CHAPTER III

PLAN AND PROCEDURE

3.1. Introduction

The chapter explains the plan and procedure of the present investigation. It consists of the sub components such as

- Rationale of the study
- Statement of the problem
- Definition of the terms
- Objectives of the study
- Hypotheses
- Procedure
- Pilot study
- Final study
- Data Analysis
- Limitations

3.2. Rationale for the Study

The goal of foreign language study is to learn a language in order to read its literature or in order to benefit from the mental discipline and intellectual development that result from foreign language study. English is a direct medium of acquiring knowledge of modern arts, science, humanities, technology etc. It is the language of computers and the Internet. Higher
education is possible in India only through the medium of English. Statesmen, politicians, scientists and doctors use this language to publish their inventions and discoveries. The usage of English enriches the knowledge and experience of the people and through their readings; they enrich a developing country like India.

Not only in fluency and pronunciation, the children in villages experience social, psychological, anthropological and educational learning difficulties. No study has been undertaken to find out the learning difficulties faced by the Tamil medium students now studying in English medium at college level. Hence this study is undertaken and it intends to draw conclusions based on it. The students are facing many internal problems related with learning. Here, the researcher proposes to study the dimensions - anthropological, psychological, technological, sociological and learning difficulties related to listening, linguistic, cultural, locality, economical and environmental because these difficulties affect the students’ learning process. The plight of Tamil medium students now studying in college in the English medium necessitates this study.

3.3. Statement of the Problem

Now-a-days Tamil medium students studying in college with English experience many difficulties which affects their academic achievement. Hence the investigator selected the statement of the problem entitled as “THE LEARNING DIFFICULTIES FACED BY TAMIL MEDIUM
3.4. Definition of the Terms

Learning Difficulties

Learning difficulty is a term used to describe any one of a number of barriers to learning that a child may experience. Children with leaning difficulties may find activities that involve thinking and understanding particularly difficulty, and many need support in their everyday lives as well as at school.

Tamil Medium

A Tamil medium education system is one that uses Tamil as the primary medium of instruction. A medium of instruction is the language that is used in teaching. The language used may or may not be the official language of the territory.

English Medium

An English medium education system is one that uses English as the primary medium of instruction. A medium of instruction is the language that is used in teaching. The language used may or may not be the official language of the territory.
College Level

The level of education that college students are assumed to have attained tier, grade, level - a relative position or degree of value in a graded group.

Academic Achievement

According to Carter V. Good (1945), “Academic achievement is an accomplishment or proficiently of performance in a given skill or body of knowledge”.

Achievement is the end gained or level of success obtained by an individual or group on a test.

3.5. Objectives of the Study

The main objective of the present study is to study the learning difficulties faced by Tamil medium students through English Medium at college level and their academic achievement.

3.5.1. Specific Objectives

1. To find out the level of learning difficulties faced by Tamil medium students through English medium at college level in total and different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical.

2. To find out whether there is any significant difference between the mean scores of learning difficulties faced by Tamil medium students through
English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to gender.

3. To find out whether there is any significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to type of management.

4. To find out whether there is any significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to locality of the college.

5. To find out whether there is any significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to community.
6. To find out whether there is any significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to religion.

7. To find out whether there is any significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to accommodation.

8. To find out whether there is any significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to locality of the student.

9. To find out whether there is any significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading,
social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to subject.

10. To find out whether there is any significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, learning related to listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to District of study.

11. To find out the associateship between the level of learning difficulties faced by Tamil medium students through English medium at college level and their parents’ educational qualification.

12. To find out the associateship between the level of listening and reading difficulties faced by Tamil medium students through English medium at college level and their parents’ occupation.

13. To find out the associateship between the level of learning difficulties faced by Tamil medium students through English medium at college level and their parents’ annual income.

14. To find out the level of academic achievement of students from Tamil medium through English medium at College level.

15. To find out whether there is any significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to gender.
16. To find out whether there is any significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to type of management.

17. To find out whether there is any significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to locality of the college.

18. To find out whether there is any significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to community.

19. To find out whether there is any significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to religion.

20. To find out whether there is any significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to accommodation.

21. To find out whether there is any significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to locality of the student.
22. To find out whether there is any significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to subject.

23. To find out whether there is any significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to district of study.

24. To find out the associateship between the level of academic achievement of students from Tamil medium students through English medium at college level and their parents’ educational qualification.

25. To find out the associateship between the level of academic achievement of students from Tamil medium students through English medium at college level and their parents’ occupation.

