Chapter 3

Research methodology

3.1 Introduction

This chapter is like brain of the study since on this hinges the reliability and validity of the research. It is with this assumption and care that the research methodology encompassing research design, research plan and structure of the study has been adopted. Objectives have been derived from research question and purpose of the investigation. It is from the objectives that the hypotheses which are included in this chapter have been designed, design of the sample structured and sampling done. Independent and dependent variables have been extracted from the research design and operational definitions assigned. Reliable and valid instrument to measure perceptions of the employees has been designed and put through the test of pilot study. After validating and reassuring of the reliability of the tool incorporating modifications where due, the questionnaire has been administered to the respondents. Scoring of the questionnaire has been done on seven point Likert scale. The chapter closes with a statement of the statistical techniques to be adopted for analysis of data which is the subject matter of the next chapter.

3.2 Statement of the problem

The problem of the study is stated as, “Perceived employees contribution in relation to recreational facilities: An exploratory study”

The purpose of this study was to identify the impact of perception of recreational facilities provided by the organisation to its employees, on employees’ contribution to their organisation, in Indian organisations. Aim of this study was to ascertain the role played by recreational facilities inclusive of recreation activities on employee productivity in its entirety, as an organisational outcome.

3.3 Operational Definitions of the Variables under investigation

3.3.1 Recreational Facilities
A facility provided in premises or precincts of an organisation, for fun, diversion, enjoyment, relaxation, amusement and physical, psychological, spiritual or social well being of members of the organisation. Activities engaged in the facility are planned by management with the view to enhance productivity and well being of employees. It is inclusive of hiring recreation organisation’s services. Recreational facilities in Indian organisations have been surveyed, in both its formats:

- Indoor recreational facilities are provided in a hall or a building, affording easy, all weather and time accessibility to employees of the organisation.
- Outdoor recreational facilities primarily constitute provisions made for games, sports, adventure activities, visit to parks, trekking and picnics for employees of the organisation.

Third dimension quested and analysed in recreational facilities of an organisation is that of policy provisions in the routine framework of the establishment. Involvement of families of the employees in their overall well being has also been examined.

### 3.3.2 Recreation activities

Utilisation of recreational facilities is done through recreational activity. Indeed recreation activity has a wider scope than that. Even when there are no recreational facilities provisioned, the organisation can still participate in recreation activities by way of outsourcing. Recreation organisations engaged in the field of recreation, games and sports, parks, tourism or therapeutic recreation offer their specialised services and customised solutions to different clients including governmental, private, or commercial participating organisations. The services rendered range from fully prepared and packaged “turn key” solutions to merely as counselling service on the other end of the scale.

Recreational activities undertaken have been inquired through a model developed incorporating a spectrum of dimensions as under:

- Building team work skills
- Development of leadership
Boundary less communications
- Opportunities created for development
- Stress busters available
- Involvement of families in outdoor recreational activities
- Building of trust and support measures
- Opportunities for challenging assignments
- Recharging of energy and enthusiasm
- Installation of system of reward and recognition
- Development of self efficacy
- Process of goal setting and clarification of goals
- Additional and informal channels of feedback and communication
- Realisation of interdependency of participants
- Generation of creativity and fun at the work place
- Care of physical, psychological, emotional and social health
- Thrill of winning
- Practice of spirituality
- Action taken on feedback
- Listening to and hearing of employees

3.3.3 **Employee Contribution**

Higher than expected performance on the job is the most important contribution an employee can make to his organization. But most enterprises in today’s competitive world need to constantly improve to remain profitable or effective. The experience and insights of the workforce are a valuable source for those improvements.

Demands and the resources to meet them change rapidly and are often out of balance. Equipment may have to be adjusted or replaced and processes may have to be revamped to keep up with these variations or shortfalls. While managers are paid to stay on top of these developments, staff members have specialized knowledge and a vantage point on the firing line that can spot problems early and formulate practical solutions. However, human resources need to be continuously developed to match these expectations and never allowed to fall short of the requisite standards.

Employee contribution is an outcome of a quality of leadership available in the organisation and is measurable. Recreational facilities and recreation activities are hypothesised as one of its important predictors, which is the focus of this research study. Performance/Results =
(abilities, skill, knowledge & experience) x (positive attitude & behaviors, motivation, alignment, inspiration, engagement) (Doug Brown, 2010).

3.4 Variables under Investigation

There are broadly four variables studied in this research:

3.4.1 Independent Variables

Recreational facilities and Recreation Activities-each has 18 and 28 items respectively.

3.4.2 Dependent variable

Perceived Employee Contribution has 16 items for measurement of employees’ perceptions.

3.4.3 Demographic Variables

Department, Designation, Gender, Age, Highest level of education attained, Marital status, Total work experience, Experience in current position, and Experience in current organisation.

3.5 Hypotheses

Hypotheses formulated for conducting the research are:

(a) $H_0_1$: There is no significant relationship between organisational Recreational Facilities and perceived Employee contribution.

