CHAPTER IV

COLLECTION OF DATA

From the foregoing discussions in the previous three chapters, it is perhaps apparent that the primary basis of the present work is to identify the four groups of people i.e. Progressive, Regressive, Stable and Fluctuating on the basis of their academic attainments. The next phase of the work involves the task of administering the Personality Test and the Interest Inventory to these subjects under controlled conditions. The third stage is primarily the stage of scoring, tabulation of data and data analysis. Therefore, the content of the present chapter will be reported under the following three main sections:

4.1 Identification of the groups
4.2 Test Administration
4.3 Scoring and Analysis.

4.1 IDENTIFICATION OF THE GROUPS

An intensive and extensive review of related literature presents the fact that achievement is associated with a number of variables where interest and personality play very important affective roles. The variables that affect academic achievement may be either static or alterable. The purpose and design of this study is to find out the specific patterns of interest shown by the various types of students, namely four according to our classification, and their respective
personality characteristics. The design of the study has been to categorise the subjects into four groups as mentioned above after a thorough and careful observation and scrutiny of their academic achievement in the form of their performance in the four consecutive terminal examinations, namely, Madhyamik (School Final), Uchchamadhyamik (Higher Secondary), Degree with Honours and Post Graduate.

In order to maintain certain amount of control over different standards of education and variations in curriculum as well as assessments, data have been collected on students prosecuting their B.Ed. course of study, who have had their education with same set of course orientation and course completion examinations. Thus, the aggregate scores of the sample people in the examinations of Madhyamik/School Final of the Board of Secondary Education, West Bengal, Higher Secondary of the West Bengal Council of Higher Secondary Education, Graduation (i.e. B.A./B.Sc./B.Com.) and Post graduation (i.e. M.A., M.Sc, M.Com.) of the University of Calcutta and its affiliated colleges. The achievement of students has been accepted as the scores and grades of the different consecutive public examinations since they are to a considerable extent standard forms of measuring mental acquisition through a process of administered curriculum and tests having statutory and public sanction.

As the sample subjects consisted of the individuals having post-graduate degrees and pursuing the B.Ed. course of study their aspirational commonality, has also been ensured in this way.
Seven colleges affiliated to the University of Calcutta and imparting B.Ed. Course were selected at random in and around Calcutta as the sample institutions. These colleges, two for boys only, two for girls only, and three co-educational, were selected so that the impact of differences in infrastructural and technical facilities, if any, may be evenly distributed.

The sample individuals and their related informations were collected from the undermentioned colleges.

**TABLE - 4.1.1**

*Sampling Distribution*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Source</th>
<th>Institutional Nature</th>
<th>No. of Students</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>David Hare Trg. College</td>
<td>Boys Only</td>
<td>68</td>
<td>-</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Belur Vidyamandir</td>
<td>&quot;</td>
<td>115</td>
<td>-</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Howrah Girls' College</td>
<td>Girls Only</td>
<td>-</td>
<td>82</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Institute of Education for Women</td>
<td>&quot;</td>
<td>-</td>
<td>75</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Calcutta University</td>
<td>Co-educational</td>
<td>93</td>
<td>37</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>St.Xaviers College</td>
<td>&quot;</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>A.B.T.A. College</td>
<td>&quot;</td>
<td>28</td>
<td>44</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>305</td>
<td>245</td>
<td>550</td>
<td></td>
</tr>
</tbody>
</table>
These individuals were admitted as students to the B.Ed. Course in 1993 for the University examination in the same year. The official records of marks/grades of individual student registered for admission were accepted as standard academic achievement parameters based on valid administered tests and these informations were collected with permission from the authorities concerned.

Data were collected to suit the requirements and application of the widely acclaimed and accepted standardised tools used for this study, viz, Kuder General Interest Survey and Cattell's Sixteen Personality Factor Test, following the directions mentioned therein. Tests were administered to 550 students, both boys and girls, of the above mentioned seven colleges. On the basis of a careful scrutiny and sound judgement the responses of 400 cases were accepted for analysis on the basis of clear, complete and concrete informations.

4.2 TEST ADMINISTRATION:

College authorities were contacted first for co-operation in administering the test. The principals, all well acquainted with the academic interest and usefulness of such psychological tests, whole-heartedly cooperated by allowing the investigator to administer the two tests, namely, KUDER GENERAL INTEREST SURVEY and CATTELL'S SIXTEEN PF to their students. The process took two days for each college. The subjects were explained earlier of the specific purpose of such tests to ensure larger classroom attendance and invoke their interests.
Simple and clear instructions were printed on the cover page of the test booklets. Although the tests are virtually self-administering, attempts were made to establish good rapport with the subjects before handing over the questionnaire. The instructions were reinforced by oral reiteration through personal presence and requesting them to be frank and honest in describing themselves so that faking could be controlled to a considerable extent. A good rapport during test administration by creating a favourable test-taking attitude helped a lot in producing a moderately accurate data.

The subjects were given two hours time per test booklet consisting of 187 (16 PF) and 168 (Kuder) questions. A pilot test was conducted earlier and the time allowed was found to be quite reasonable for getting a complete answer. Tests were taken on two consecutive days in seven different colleges following the same pattern of test administration. The subjects were asked to enter their names at the top of the booklets, read the instructions on the cover of the booklets and then to work the example to ensure correct responses to the questionnaire. The instructions were read aloud with the students and certain points were discussed and clarified. It was ensured through personal presence that all questions were answered and one, and only one, answer was given for every question on the test. Further, to ensure individual reflections without bias or external influence, consultation among the respondents were strictly controlled and answered booklets were collected just at the end of the tests.
4.3 SCORING AND ANALYSIS:

Scoring for Kuder General Interest Survey is done strictly according to instructions provided in the answer section published by Science Research Associates, Inc. Illinois, U.S.A., 1988. Separate Male Female Norms have been followed to minimise whatever sexual bias attached to the assessment of interests by this survey.

Scoring for personality has been completed according to the Manual: for Sixteen Personality Factor Questionnaire published by the Institute for Personality and Ability Testing, Illinois, U.S.A. For conversion of raw scores to deviation scores in order to maintain statistical equivalence and comparability, computer assistance has been taken from the Indian Statistical Institute, Calcutta. The 16 PF were scored for four broad second order factors from the stems into which the raw scores were first converted following the manual.

The Kuder General Interest values were converted to six highest RIASEC types also according to the conversion procedure given in the booklet. Of the six RIASEC personality types, the three most prominent and predominant highest values have been accepted as the norm for knowing interest pattern of an individual, though all the scores are important since a person may have and normally do, a job involving a combination of two or more interests. Studying a person's interests, however, helps him direct his activities mainly into channels where he is more likely to achieve satisfaction and success.