26. To find out the associateship between the level of academic achievement of students from Tamil medium students through English medium at college level and their parents’ annual income.

27. To find out whether there is any significant relationship between the academic achievement and the learning difficulties faced by the Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality and economical.
28. To find out which dimension of learning difficulties faced by Tamil medium through English medium is most difficult.

### 3.6. Null Hypotheses

Based on the above objectives the following hypotheses were formulated for the present investigation.

1. The level of learning difficulties faced by Tamil medium students through English medium at College Level is moderate in total and different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical.

2. There is no significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to gender.

3. There is no significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to type of management.
4. There is no significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to locality of the college.

5. There is no significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to community.

6. There is no significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to religion.

7. There is no significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical,
linguistic, cultural, environmental, locality, and economical with respect to accommodation.

8. There is no significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to locality of the student.

9. There is no significant difference between the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to subject.

10. There is no significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality, and economical with respect to District of study.
11. There is no significant associateship between the level of learning difficulties faced by Tamil medium students through English medium at college level and their parents’ educational qualification.

12. There is no significant associateship between the level of learning difficulties faced by Tamil medium students through English medium at college level and their parents’ occupation.

13. There is no significant associateship between the level of learning difficulties faced by Tamil medium students through English medium at college level and their parents’ annual income.

14. The level of academic achievement of students from Tamil medium through English medium at College level is moderate.

15. There is no significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to gender.

16. There is no significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to type of management.

17. There is no significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to locality of the college.
18. There is no significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to community.

19. There is no significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to religion.

20. There is no significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to accommodation.

21. There is no significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to locality of the student.

22. There is no significant difference between the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to subject.

23. There is no significant difference among the mean scores of academic achievement of students from Tamil medium through English medium at college level with respect to district of study.

24. There is no significant associateship between the level of academic achievement of students from Tamil medium students through English medium at college level and their parents’ educational qualification.
There is no significant associateship between the level of academic achievement of students from Tamil medium students through English medium at college level and their parents’ occupation.

There is no significant associateship between the level of academic achievement of students from Tamil medium students through English medium at college level and their parents’ annual income.

There is no significant relationship between the academic achievement and the learning difficulties faced by the Tamil medium students through English medium at college level in total and in different dimensions such as anthropological, listening and reading, social, psychological, technical, linguistic, cultural, environmental, locality and economical.

3.7. Population of the Study

The population of the study is students studying in the Arts and Science colleges of Kanyakumari, Tirunelveli and Tuticorin districts affiliated to the Manonmaniam Sundaranar University.

Sample

The investigator has used random sampling technique for selecting the sample for his investigation. The investigator randomly selected 932 students who were studying in the colleges affiliated to the Manonmaniam Sundaranar University.
TABLE 3.1.
LIST OF COLLEGES INCLUDED IN THE STUDY

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the College</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>M.S. University Constituent College of Arts &amp; Science for Women, Sathankulam</td>
<td>50</td>
</tr>
<tr>
<td>2.</td>
<td>St. Mary’s College, Tuticorin</td>
<td>70</td>
</tr>
<tr>
<td>3.</td>
<td>V.O.C. College, Tuticorin</td>
<td>63</td>
</tr>
<tr>
<td>4.</td>
<td>Govindammal Aditanar College for Women, Tiruchendur</td>
<td>82</td>
</tr>
<tr>
<td>5.</td>
<td>Aditanar College of Arts and Science, Tiruchendur</td>
<td>50</td>
</tr>
<tr>
<td>6.</td>
<td>St. John College, Palayamkottai</td>
<td>68</td>
</tr>
<tr>
<td>7.</td>
<td>Sardhar Raja Arts and Science College, Vadakkankulam</td>
<td>46</td>
</tr>
<tr>
<td>8.</td>
<td>St. Xavier’s College, Palayamkottai</td>
<td>63</td>
</tr>
<tr>
<td>9.</td>
<td>Kamaraj Government Arts College, Surandai</td>
<td>70</td>
</tr>
<tr>
<td>10.</td>
<td>Rani Anna Government Constituent College for Women, Tirunelveli</td>
<td>63</td>
</tr>
<tr>
<td>11.</td>
<td>Sree Devi Kumari Women’s College, Kuzhithurai</td>
<td>53</td>
</tr>
<tr>
<td>12.</td>
<td>Scott Christian College, Nagercoil</td>
<td>79</td>
</tr>
<tr>
<td>13.</td>
<td>Nesamony Memorial Christian College, Marthandam</td>
<td>52</td>
</tr>
<tr>
<td>14.</td>
<td>Udhaya College of Arts and Science, Vellamadi</td>
<td>70</td>
</tr>
<tr>
<td>15.</td>
<td>Muslim Arts College, Thiruvithancode</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
</tr>
</tbody>
</table>
3.8. Characteristics of the Sample

