Chapter III

METHODOLOGY

This chapter deals with the contents and meaning of undertaking the study in terms of objectives and process of analyzing the objectives in the form of formulation of appropriate hypothesis. Further, the methodology of this study is spelt out in the mode of data collection, methods of data analysis, statistical techniques and limitations of the study.

3.1 Objectives of the Study

The following objectives are evolved for the purpose of the present study:

1. To analyze the awareness of ICT based resources and services among Faculty members and PG Students of selected Arts and Science Colleges in Cuddalore District.

2. To study the utilization of ICT based resources and services by the Faculty members and PG Students of Arts and Science Colleges.

3. To determine the level of satisfaction of ICT based resources and services among Faculty members and PG Students of Arts and Science colleges.

4. To identify the problems faced by the Faculty members and PG Students of Arts and Science Colleges while accessing and using ICT based resources and services.
5. To find out the extent of dependency on ICT based resources and services for teaching, learning and research among Faculty members and PG Students Arts and Science Colleges.

6. To find out the level of expertise with computers among Faculty members and PG Students of Arts and Science Colleges.

7. To study the use of various online services by the Faculty members and PG Students of Arts and Science Colleges selected for the study.

8. To identify the most commonly used browser and search engine used by the Faculty members and PG Students of Arts and Science Colleges.

9. To find out the frequency of accessing ICT based resources and services among the Faculty members and PG Students of Arts and Science Colleges.

10. To find out the most preferred place for accessing ICT based resources and services among Faculty members and PG Students of Arts and Science Colleges.

11. To study the purpose of using ICT based resources and services among Faculty members and PG Students of Arts and Science Colleges.

12. To identify the method of acquiring IT skills by the Faculty members and PG Students of Arts and Science Colleges.

13. To find out the most preferred format for downloading articles among Faculty members and PG Students of Arts and Science Colleges.
14. To suggest the measures for the improvement of the use of ICT based resources and services by the Faculty members and PG Students of Arts and Science Colleges.

3.2 Hypotheses of the study

In order to study the above mentioned objectives, the following hypothesis were formulated and tested with appropriate statistical tools:

1. There is no significant difference in the ICT based resources and services is by Faculty members and PG Students of Arts and Science Colleges in Cuddalore District.

2. There is no significant difference in the confidence level of using ICT based resources and services among respondents of Arts and Science Colleges with respect to gender and status.

3. There is no significant difference in their dependency on library for learning and teaching among respondents of Arts and Science Colleges,

4. There is no significant difference in using the browser and search engine among respondents of Arts and Science Colleges in Cuddalore District.

5. There is no significant difference in their preferred place for accessing ICT based resources and services among respondents of Arts and Science Colleges with respect to gender and status.
6. There is no significant difference in the purpose of using ICT based resources and services among respondents of Arts and Science Colleges with respect to gender and status.

7. There is no significant difference in the preferred format for downloading articles among respondents of Arts and Science Colleges in Cuddalore District with respect to gender and status.

8. There is no significant difference in the level of satisfaction with the use of ICT based resources and services among respondents of Arts and Science Colleges in Cuddalore District with respect to gender and status.

3.3 Methodology

This study attempts to examine the use of ICT based resources and services by the faculty members and PG Students of Arts and Science Colleges located at Cuddalore District, Tamil Nadu. It is primarily a fact finding venture. The identified facts are cross-tabulated with the academic status background and gender background of the respondents. Thus it gives analytical orientation to this study and the design of this study is partly exploratory and partly analytical in nature.

