CHAPTER – IV

PLAN AND PROCEDURE

4.1.0 INTRODUCTION

The objective of the present study is to investigate whether emotional intelligence and aptitude with other factors play a role in the achievement of commerce students in Higher Secondary school level.

Descriptive research provides opportunities in describing, studying and interpreting what exists at present and is concerned with conditions, relationship, practices, beliefs, attitudes that prevail, the process and the trends that develop through. It is primarily concerned with the present, although it often considers past events influences as they relate to current conditions. Hence descriptive method is adopted in this study.

4.2.0 STATEMENT OF THE PROBLEM

Building one’s emotional intelligence has a lifelong impact. Many parents and educators, alarmed by increasing levels of conflict in young schoolchildren – from low self-esteem to early drug and alcohol use to depression, are rushing to teach students the skills, necessary for emotional intelligence. The training programs have helped school students to cooperate better and motivate more, thereby increasing learning skill and their better achievement in their subject.
Students’ emotions are important because their thoughts, feelings and moods affect their subsequent motivational behavior and learning. It is terribly unfortunate that students who are bright and competent, but lacking in emotional intelligence, will often sell themselves short and withdraw from programmes of academic or vocational success, prematurely. Moreover, the students of the age are more susceptible to high-risk behaviors in term of mental health, with the changing social and cultural milieu, fragmenting relationships in the families and the differentiated goals of members in the immediate environment of the subject individual.

Basic understanding of emotional intelligence and the dynamics of its concurrent and conjunct variables appear warranted, to have a clear picture of growing needs of the students. Among students the changing circumstances of social and cultural environment has all the more dishelmed the students’ population and therefore students should be immunized with empowerment, by finding their own voices; they identify their strengths and capabilities.

The skills associated with emotional intelligence develop throughout life. Family and educational institutions play a vital role in developing emotional intelligence. Basic skills related to handling emotions, settling disagreements amicably and getting along can be improved upon. There is a greater need for systematically and continuously imparting and facilitating students to develop emotional competencies such as self-awareness, self-control, self-confidence, empathy and they are of listening, resolving conflicts and co-operation.
The investigator has taken the topic for the present study, to confirm if the above factors really play role in the achievement of students in commerce. Hence, the present problem is stated as,

“EMOTIONAL INTELLIGENCE, APTITUDE AND ACHIEVEMENT IN COMMERCE OF HIGHER SECONDARY STUDENTS.”

4.3.0 OBJECTIVES OF THE STUDY

The main objectives of the study are;

1. To find out the level of Emotional Intelligence and Aptitude in commerce among higher secondary students.
2. To find out the relationship between and among the variables Emotional Intelligence and Aptitude in Commerce and Academic Achievement.
3. To compare boys and girls in their
   i) Emotional Intelligence
   ii) Commerce Aptitude
   iii) Academic Achievement
4. To compare the students of different types of school with respect to their
   i) Emotional Intelligence
   ii) Commerce Aptitude
   iii) Academic Achievement
5. To compare students from rural and urban locality with respect to
   i) Emotional Intelligence
   ii) Commerce Aptitude
   iii) Academic Achievement

4.4.0 HYPOTHESES

1. There is no significant difference in gender, class, type of school and
   locality with respect to emotional intelligence of students of higher
   secondary schools.

2. No significant difference is found in gender, class, types of school and
   locality with respect to aptitude in commerce students of higher
   secondary schools.

3. No significant difference is found in gender, class, types of school and
   locality with respect to academic achievement of commerce students
   of higher secondary school.

4. There is a positive and significant relationship between emotional
   intelligence and aptitude in commerce among the higher secondary
   students.

5. There is a positive and significant relationship between emotional
   intelligence and aptitude in commerce of boys, girls, rural, urban, XI
std., XII std., Government, aided and unaided higher secondary schools

6. A positive and significant relationship exists between emotional intelligence and achievement in commerce among the higher secondary students.

7. There is a positive and significant relationship between emotional intelligence and achievement in commerce of boys, girls, rural, urban, XI std., XII std., Government, aided and unaided school students.

8. There is a positive and significant relationship between aptitude and achievement in commerce among higher secondary students.

9. A positive and significant relationship exists between aptitude and academic achievement in commerce of boys, girls, rural, urban, XI std., XII std., Government, aided and unaided higher secondary students.

4.5.0 RESEARCH DESIGN

A research is the arrangement of conditions for collection and analysis of data in a manner that to combine relevance to the research purpose with economy in procedure.
<table>
<thead>
<tr>
<th>Nature of study</th>
<th>Variable studied</th>
<th>Tools used</th>
<th>Sample</th>
<th>Statistics used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative</td>
<td>Emotional Intelligence</td>
<td>Scale of Emotional Intelligence by Daniel Goleman</td>
<td>782 students from different Higher Secondary Schools</td>
<td>Mean SD</td>
</tr>
<tr>
<td>Differential</td>
<td>Aptitude for Commerce</td>
<td>Commerce Aptitude Test (Constructed by the Investigator)</td>
<td></td>
<td>‘t’ test Chi-Square test</td>
</tr>
<tr>
<td>Relational</td>
<td>Academic Achievement in commerce</td>
<td>Achievement test scores</td>
<td></td>
<td>Correlation Bivariate Multivariate Regression</td>
</tr>
</tbody>
</table>

### 4.6.0 METHOD OF STUDY

The method of study adopted by the investigator for the present study is *normative survey*. This method is utilized to reach the representative sample of data.
4.7.0 POPULATION AND SAMPLE

Students from Higher Secondary Commerce students in Cuddalore District constitute the population.

The sample has been taken from twelve higher secondary schools at Cuddalore District and data have been collected from three types of higher secondary schools. Seven Government schools, three aided and two unaided schools are selected. Among these two schools are for boys and three schools are for girls and another seven co-education schools. The sampling method followed is random for selecting schools and cluster for selecting the students.

