METHODOLOGY

The present investigation was basically designed as a Normative Study with Survey as the technique of research employed for Data Collection. The details of procedure followed in this study are presented under relevant headings.

PERIOD OF STUDY

A perusal of the documents related to the establishment of colleges maintained in the office of the Directorate of Collegiate Education of Puducherry Union Territory Government revealed the fact that Self – financing Private Colleges in Engineering and Medicine were commenced during the academic year, 1997 – 1998, though one Self- financing Private College of Education was established as early as in the academic year, 1986-1987. Hence the academic year 1997-1998 was considered as the base year for the present study.

The academic year 2009-2010 was treated as the cut off year for the reasons stated below.

1. Fulfilment of the minimum required period for the submission of thesis as per the regulation of the University.
2. Coverage of the latest possible academic year.
3. Fulfilment of a Considerable period of the Self-financing system in Colleges - a span of twelve academic years.

The academic year, 2007 – 2008 was considered for computing Students Gain Strength due to the availability of completeness of information in the colleges.

DOCUMENTS COLLECTED

The following documents were collected by the Investigator in person for the purpose of identification of the various kinds of colleges managed by the Government, Society and Private Bodies across the four regions of Union Territory of Puducherry, Viz. Puducherry, Karaikal, Mahe and Yanam:


Data were adduced from the above said documents and analysed in terms of the objectives 1 and 2 of the present study.

**DATA COLLECTION FROM PRINCIPALS**

Prior permission was obtained from the Directorate / Management of Government, Society and Private Colleges. Having obtained the permission, the Questionnaire structured by the Investigator for the purpose of fulfilment of analysis pertinent to the objective 3 of the present study was used for data collection from 30 Principals who came forward to get involved in this study, by furnishing the Questionnaire to them in person. This way, the sample of Principals constituted in this study was based on convenient sampling. The list of thirty colleges from which data were collected from the principals concerned is presented as Appendix I. The Questionnaire used is presented as Appendix II. The data pertinent to the academic year, 2007-2008 were collected from the Principals during the academic year 2009-10.
DATA COLLECTION FROM STUDENTS

After obtaining the permission from the principals and heads of the departments of 38 Arts and Science, Engineering and Paramedical Colleges, the Questionnaire structured by the Investigator for the purpose of verification of the four Hypotheses formulated in this study were served in person to the first year and last year students and the filled in questionnaires were collected back by the investigator himself. The thirty eight colleges involved in the collection of data from the students are presented as Appendix III. The structured Questionnaire used for Data Collection from the students is provided as Appendix IV.

The data from 6,772 students were collected during the academic year, 2009-10. Convenient sampling was used in the Constitution of Samples of Students.

The Breaks-ups of Samples of UG Arts and Science students, B.Ed. students, UG Engineering Students and UG Paramedical students in terms of the variables, viz. Management Type and Sex are presented in Tables 1 through 4.
Table 1
Break – up of Sample of Arts and Science Students: Management Type and Sex-wise

<table>
<thead>
<tr>
<th>Management Sex</th>
<th>G</th>
<th>S</th>
<th>P</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>303</td>
<td>480</td>
<td>982</td>
<td>1765</td>
</tr>
<tr>
<td>Female</td>
<td>185</td>
<td>239</td>
<td>451</td>
<td>875</td>
</tr>
<tr>
<td>Total</td>
<td>488</td>
<td>719</td>
<td>1433</td>
<td>2640</td>
</tr>
</tbody>
</table>

G denotes Government College.
S denotes Society College.
P denotes Private College.

Table 2
Break-up of Sample of B.Ed. Students: Management Type and Sex-wise

<table>
<thead>
<tr>
<th>Management Sex</th>
<th>S</th>
<th>P</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>33</td>
<td>254</td>
<td>287</td>
</tr>
<tr>
<td>Female</td>
<td>237</td>
<td>644</td>
<td>881</td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>898</td>
<td>1168</td>
</tr>
</tbody>
</table>

S denotes Society College.
P denotes Private College.
### Table 3
Break-up of Sample of UG Engineering Students: Management Type and Sex-wise

<table>
<thead>
<tr>
<th>Management Sex</th>
<th>S</th>
<th>P</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>356</td>
<td>1118</td>
<td>1474</td>
</tr>
<tr>
<td>Female</td>
<td>234</td>
<td>650</td>
<td>884</td>
</tr>
<tr>
<td>Total</td>
<td>590</td>
<td>1768</td>
<td>2358</td>
</tr>
</tbody>
</table>

S denotes Society College.
P denotes Private College.

### Table 4
Break-up of Sample of UG Paramedical Students: Management Type and Sex-wise

<table>
<thead>
<tr>
<th>Management Sex</th>
<th>S</th>
<th>P</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>78</td>
<td>55</td>
<td>133</td>
</tr>
<tr>
<td>Female</td>
<td>288</td>
<td>185</td>
<td>473</td>
</tr>
<tr>
<td>Total</td>
<td>366</td>
<td>240</td>
<td>606</td>
</tr>
</tbody>
</table>

S denotes Society College.
P denotes Private College.
STATISTICAL TREATMENTS

For the identification of Students Gain Strength in the first year from the last year of the courses during 2007 – 08, Percentage Analysis was done.

In the verification of the four Hypotheses formulated in this study, the chi-square test of hypothesis of dependence was employed.

The formula used was

\[ \chi^2 = \sum \frac{(f_o - f_e)^2}{f_e} \]

Where

- \(f_o\) denotes observed frequency
- \(f_e\) denotes expected frequency
- degree of freedom = (no. of columns – 1) (no. of rows – 1)

Decisions were taken at 0.01 level of significance.

The details of Analysis and Discussion of Results are given in the next chapter.