TABLE 3.2
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO GENDER

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Gender</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Male</td>
<td>374</td>
<td>40.13</td>
</tr>
<tr>
<td>2.</td>
<td>Female</td>
<td>558</td>
<td>59.87</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The above table shows the number of college students selected for investigation. Among 932 college students, 558 (59.87%) were females and 374 (40.13%) were males.

DIAGRAM 3.1.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO GENDER

- Male
- Female
TABLE 3.3
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO TYPE OF MANAGEMENT

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Type of Management</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Autonomous College</td>
<td>212</td>
<td>22.75</td>
</tr>
<tr>
<td>2.</td>
<td>Aided College</td>
<td>286</td>
<td>30.69</td>
</tr>
<tr>
<td>3.</td>
<td>Self-Financing College</td>
<td>251</td>
<td>26.93</td>
</tr>
<tr>
<td>4.</td>
<td>Government College</td>
<td>183</td>
<td>19.64</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Out of 932 college students, 286 (30.69%) students were selected from Aided colleges, 251 (26.63%) students were selected from Self-Financing colleges, 212 (22.75%) students were selected from Autonomous colleges and the remaining 183 (19.64%) students were selected from Government colleges.

DIAGRAM 3.2.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO TYPE OF MANAGEMENT

- Autonomous College
- Aided College
- Self-Financing College
- Government College
TABLE 3.4

DISTRIBUTION OF THE SAMPLE WITH RESPECT TO LOCALITY OF COLLEGE

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Locality of College</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rural</td>
<td>484</td>
<td>51.93%</td>
</tr>
<tr>
<td>2.</td>
<td>Urban</td>
<td>448</td>
<td>48.07%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>932</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

The above table shows that out of 932 college students selected for this present investigation, 484 (51.93%) were selected from rural area colleges and the remaining 448 (48.07%) were selected from urban area colleges.

DIAGRAM 3.3.

DISTRIBUTION OF THE SAMPLE WITH RESPECT TO LOCALITY OF COLLEGE

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The diagram illustrates the distribution of the sample with respect to locality of college, showing 51.93% from rural areas and 48.07% from urban areas.
TABLE 3.5
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO COMMUNITY

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Community</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>OC</td>
<td>29</td>
<td>3.11</td>
</tr>
<tr>
<td>2.</td>
<td>BC</td>
<td>635</td>
<td>68.13</td>
</tr>
<tr>
<td>3.</td>
<td>MBC</td>
<td>144</td>
<td>15.45</td>
</tr>
<tr>
<td>4.</td>
<td>SC</td>
<td>124</td>
<td>13.30</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Out of 932 college students, 635 (68.13%) students belong to BC community, 144 (15.45%) students belong MBC community, 124 (13.30%) students belong to SC community and the remaining 29 (3.11%) students belong to OC community.

DIAGRAM 3.4.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO COMMUNITY
### TABLE 3.6
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO RELIGION

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Religion</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hindu</td>
<td>611</td>
<td>65.56%</td>
</tr>
<tr>
<td>2.</td>
<td>Muslim</td>
<td>25</td>
<td>2.68%</td>
</tr>
<tr>
<td>3.</td>
<td>Christian</td>
<td>296</td>
<td>31.76%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Out of 932 college students, 611 (65.56%) students were Hindus, 296 (31.76%) students were Christians and the remaining 25 (2.68%) students were Muslims.

### DIAGRAM 3.5.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO RELIGION
TABLE 3.7
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO ACCOMMODATION

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Accommodation</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Home</td>
<td>840</td>
<td>90.13</td>
</tr>
<tr>
<td>2.</td>
<td>Hostel</td>
<td>92</td>
<td>9.87</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Out of 932 college students, 840 (90.13%) students were residing at Home, and the remaining 92 (9.87%) students were residing at Hostel.

DIAGRAM 3.6.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO ACCOMMODATION
TABLE 3.8
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO LOCALITY OF THE STUDENT

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Locality of the Student</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rural</td>
<td>603</td>
<td>64.70</td>
</tr>
<tr>
<td>2.</td>
<td>Urban</td>
<td>329</td>
<td>35.30</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Out of 932 college students, 603 (64.70%) students were selected from rural area and the remaining 329 (35.30%) students were selected from urban area.