TABLE 4.2
SCHOOL-WISE DISTRIBUTION OF THE SAMPLE

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Govt. Schools 7</th>
<th>Aided Schools 3</th>
<th>Unaided Schools 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Category</td>
<td>Boys</td>
<td>Girls</td>
<td>Co-Ed</td>
<td>Boys</td>
</tr>
<tr>
<td>No. of Schools</td>
<td>01</td>
<td>03</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>No. of Students</td>
<td>42</td>
<td>209</td>
<td>241</td>
<td>86</td>
</tr>
</tbody>
</table>
The sample students are divided into many sub-variables

- Class wise
- School wise
- Living area

The sample for the present study consists of students from XI and XII standards (Commerce Group).

Type of schools fall under different institutions namely, Government, Government Aided and Private.

4.8.0 TOOLS

After formulating the research objectives and pinning down the measures and sample for the present investigation, tools were selected. Questionnaire method was adopted in collecting the data and the tools used were basically self-report measures. The tools used in the study consisted of the following:

- **Emotional Intelligence Scale** – constructed and standardized by Balasubramainian.S (2003) based on the theory of Emotional Intelligence propounded by Daniel Goleman

- **Commerce Aptitude Test** – constructed and standardized by the investigator.

  *Achievement Test scores* from the respective school records
4.8.1 DESCRIPTION OF THE TOOLS

4.8.1.1 Emotional Intelligence Scale

With emotional intelligence its momentum in our country and more so in organizational components and work related tasks, there is a need for more researches towards application of emotional intelligence in educational settings based on Indian population. Underlying the above perspective, the assessment and measurement of emotional intelligence for student population was considered the need of the hour.

While research on emotional intelligence has progressed significantly since its inception, more research will be needed to further validate claims of the relative importance that traditional intelligence and emotional intelligence hold to the prediction of specific criterion. Owing to limited researches in Indian context, specific to adolescent, adult population and its application in educational setting, developing an appropriate tool appeared warranted and was intended in the present study. The original version consisted of 50 items. The question of reliability does not arise since it is a standardized tool. The validity of the tool was established by test and re-test method.
4.8.1.2 Underlying Dimensions

Researchers investigated dimensions of emotional intelligence (EI) by measuring related concepts, such as social skills, interpersonal competence, psychological maturity and emotional awareness, long before the term “emotional intelligence” came into use. According to Salovey and Mayor (1990), EI Subsumes Garner’s inter and intra-personal intelligence, and involves abilities that may be categorized into five domains. (i.e.) Self awareness, managing emotions, motivating oneself, empathy and handling relationships. Goleman proposed a model on emotional intelligence, which is comprised of the five components. Thus with its associated traits as follows. The first three related to self-management; the last two determine how effective we are in relationship. They are (a) self-awareness cluster which includes emotional awareness, accurate self assessment and self confidence; (b) self-regulation cluster of self-control, trustworthiness, conscientiousness, adaptability, and innovation; (c) self-motivation cluster comprising of achievement drive, commitment, initiative and optimism; (d) empathy cluster which includes understanding others, developing others, service orientation and (e) social skills cluster comprising of influence, communication, conflict management, leadership, change catalyst, building bonds collaboration and cooperation and team capabilities.
4.8.1.3 Validity and Reliability of the Tool Emotional Intelligence.

**Validity:**

Since the tool is a standardized tool the question of establishing content validity does not arise. However Construct validity and Intrinsic validity have been established. The Construct validity is formed by correlating the tool with a similar standardized tool and the correlation value is formed to be 0.89. The intrinsic validity is computed using the formula $\sqrt{1-x^2}$ and the value is 0.91.

**Reliability**

The reliability of the tool as well and sample have been computed using split half method and test retest method respectively.

The tool reliability is found to be 0.83

The sample reliability is calculated as 0.81.

4.8.1.4 Scoring

In Emotional Intelligence test only one correct answer is to be selected by students, for each item from the different alternatives given under each item. One score was given for each correct answer and zero for
each incorrect answer. No scores were deducted for wrong answers. Thus the possible range of the scores obtained by an individual will be 0 to 50.

4.8.2.0 Commerce Aptitude Test

Commerce Aptitude test was developed by the investigator. This consists of 50 items on the aspect of commerce subject. One correct answer is to be selected by students, for each item from the different alternatives given under each item. One score is given for each correct answer and zero for each incorrect answer. No scores are deducted for wrong answers. Thus the possible range of the scores obtained by an individual will be 0 to 50.

4.8.2.1 Item Generation and Establishment of Reliability and Validity

80 items were constructed for Commerce Aptitude based on competitive examinations. The tool consisted of these items were referred to subject expects for jury opinion. Corrections suggested by the experts were carried out. Finally 50 items were selected. Thus the Face validity of Commerce Aptitude was established.

The final validated items were administered to a sample of 50 higher secondary students by adopting test-retest method and the
correlation co-efficient was found as 0.81. Thus the reliability of the aptitude test was established.

4.8.3 Achievement scores

To assess the teaching competency, marks obtained by the students in terminal examinations were considered. All the schools follow the same syllabus prescribed the Department of Higher Secondary School Board. As all the schools administer a common test, the reliability and validity are well established.

4.9.0 DATA COLLECTION

The tools were administered with sufficient care and time to the students of government, aided and unaided higher secondary schools.

The investigator personally visited the schools and obtained the prior permission of the headmaster of the respective schools to administer the tools. The students were asked to put a tick mark against the answer of their choice.
4.10.0 STATISTICAL TECHNIQUES USED FOR DATA ANALYSIS

Descriptive, differential and relational analysis were done using appropriate statistical methods.