Customer Satisfaction</td>
</tr>
<tr>
<td></td>
<td>FP6</td>
<td>Quality of workforce</td>
</tr>
<tr>
<td></td>
<td>FP7</td>
<td>Quality service providence</td>
</tr>
<tr>
<td>Individual attitude (Individual)</td>
<td>EEA1</td>
<td>Membership of the organization</td>
</tr>
<tr>
<td></td>
<td>EEA2</td>
<td>Generating a feeling of motivation to see the success of the company</td>
</tr>
<tr>
<td></td>
<td>EEA3</td>
<td>Employees involvement in the decisions that is related to them</td>
</tr>
<tr>
<td></td>
<td>EEA4</td>
<td>Reference to friends to join this company</td>
</tr>
<tr>
<td></td>
<td>EEA5</td>
<td>Desiring to serve this company till retirement</td>
</tr>
<tr>
<td></td>
<td>TM8</td>
<td>Comfortable to share feelings, opinion within team</td>
</tr>
<tr>
<td>Organizational Culture)</td>
<td>OCC1</td>
<td>Treating employees as resources regardless of race and gender bias</td>
</tr>
<tr>
<td></td>
<td>OCC3</td>
<td>Culture of positive confrontation</td>
</tr>
<tr>
<td></td>
<td>OCC4</td>
<td>Get together programs for employee family member arranged by company</td>
</tr>
<tr>
<td></td>
<td>OCC5</td>
<td>Organizational supports towards team building activity</td>
</tr>
<tr>
<td></td>
<td>NFP1</td>
<td>Job security and stability in the organization</td>
</tr>
<tr>
<td></td>
<td>NFP3</td>
<td>Positive work environment</td>
</tr>
<tr>
<td>PAS (Performance appraisal system)</td>
<td>G3</td>
<td>Mutual goals setting</td>
</tr>
<tr>
<td></td>
<td>MP3</td>
<td>Regular review of Goals and performances achievement</td>
</tr>
<tr>
<td></td>
<td>RM1</td>
<td>Reliable feedback system</td>
</tr>
</tbody>
</table>

### 5.6 Ordinal Logistic Regression

To understand as to whether the performance appraisal systems (PAS) and its’ outcome on affect the employee motivation significantly or not, and their respective estimations, an ordinal logistic regression is conducted. Regression is basically fitting a linear or linear relational structure between dependent and
independent variables, using the data understudy to analyze the estimation of dependent variable based on the values of the independent variables. Ordinal regression is useful when, the dependent variable is measured in an ordinal scale (Likert type scale) and the independent variables are continuous/ ordinal/ categorical/dichotomous. Here the regression analyses the association between the employee motivations from performance appraisal system and the factor scores obtained from the factor analysis. Employee motivation (item EEA11) is treated as the dependent variable and is regressed on the 19 factors, those are derived from the administration of questionnaire and the items are loaded on the basis of responses given by the executives from sampled IT companies. As the dependent variable is using five point Likert type scales, the link function in ordinal logistic regression is taken ‘Probit’. The link function transforms the original dependent variable (Y) to estimated Y, i.e Ŷ. Probit regression assumes that the errors are normally distribute.

The table below provides the model fitting summary; the more the value of the loglikelihood is, the model is good fit. Though there is no upper limit ascertained for loglikelihood values, in this model the -2LL values has taken considerably high value. The p value in the table calculated is 0.000 < 0.05, shows the model significance.

<table>
<thead>
<tr>
<th>Model</th>
<th>-2 Log Likelihood</th>
<th>Cox and Snell</th>
<th>Nagelkerke</th>
<th>Chi square Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final</td>
<td>1546.042</td>
<td>0.367</td>
<td>0.389</td>
<td>.000</td>
</tr>
</tbody>
</table>

Link function: Probit.

Table 5.201: Model Fitting Information for regression
The cox and snell calculated value is 0.367, which indicates a moderately fit model, which is explaining 36.7% of causal relation between the predictor variables and the predictions. The following table provides the estimation of the causal relations between the employee motivation and the factors. All the factors show a significant effect on employee motivation.

<table>
<thead>
<tr>
<th>Table 5.202. Parameter Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Threshold</td>
</tr>
<tr>
<td>[EEA1 = 1]</td>
</tr>
<tr>
<td>[EEA1 = 2]</td>
</tr>
<tr>
<td>[EEA1 = 3]</td>
</tr>
<tr>
<td>[EEA1 = 4]</td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>FAC1_1</td>
</tr>
<tr>
<td>FAC2_1</td>
</tr>
<tr>
<td>FAC3_1</td>
</tr>
<tr>
<td>FAC4_1</td>
</tr>
<tr>
<td>FAC6_1</td>
</tr>
<tr>
<td>FAC7_1</td>
</tr>
<tr>
<td>FAC8_1</td>
</tr>
<tr>
<td>FAC11_1</td>
</tr>
<tr>
<td>FAC12_1</td>
</tr>
<tr>
<td>FAC13_1</td>
</tr>
<tr>
<td>FAC14_1</td>
</tr>
<tr>
<td>FAC18_1</td>
</tr>
</tbody>
</table>

Link function: Probit.

Source: Primary Data

Taking all the factors together, and after the regression analysis, it is found based on the opinions of the sampled IT companies, the factors 5 (perceived financial portfolios), factor 9 (evaluation factor), factor 15 (punitive
measures), factor 16 (acceptance within the team), factor 17 (role of line and staff functions), and factor 19 (Action), are not showing significant relationship with employee motivation. As the data set is comprised for the companies, varying in employee strength (employee strength to “less than 50” to more than 15,000), diverse business focus (IT/ITes/ BPO), varied job grades (junior IT executives, senior IT executives, managers, non-IT executives), the estimates of the significant factors are also somewhat less, but it gives us clear picture about the trend of opinions in the sampled IT companies in West Bengal.

The regression estimates show, fair practice in appraisal process (factor 6), learning and growth (factor 7), innovation orientation (factor 18), job derivatives (factor 12) establishes a significantly high association with employee motivation.