DIAGRAM 3.7.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO LOCALITY OF THE STUDENT
### TABLE 3.9

**DISTRIBUTION OF THE SAMPLE WITH RESPECT TO SUBJECT OF STUDY**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject of Study</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Arts</td>
<td>447</td>
<td>47.96%</td>
</tr>
<tr>
<td>2.</td>
<td>Science</td>
<td>485</td>
<td>52.04%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Out of 932 college students, 485 (52.04%) students were studying science subjects and the remaining 447 (47.96%) students were studying arts subjects.

### DIAGRAM 3.8.

**DISTRIBUTION OF THE SAMPLE WITH RESPECT TO SUBJECT OF STUDY**

![Diagram showing the distribution of students between Arts and Science subjects with 52.04% for Science and 47.96% for Arts]
TABLE 3.10
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO PARENTS’ EDUCATIONAL QUALIFICATION

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parents’ Educational Qualification</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>School Level</td>
<td>852</td>
<td>91.42</td>
</tr>
<tr>
<td>2.</td>
<td>College Level</td>
<td>31</td>
<td>3.33</td>
</tr>
<tr>
<td>3.</td>
<td>Technical Level</td>
<td>49</td>
<td>5.25</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>932</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Out of 932 college students, 852 (91.42%) students’ parents’ educational qualification was school level, 49 (5.25%) students’ parents’ educational qualification was technical level and the remaining 31 (3.33%) students’ parents’ educational qualification was college level.

DIAGRAM 3.9.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO PARENTS’ EDUCATIONAL QUALIFICATION
TABLE 3.11
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO PARENTS’ OCCUPATION

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parents’ Occupation</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Government</td>
<td>44</td>
<td>4.72</td>
</tr>
<tr>
<td>2.</td>
<td>Private</td>
<td>53</td>
<td>5.69</td>
</tr>
<tr>
<td>3.</td>
<td>Coolie</td>
<td>835</td>
<td>89.59</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>932</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Out of 932 college students, 835 (89.59%) students’ parents’ occupation was coolie, 53 (5.25%) students’ parents’ occupation was private and the remaining 44 (4.72%) students’ parents’ occupation was government.

DIAGRAM 3.10.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO PARENTS’ OCCUPATION

- Government
- Private
- Coolie
### TABLE 3.12
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO PARENTS’ ANNUAL INCOME

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Parents’ Annual Income</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Less than Rs.100000</td>
<td>151</td>
<td>16.20</td>
</tr>
<tr>
<td>2.</td>
<td>More than Rs.100000</td>
<td>781</td>
<td>83.80</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>932</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Out of 932 college students, 781 (83.80%) students’ parents’ annual income was less than Rs.100000 and the remaining 151 (16.20%) students’ parents’ annual income was more than Rs.100000.

### DIAGRAM 3.11.
DISTRIBUTION OF THE SAMPLE WITH RESPECT TO PARENTS’ ANNUAL INCOME

Less than Rs.100000  More than Rs.100000
<table>
<thead>
<tr>
<th>S.No.</th>
<th>District of Study</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thoothukudi</td>
<td>315</td>
<td>33.80</td>
</tr>
<tr>
<td>2.</td>
<td>Tirunelveli</td>
<td>310</td>
<td>33.26</td>
</tr>
<tr>
<td>3.</td>
<td>Kanyakumari</td>
<td>307</td>
<td>32.94</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>932</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Out of 932 college students, 315 (33.80%) students were studying in Thoothukudi district, 310 (33.26%) students were studying in Tirunelveli district and the remaining 307 (32.94%) students were studying in Kanyakumari district.

**DIAGRAM 3.12.**

**DISTRIBUTION OF THE SAMPLE WITH RESPECT TO DISTRICT OF STUDY**

- **Thoothukudi**
- **Tirunelveli**
- **Kanyakumari**
3.9. Tool

Learning Difficulties Scale developed by the investigator Mr. C. Kingsly Deva Jose and the Guide Dr. V. Thamodharan. Learning Difficulties Scale is a five point scale consisting of 200 items with 10 dimensions consisting of 20 items in each dimensions. The dimensions of the scale are; (1) Anthropological difficulties; (2) Listening and reading difficulties; (3) Social difficulties; (4) Psychological difficulties; (5) Technical difficulties; (6) Linguistic difficulties; (7) Cultural difficulties; (8) Environmental difficulties; (9) Locality related difficulties and (10) Economical difficulties.

