CHAPTER II

PRESENT STUDY
CHAPTER III
THE PRESENT STUDY

Career development includes occupational awareness, planfulness, desire to explore the world of work, recognition of changes in the tasks of vocational development that one faces with increased age and social responsibility, and knowledge of the world of work and of appropriate occupations.

Research and theory suggest that high school students are still in the exploratory stage. Choice of curriculum are among the earliest choices that high school students are expected to make. These choices are important because they can limit or expand later opportunities. Unfortunately, such choices are usually made before students have clarified their aspirations or reached an adequate level of vocational development.

The formulation of a vocational objective cannot be postponed beyond the high school years. Those whose vocational development was lagging behind in adolescence were less likely than other students to see themselves and to be seen by others as successful and satisfied in young adulthood. (Jordaan and Super. 1974; Super, Kowalski and Gotkin. 1967).
The present study focuses on some factors related to career development among high school students in an attempt to understand the various aspects and dimensions of the career development process and to implement an intervention program aimed at facilitating career development.

**PROBLEM:** To study some psychosocial factors related to career development and device an intervention program to facilitate career development.

**OBJECTIVES**

1) The first objective of the study was to determine the psychosocial correlates of career development among high school students.

2) The second objective was to develop an intervention program aimed at facilitating the career development process and to develop skills for career exploratory behavior.

**DESIGN**

A multistage design was adopted to meet the research objectives.

1) **Stage 1:** A pilot study was undertaken to determine the relevance of the tools used.

2) **Stage 2:** A sample of 300 students (150 boys and 150 girls) studying in Std.VIII in 5 schools in Bangalore city were contacted. They were administered a battery
of tests to determine the correlates of career development.

3) **Stage 3**: The responses were analysed by using appropriate statistical techniques and students requiring intervention based on their career development scores were identified.

4) **Stage 4**: Students requiring intervention were divided into two groups: a Control group which received no intervention and an Experimental group which received intervention.

5) **Stage 5**: Post intervention assessment was made to determine the effect of the intervention program.

**Figure 1. The Five Stages of the Study**

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administering tests to Pilot sample</td>
<td>Administering a Battery of tests to main sample</td>
<td>Analysis of Results</td>
<td>Experimental group (Intervention)</td>
<td>Post Intervention Assessment</td>
</tr>
<tr>
<td>Control group (No Intervention)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VARIABLES**

The Independent variables were of three types:

1) Demographic/Social variables (eg. sex of subject, type of school, etc.)
ii) Psychological variables (eg. adjustment, anxiety)

iii) Career Variables (eg. level of career choice, career factors, etc.)

Details regarding these variables are presented in Appendix A.

The dependent variables were four aspects of career development. viz,

i) Career Planning

ii) Career Exploration

iii) Tendency to Foreclose

iv) Vocational Commitment

OPERATIONAL DEFINITIONS

Career: It is the course of an individual's progress through life in relation to work. The etymological root of the word lies in the Latin "Carraria" meaning a major highway. In this sense "Career" looks to a continuing lifetime progress in relation to work.

World of work: The sum total of all the kinds of work - from the very simple to the very complex - in which men and women of today engage in order to earn a living.

Career Information: It consists of valid and usable data about jobs, positions, occupations, employment and the world of work.
Career Exploration: It is defined as those activities in which individuals seek to assess themselves and acquire information from the environment to assist with the decision making, job entry and vocational adjustment processes.

Career commitment: It encompasses a clear sense of one's occupational preference along with a firm attachment to a particular vocational goal. By attaining high levels of commitment to career choices, individuals would be expected to develop specific plans for implementing their objectives and would be prepared to overcome obstacles to achieve their choices.

Tendency to Foreclose: It is defined as a desire to commit to important decisions as soon as possible and an analogous attempt to adhere to these choices even in the face of disconfirming evidence.

Career Planning: This refers to specific strategies adopted by the individual in order to achieve his/her career goals.

HYPOTHESES
1) Career development is a multidimensional construct. Four aspects of career development under study, viz. planning, career exploration, tendency to foreclose and vocational commitment will be independent factors.
2) Different sets of variables will be related to each of these four aspects of career development.

3) Intervention program implemented to the Experimental group will enhance career development.

Subsidiary Hypotheses

1) Sex differences will exist in relation to the following variables:
   i) First choice of occupation
   ii) Number of occupations considered
   iii) Level of occupational field
   iv) Mother's choice of occupation for the student
   v) Father's choice of occupation for the student
   vi) Preferred curriculum subject
   vii) Initial willingness to participate in a career development program
   viii) Vocational aspiration
   ix) Each of the educational interest fields—science, engineering, medicine, agriculture, humanities, home science, fine arts and commerce
   x) Each of the career factors—family, social, individual, socio-economic, situational and psychosocial-emotional factors
2) The Experimental and Control groups will show significant differences in the 4 aspects of career development under study after the Intervention program:
   i) Career Planning
   ii) Career Exploration
   iii) Tendency to Foreclose
   iv) Vocational commitment

3) The Control group will show no differences in their scores on these four aspects of career development when tested in the pre and post intervention testing sessions.