(b) $H_0_2$: There is no significant relationship between organisational Recreation activities and perceived Employee Contribution.

(c) $H_0_3$: Organizational Recreational Facilities and Recreation Activities do not significantly influence perceived employee Contribution to their organisations.

(d) $H_0_4$: There will be no significant differences across demographics and organisational recreational facilities and organisational recreation activities.
(e) $H_0$: There will be no significant differences across demographics and perceived perceptions of Employees contribution to their organizations.

### 3.6 Sample of the study

As a true representative of the population, a sample drawn from Indian organisations based in Bangalore was surveyed.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturing</strong></td>
<td><strong>05</strong></td>
<td><strong>102</strong></td>
</tr>
<tr>
<td><strong>IT Services</strong></td>
<td><strong>05</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Indian Organisations</strong></td>
<td><strong>10</strong></td>
<td><strong>202</strong></td>
</tr>
</tbody>
</table>

Table 3.1: Indicating the sample drawn

### 3.7 Sampling technique

Judgemental as well as convenience technique of sampling was adopted. Sample of representative organisations by way of convenience sampling technique and then from each of the organisation chosen, participants were selected from the cross section of the population by utilising judgemental technique. The questionnaire was personally delivered by the researcher explaining the variables and nuances. Those participants, who could understand the requirement, completed the questionnaire with their responses.

### 3.8 Tools adopted for the study

The following tools were used to measure the variables of the study.

1. Perceptions of Recreational Facilities were measured with the Recreational Facilities Tool, developed by the researcher and Dr Harold A. Patrick, Christ University, Bangalore.

2. Perceptions of recreational activities were measured with the Recreation activities tool, developed by the researcher and Dr Harold A. Patrick, Christ University, Bangalore.
3. Perceptions of Employee contribution were measured with the Employee contribution tool, developed by the researcher and Dr Harold A. Patrick, Christ University, Bangalore.

Table 3.2: Indicating the tools and their dimensions, number of items and Cronbach’s Alpha for the total sample.

<table>
<thead>
<tr>
<th>Tools and their Dimensions</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreational facilities</td>
<td>18</td>
<td>.867</td>
</tr>
<tr>
<td>Recreation activities</td>
<td>28</td>
<td>.951</td>
</tr>
<tr>
<td>Perceived employee contribution</td>
<td>16</td>
<td>.887</td>
</tr>
</tbody>
</table>

3.9 Description of the tools

The tools devised for this research study consisted of four parts:

Part I - Participants profile (demographics) – Contains 9 Items included below:

1. Department (dept)
2. Designation (designation)
3. Gender (gender)
4. Age (age)
5. Highest level of education attained (edn)
6. Marital status (marital)
7. Experience in the present position held (designexperience)
8. Total number of years work experience (totalexperienc)
9. Total number of years in the current organisation (orgexperience).

Part II - Recreational Facilities - Contains Items 18 given below measured on a 7 point Likert scale with weightage 1 equals “Disagree” and 7 equals “Agree”.

1. recFacil_Org. Formalised as policy in organisation rules
2. recFacil_Policy. Periods at regular intervals earmarked
3. recFacil_asWaste. Considered as waste of resources (Reversed)
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4. recFacil_In_MultiHall   Indoor multipurpose audio/video hall provided
5. recFacil_In_AVLib      Indoor audio/video Library provided
6. recFacil_In_CCTT       Indoor carom, chess, table tennis available
7. recFacil_In_Billiards  Indoor billiards provided
8. recFacil_In_Gym       Indoor Gymnasium
9. recFacil_In_Saunabath  Indoor sauna bath
10. recFacil_In_Bad      Indoor badminton court
11. recFacil_In_Other    Indoor any other facility provided
12. recFacil_Out_Park    Outdoor open park area to organise games
13. recFacil_Out_Tennis  Outdoor Tennis Court
14. recFacil_Out_Bad     Outdoor badminton court
15. recFacil_Out_FamilyPic Outdoor picnic with families organised
16. recFacil_Out_Adven   Outdoor adventure events
17. recFacil_needForm    need to be formalised
18. recFacil_DayNight    catered for both day and night shifts

Part III: Recreation Activities – Contains 28 Items given below measured on a 7 point Likert scale with weightage 1 equals “Disagree” and 7 equals “Agree”.