Pilot Study

The pilot study was conducted in 20 male and 20 female first year, college students of V.O.C. College, Thoothukudi. The respondents were given a brief account of the study. The data gathering tool was administered. They were asked to go through the items. Item index table was prepared. The items in the upper 35% and lower 35% were selected for the final form.

Validity of the Tool

To establish content validity, the learning difficulties scale was well scrutinized and checked by the experts in the education field; a few modifications were done based on their comments, regarding the language, suitability and relevance. Based on the suggestions of the experts, some of the items were modified. Thus the content validity of the scale was affirmed.
Reliability of the Tool

For getting reliability co-efficient of the inventory, it was administered to a sample of 20 students. The investigator applied test-retest method. The tool was administered to 20 college students and after a period of 20 days, it was re-administered. The tool was administered to the same set of students. The responses were scored and co-efficient of correlation between two set of scores was calculated. The reliability co-efficients were found and given in the following table 3.14.

**TABLE 3.14**

**TEST-RETEST RELIABILITY OF LEARNING DIFFICULTIES**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Dimensions of Learning Difficulties</th>
<th>Reliability Co-efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Anthropological</td>
<td>0.76</td>
</tr>
<tr>
<td>2.</td>
<td>Learning Related to Listening and Reading</td>
<td>0.78</td>
</tr>
<tr>
<td>3.</td>
<td>Social</td>
<td>0.74</td>
</tr>
<tr>
<td>4.</td>
<td>Psychological</td>
<td>0.79</td>
</tr>
<tr>
<td>5.</td>
<td>Technical</td>
<td>0.75</td>
</tr>
<tr>
<td>6.</td>
<td>Linguistic</td>
<td>0.77</td>
</tr>
<tr>
<td>7.</td>
<td>Cultural</td>
<td>0.78</td>
</tr>
<tr>
<td>8.</td>
<td>Environmental</td>
<td>0.75</td>
</tr>
<tr>
<td>9.</td>
<td>Locality</td>
<td>0.74</td>
</tr>
<tr>
<td>10.</td>
<td>Economical</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Scoring

The scoring was done with the key which was prepared by the investigator for learning difficulties scale. In this scale all the items are positive worded and there is no negative item and each item is worded
“Strongly Agree”, “Agree”, “Neutral”, “Disagree” and “Strongly Disagree” and the score is given as 5, 4, 3, 2 and 1 respectively. An individual may get a lowest score of 200; and the possibility of highest score of 1000.

Final Study

Totally, 932 first year college students studying in Thoothukudi, Tirunelveli and Kanyakumari districts were selected for the final study and they were administered with 200 items each.

Achievement Marks

The first semester university marks was taken as academic achievement score for each student from the respective colleges.

3.10. Method Adopted in the Present Study

In the present study, the investigator has chosen Survey Method for studying the problems of this study. Survey is a procedure in which data are systematically collected from a population through some direct solicitations such as face to face interview, Questionnaire or Observation Schedule etc. The investigator selected 932 college students who were studying in Kanyakumari, Tirunelveli and Tuticorin districts.

3.11. Scheme of Data Analysis

The response of the surplus respondents were scored and treated with mathematical techniques to realize the objective formulated for the study. The critical ratio (‘t’ test) test is applied to find out the significant difference between the mean scores of learning difficulties faced by Tamil
medium students through English medium at college level with respect to gender, location of college, accommodation, locality of student and subject of study. The ‘F’ ratio is applied to find out the significant difference among the mean scores of learning difficulties faced by Tamil medium students through English medium at college level with respect to type of management, community, religion and district of study. Wherever ‘F’ ratio is found to be significant, to find out the difference between the paired means, Scheffe’s test is used. To find out the relationship between the academic achievement and the learning difficulties faced by Tamil medium students through English medium at college level in total, and between the academic achievement and in different dimensions, Karl Pearson Product Moment Correlation technique is used. To find out the associateship between the learning difficulties and parents’ educational qualification; learning difficulties and parents’ occupation; and learning difficulties and parents’ annual income, Chi-square test is used. To find out the learning difficulty which is most difficult, faced by Tamil medium students through English medium, co-efficient of variation is used.

3.12. Statistical Techniques

For analyzing the data, the investigator made use of the following major statistical techniques.