SAMPLE

High school students are at the threshold of career decision making. Hence this sample was chosen. Since there is very little career education prior to high school in the present Indian educational system, it is only at this stage that students become aware of the existing world of career possibilities. The high school years have been identified as an exploratory phase of career development according to the Developmental model (Ginzberg, 1961; Super, 1964).

The student body under study was high school boys and girls studying in Standard VIII of English medium schools in Bangalore city. These students of grade VIII were selected
because they had just entered high school—a critical period in which they would need to contemplate on various future career possibilities for themselves. Since implementing an intervention program was a major objective, this grade was selected since students would be available for intervention for the next couple of years at least. Purposive sampling method was adopted and students from English medium schools in Bangalore city were contacted.

PROCEDURE

The study was conducted in 6 stages:

PILOT STUDY (Stage 1)

A pilot study was conducted with the following objectives in mind:

i) To test the efficacy of the information schedule designed by the researcher to obtain data on relevant demographic and social variables.

ii) To test the suitability of the tools

iii) To standardise the procedure and scoring system.

Sample

For the purpose of the pilot study a small sample of 11 boys and 13 girls studying in Std.VIII in two English medium schools in Bangalore city were contacted, based on purposive sampling method.
The details of the pilot study sample are as follows:

Table 2 : Demographic Details of the Pilot Study Sample

<table>
<thead>
<tr>
<th>Sex of subject</th>
<th>N</th>
<th>Age (in years) Mean</th>
<th>S.D.</th>
<th>Religion* H M C O</th>
<th>Order of Birth* El Md Yn On</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>11</td>
<td>13.25</td>
<td>0.90</td>
<td>10 0 1 0</td>
<td>4 6 1 0</td>
</tr>
<tr>
<td>Girls</td>
<td>13</td>
<td>13.00</td>
<td>0.76</td>
<td>10 2 1 0</td>
<td>2 6 4 1</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>13.13</td>
<td>0.82</td>
<td>20 2 2 0</td>
<td>6 12 5 1</td>
</tr>
</tbody>
</table>

* Order of Birth : El=Eldest. Md=Middle. Yn=Youngest, On=only.

Procedure : The students were contacted in the classroom and tested in groups. They were put at ease and told that this was a study of career development of school students and that they would have to answer some questionnaires in this connection. They were requested to be frank and forthright in their responses and have their doubts cleared before answering.

Assessment Techniques : The tools used in the study were as follows:

i) Information schedule

ii) Career Factor Checklist (O'Neil et al 1980)

iii) Vocational Aspiration Scale (Sudha and Satyanarayana 1978)
iv) Vocational Expression Blank (Chaddha et al 1982)

v) General Anxiety Scale for Children (Sarason et al 1960)

vi) Commitment to Career Choices Scale (Blustein et al 1989)

vii) Career Development Inventory - School form (Thompson and Lindeman, 1981)

viii) Bell's Adjustment Inventory (Indian Adaptation, Sharma, 1988)

ix) Vocational Maturity Scale (Srivastava, 1986)

x) Vocational Interest Record (Bansal and Srivastava, 1975)

Details of Scales 1 - 7 will be given in Stage II of the study as they were retained for the Main Study. Details of 2 subscales of the Career Development Inventory and Scales 8, 9 and 10 which were used only in the pilot study but dropped for reasons given below, are as follows:

Career Development Inventory:

The authors Thompson and Lindeman in collaboration with Super, Jordaan and Myers developed the scale in 1981. The scale consists of 5 subscales in the school form. The 2 subscales retained for main study are discussed in detail in stage II of the study.

a) Decision Making Subscale is made up of 20 brief sketches of people making career decisions. Since the scale measures "the ability to apply knowledge and insight to career and
decision making." (Thompson and Lindeman, 1981) and most of the items evoked a lively discussion on the suitability of various alternatives in the career crisis situations as depicted in the scale items, the researcher felt that these items could be profitably used in the Intervention stage of the study. Taking into account the time taken in interpreting the concepts in the scale and discussion which came to about an hour, it was felt that it would not be feasible to use the subscale in the main study.

b) World of work Information Subscale comprises of 20 questions, 10 of which assess knowledge of the career development tasks in the Exploratory and early establishment stages. The other 10 questions test knowledge of occupational structure. However, the work situations as depicted were American culture oriented, and the students in the pilot study could not readily comprehend them. Hence this subscale was not retained for the main study.

c) Knowledge of Preferred Occupational Group is made up of 40 multiple choice questions that pertain to occupations which are categorised into 20 groups. However, here again the occupational groups were American culture oriented and hence this subscale was not retained for the main study.

Indian Adaptation of Bell's Adjustment Inventory

Selected items from the original Bell's Adjustment Inventory, (Bell. 1962) were standardised in Hindi by Sharma
(1988) which was then translated to English by the author. The Inventory consists of 80 items. (as against 200 in Bell's Adjustment Inventory) and there are 4 areas of adjustment - Home, Health, Social and Emotional. Difficulties regarding comprehension of certain items were faced, eg. "Do you usually make Air-fort?" (sic) (Item no.10) Item no. 14 read "Do you sink in thinking due to behaviour of your parent?". Item no.15 read "Do you feel shame on father's activities for the conduction (sic) of the family?" Since considerable time was spent in interpreting these ambiguously worded items, it was not thought to be economical for use in the main study. Hence this scale was dropped and the original Bell's Adjustment Inventory (Bell 1962) was used in the main study.