1. recAct4TeamWk       Building of team work skills
2. recAct4TeamLdr      Building of leadership skills
3. recAct4Comm        Enhancing interpersonal communication
4. recAct4Leadership  Excellent opportunity for team building and leadership exist
5. recAct4QWL         Work/family distress released
6. recAct4FamIncl     Families across hierarchy included in picnics
7. recAct4Trust      Building of trust and support amongst people
8. recAct4Challenge   Flair for facing challenging assignments
9. recAct4Energy     Recharging energy and enthusiasm
10. recAct4Recognition System of reward and recognition
11. recAct4SelfEfficacy Self efficacy in employees developed
12. recAct4Confidence  Building of trust and confidence
13. recAct4GoalSetting Honing practice of goal setting and clarification
14. recAct4Feedback   Informal channel of feedback across hierarchy
15. recAct4Interdepend Inevitable interdependence of participants
16. recAct4Creativity  Creativity and fun is generated
17. recAct4Physical   Improvement of my physical health
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18. recAct4Emotional Improvement of my emotional health
19. recAct4Spiritual Improvement of my spiritual health
20. recAct4Intellectual Improvement of my intellectual health
21. recAct4Social Improvement of my social health
22. recAct4Thrill Thrill of winning celebrated
23. recAct4Discourses Spiritual discourses are organised & practiced
24. recAct4NoFeedback Involved feedback does not exists (Reversed)
25. recAct4FeedbackAction Satisfactory action on feedback taken
26. recAct4Listening Participants are listened to and heard
27. recAct4Develop Opportunity to develop not lost sight of
28. recAct4Enthusiasm Enthusiasm and confidence cultivated

Part IV: Perceived employee contribution - Contains 16 Items given below measured on a 7 point Likert scale with weightage 1 equals “Disagree” and 7 equals “Agree”.

1  contriIncreased Performance increased beyond expectations
2  contriOCB Desirable behaviour beyond call of duty
3  contriCommitment No intention of leaving in next two years
4  contriLoyalty Proud to work for my organisation
5  contriHappiness Happiness increased over last two years
6  contriLeadership My leadership skills have improved
7  contriTeam My team skills have improved
8  contriAtmosphere Fewer mistakes due to open and free communications
9  contriBelief Believe happy employees are productive employees
10 contriIntrinsic Motivation more intrinsic than extrinsic
11 contriTrust Trust in colleagues and organisational support
12 contriQWL Effective balance in work/family life
13 contriPhysical Better physical health; improved performance
14 contriPsy Better psychological health; improved contribution/performace
15 contriSpiritual Better spiritual health; improved performance
16 contriThrill Thrill of winning (Reversed)
3.10 **Pilot Test and Reliability of Instruments**

Recreation, sport, parks and tourism are favourite leisure activities in United States, Canada, New Zealand and other Western countries. A fairly large body of literature and research studies is available on the subject leading people to enjoy varied recreational experience as appropriate to their needs and wants. In Indian settings, although a good percentage of the middle class indulges in recreation, the concept has seriously not been looked into as another significant dimension to leverage employee productivity. The researcher could not find a tested, valid and reliable tool to measure the variables under study.

A scale to measure perceptions of employees in Indian organisations was devised. It was put to Pilot test which was responded by 50 employees from the actual sample. The pilot test results intimated that the direction in which the researcher intended to proceed was confirmed. The aims, objectives and the hypotheses were in the right direction. The Cronbach’s Alphas reliability for the developed questionnaires were above .678. Thus the developed questionnaires were adopted for the present study.

**Table 3.3:** Table indicating Cronbach’s Alpha reliability for the three dimensions on the Pilot Test

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreational Facilities</td>
<td>17</td>
<td>.678</td>
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<td>28</td>
<td>.957</td>
</tr>
<tr>
<td>Perceived Employee Contribution</td>
<td>16</td>
<td>.850</td>
</tr>
</tbody>
</table>

3.11 **Administration and scoring**

The questionnaire was delivered and administered by the researcher himself and explained to the respondents. Additional visits were made where needed to have the responses recorded. Some organisations were noticed to be shy of administering the question due to misplaced fear of losing information to competitors or were not sure of themselves. Such enterprises had to be taken off from the list of respondents.

Scoring was done on 7 point Likert scale. Participants were addressed to reply all statements with one of the following choices mentioned against each item /statement.
### Table 3.4 Indicating Likert scale of scoring in the questionnaire

<table>
<thead>
<tr>
<th>Ser No</th>
<th>Choice</th>
<th>Points awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Disagree</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Moderately disagree</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Inclined to disagree</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Neither agree nor disagree</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Inclined to agree</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Moderately agree</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Agree</td>
<td>7</td>
</tr>
</tbody>
</table>

#### 3.12 Statistical techniques and analysis

The following statistical techniques were used for analysing the data as per the objectives of the study.

1. Descriptive statistics (frequency, means, standard deviation and percentages)
2. Bivariate analysis (Correlation)
3. Multivariate analysis (Regression)
4. Univariate analysis (ANOVA).
5. Cronbach’s Alpha for Reliability Test.

#### 3.13 Conclusion

This chapter presented the problem statement and the definitions of the variables which were taken up for the study. The objectives of the researcher are clearly laid down. The hypothesis which is to be tested is defined in this chapter. An elaborate description of the tools which were used to measure the variables are also given. A note on the samples which were collected
for the study and the way data was collected is also mentioned. The methodology which will be used to measure the variables and the statistical techniques which will be used to analyse the data is also discussed.