3.4 Sample for the study

There are 13 Arts and Science colleges located at Cuddalore District, Tamilnadu. The researcher has selected only 10 colleges on the basis of their year
of establishment. The researcher has employed a well-structured questionnaire for collecting the data from Faculty members and PG students of 10 Colleges located at Cuddalore District, Tamil Nadu. The questionnaire has been prepared in such a way that the respondents could easily understand the items. A total number of 1500 questionnaires were distributed among the Faculty members and PG students. They are personally requested to fill up the questionnaire at their earliest conveniences in order to help the investigator to collect the same during her next visit. The investigator has to make second, third and fourth visits to the colleges for collecting the filled-in-questionnaires from the respondents. During these visits, the investigator could collect questionnaires from only 1250 out of 1500 respondents among whom the questionnaires were distributed. This constitutes 83.33% (1250/1500) of the total response. While selecting samples, stratified random sampling method has been adopted with a view to give relative weightage to the respondents of different categories.
<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the colleges</th>
<th>No. of Questionnaires Distributed</th>
<th>No. of Questionnaires received</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Periyar college</td>
<td>150</td>
<td>115</td>
<td>7.67</td>
</tr>
<tr>
<td>2</td>
<td>Thiru Kolanjiappar Government Arts &amp; Science College</td>
<td>150</td>
<td>112</td>
<td>7.47</td>
</tr>
<tr>
<td>3</td>
<td>C.Kandasamy Naidu college for women</td>
<td>150</td>
<td>134</td>
<td>8.93</td>
</tr>
<tr>
<td>4</td>
<td>Governments Arts College, Chidambaram</td>
<td>150</td>
<td>129</td>
<td>8.60</td>
</tr>
<tr>
<td>5</td>
<td>Jawahar science college</td>
<td>150</td>
<td>127</td>
<td>8.47</td>
</tr>
<tr>
<td>6</td>
<td>St.Joseph College of Arts and science</td>
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<td>131</td>
<td>8.73</td>
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<tr>
<td>7</td>
<td>Thiruvalluvar Arts and Science College</td>
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<td>118</td>
<td>7.87</td>
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<td>8</td>
<td>Shri Raghavendra Arts and Science College</td>
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<td>134</td>
<td>8.93</td>
</tr>
<tr>
<td>9</td>
<td>B.Padmanaban Jayanthimal Arts and Science college</td>
<td>150</td>
<td>114</td>
<td>7.60</td>
</tr>
<tr>
<td>10</td>
<td>Krishnaswamy college of Science, Arts and Management for women</td>
<td>150</td>
<td>136</td>
<td>9.06</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1500</strong></td>
<td><strong>1250</strong></td>
<td><strong>83.33</strong></td>
</tr>
</tbody>
</table>
3.5 Data Collection

The pertinent data has been collected from the Faculty members and PG students, by administering the questionnaire method. The respondents were encouraged to give free and frank information. The respondents extended their full cooperation in the data collection. The data collection was carried out from July 2012 to October 2012.

3.6 Data Analysis

The collected data were classified and tabulated according to the objectives and hypothesis stated. For proper arrangement of the data, a master table was prepared by the researcher and was subjected to statistical treatments. In order to test the hypothesis, the chi-square and two way ANOVA model were applied. The chi-square values were worked out with the help of SX package, and anova two ways model was worked out with the help of Excel package. The general data interpretation was made with the help of percentages and averages. On the basis of obtained data, academic status-wise and Gender-wise interpretations were made.
3.7 Limitations

The findings of this study are applicable to the Faculty Members and PG students of 10 Arts and Science Colleges located at Cuddalore District, Tamil Nadu and it does not represent PG students, Research scholars and Faculty members of other institutions. To undertake the study in all institutions is not possible at the level of an individual researcher, due to constraints imposed by money, time, energy and efforts.

3.8 Chapterisation Scheme

The first chapter gives a brief introduction to e-resources, transition from printed resources to electronic formats in the college libraries and various factors affecting the use of e-resources.

The second chapter deals with the review of literature gives details of the various studies conducted so a related to the topic of study in India and abroad.

The third chapter is devoted to Research Design. It deals with the objectives, hypothesis and methodology adopted for the study.

The fourth chapter deals with the profiles of selected colleges undertaken for study.

The fifth chapter deals with the Analysis and Interpretation of the data.

The sixth chapter presents a brief summary of the study, findings, conclusion and suggestions for further study followed by the Bibliography and Appendices.