1) Mean

2) Standard Deviation
3) Percentage Analysis

4) Test of Significance (t-Test)

5) F-test (ANOVA)

6) Scheffe’s Test

7) Correlation Technique

8) Chi-Square test

9) Co-efficient of Variation

1. Mean

Mean is the simplest measurement of Central Tendency and is a widely used measure. Its chief use consists in summarizing the essential features of a series and in enabling data to be compared. It is more stable and suitable for further calculations.

Mean is calculated using the formula,

\[ \bar{x} = \frac{\sum X}{N} \]

where,

\( N \) = number of subjects.

\( X \) = arithmetic mean.

\( \sum X \) = sum of the series of subjects.

2. Standard Deviation

It is widely used measures of dispersion of a series and is defined as the square root of average of squares of deviations, when such deviations
for the values of individual items in a series are obtained from the arithmetic average. It is least affected by sampling fluctuations.

Standard Deviation is calculated using the formula,

$$\sigma = \frac{C}{N} \sqrt{N \sum X^2 - (\sum X)^2}$$

(or) $$CX \sqrt{\frac{\sum X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

Where,

- $N$ = Number of individuals
- $X$ = Number of scores
- $C$ = Class interval

3. **Percentage Analysis**

- High = Value above the mean + standard deviation
- Low = Value below the mean – standard deviation
- Medium = Value between mean ± standard deviation

4. **Test of significance (t-test)**

This test is used to find the significant level of difference between two groups of populations. From the mean and standard deviation of the two groups, the t-values are calculated. If the obtained t-value is 2.58 and above, then the significant level of difference is 0.01 and if the value lies between 1.96 and 2.58, the significant level is 0.05. If the value is below 1.96, the difference is not significant at any level.

The t-test is calculated using the formula,
\[ t = \frac{|M_1 - M_2|}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}} \]

Where,

\(M_1\) = Mean of the I sample

\(M_2\) = Mean of the II sample

\(\sigma_1\) = S.D of the I sample

\(\sigma_2\) = S.D of the II sample

\(N_1\) = Total number of frequency of the I sample

\(N_2\) = Total number of frequency of the II sample

5. F-test

\[ F\text{-test} = \frac{MSV\ Between\ the\ Groups}{MSV\ within\ the\ Groups} \]

6. Scheffe’s Test

If the F ratio is significant then scheffe test is used to find the significant among the groups.

\[ C.I = \sqrt{(k-1) \times F_{(Table)} \times MS_w \times \left( \frac{1}{n_1} + \frac{1}{n_2} \right)} \]

Where,

\(C.I\) = Confidence internal

\(K\) = Number of groups
F_{(Table)} = \text{F value at 5% level}

M_{Sw} = \text{Mean Squares Within}

n_1 = \text{Number of sample in the first group}

n_2 = \text{Number of sample in the second group}

7. Correlation Technique

Correlation is used for measuring the degree of relationship between two variables. It shows us the extent to which values in one variable are linked or related to values in another variable.

Correlation coefficient is calculated using the formula,

\[ r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{\left(N \sum X^2 - \left(\sum X\right)^2\right) \left(N \sum Y^2 - \left(\sum Y\right)^2\right)}} \]

where,

\( r \) = correlation coefficient

\( \sum X \) = Sum of X score

\( \sum Y \) = Sum of Y score

\( \sum X^2 \) = Sum of squares of X score

\( \sum Y^2 \) = Sum of squares of Y score

\( \sum XY \) = Sum of product of X and Y

\( N \) = Number of students
8. Chi-Square Test

\[ \chi^2 = \sum \frac{(O - E)^2}{E} \]

Where, \( O \) = Observed Frequency
\( E \) = Expected Frequency

9. Co-efficient of Variation

\[ \text{C.V.} = \frac{\sigma}{\bar{X}} \times 100 \]

Where, \( \sigma \) = Standard Deviation
\( \bar{X} \) = Mean Value

3.13. Delimitations

1. The study was conducted on college students from the Arts and Science streams only.

2. The study was conducted only in fifteen colleges.

3. The area chosen for conducting the study was only three southern districts of Tamilnadu – Kanyakumari, Tirunelveli and Tuticorin.

4. The study was conducted on a population of 932 students only.

5. The performances of the students were recorded at a specific point of time – during the first semester of a course. It is not known whether their performance improved towards the end of the course.
3.14. Conclusion

The investigator tried to find out the leading difficulties faced by Tamil medium students through English medium at college level. The data was collected from the selected sample of the respondents using Questionnaire. The collected data were analysed and interpreted using tabular columns.