Vocational Maturity Scale: This scale was standardised by Srivastava (1986) on students of classes 9 and 10 and relates to various aspects of work. It has 35 items and measures orientation towards work, decision making, conception of choice process, etc.

Certain ambiguities in interpreting the items were encountered. Item no.8 read "Often this is my daydream that I choose occupation according to my own abilities." However, the Hindi version of the same item given directly below the English version was quite different in meaning, viz. "Choosing my occupation according to my abilities can only be
wishful thinking." Item no.3 which read "Any work not bad itself" was not understood by the students.

Hence this scale was dropped as it generated considerable confusion among the students.

Vocational Interest Record: This scale was developed by Bansal and Srivastava (1975) with school and college students. There are 128 vocations belonging to different fields, viz. Agriculture, Artistic, Commercial, Executive, Household, Literary, Scientific and Social.

The scale was easily administered and the instructions were easily understood. However, certain difficulties were encountered as some vocations could not be understood eg. "Flood-stricken", "Drought-stricken", "Well-wisher", "Dusting" and "Construct water hut".

Hence this scale was not retained for the main study. Based on the results of the pilot study, scales 1-6 and 2 subscales from scale 7 were retained while scales 8-10 were dropped. A few changes were made in the wording of those items of the retained scales. which were found difficult to comprehend and in all cases synonymous words were used.

MAIN STUDY (Stage 2)

The second stage of the study was undertaken after all the results of the first stage were analysed.
Sample

Purposive sampling technique was used in the Main study. 150 boys and 150 girls studying in Standard VIII in 5 English medium schools in Bangalore City (apart from the 2 schools contacted for the pilot study) were contacted. Three co-educational schools, one boys' school and one girls' school were contacted. Since the ratio of boys to girls in co-educational schools was 2:1, about twice the number of girls from girls' school were contacted as boys from boys' school to meet the required number, i.e. 150 boys and 150 girls. In this way there were 101 boys from the three co-educational schools and 55 boys from boys' school and 49 girls from the three co-educational schools and 95 from girls' school. This could account for the significant result obtained when type of school - mixed or single sex (Table 3) was considered.

The table below gives the sample characteristics for boys and girls in the main sample. In order to assess whether the boys and girls in the sample were comparable, t test and $X^2$ test was applied (Garrett, 1962):

$$t = \frac{X_1 - X_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

$$X^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$
Table 3: The Characteristics of the Main Study Sample

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variable</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
<th>Statistical Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>13.19</td>
<td>13.11</td>
<td>13.15</td>
<td>t = 0.95 (df = 298)</td>
</tr>
<tr>
<td></td>
<td>S.D.</td>
<td>0.79</td>
<td>0.65</td>
<td>0.73</td>
<td>n.s.</td>
</tr>
<tr>
<td>2.</td>
<td>Order of Birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eldest</td>
<td>62</td>
<td>65</td>
<td>127</td>
<td>(X^2 = 2.42) (df = 3)</td>
</tr>
<tr>
<td></td>
<td>Middle</td>
<td>22</td>
<td>32</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Youngest</td>
<td>56</td>
<td>41</td>
<td>97</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Only</td>
<td>10</td>
<td>12</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Family Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below Rs. 20,000</td>
<td>28</td>
<td>24</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rs. 20,000 to Rs. 49,999</td>
<td>69</td>
<td>66</td>
<td>135</td>
<td>(X^2 = 1.2) (df = 3)</td>
</tr>
<tr>
<td></td>
<td>Rs. 50,000 to Rs. 99,999</td>
<td>36</td>
<td>44</td>
<td>80</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Rs. 1,00,000 and above</td>
<td>17</td>
<td>16</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>School Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single sex</td>
<td>49</td>
<td>95</td>
<td>144</td>
<td>(X^2 = 28.26^*) (df = 1)</td>
</tr>
<tr>
<td></td>
<td>Mixed sex</td>
<td>101</td>
<td>55</td>
<td>156</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Maternal Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Housewife</td>
<td>127</td>
<td>115</td>
<td>242</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administrative and clerical</td>
<td>12</td>
<td>10</td>
<td>22</td>
<td>(X^2 = 7.58) (df = 5)</td>
</tr>
<tr>
<td></td>
<td>Teaching</td>
<td>6</td>
<td>13</td>
<td>19</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medicine</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

(Contd.)
6. Paternal Occupation

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variable</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
<th>Statistical test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Paternal Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>70</td>
<td>74</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administrative and clerical</td>
<td>48</td>
<td>33</td>
<td>81</td>
<td>$X^2 = 6.24$ (df=5)</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>11</td>
<td>21</td>
<td>32</td>
<td>n.s.</td>
</tr>
<tr>
<td></td>
<td>Medicine</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teaching</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
<td>11</td>
<td>13</td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

7. Religion

<table>
<thead>
<tr>
<th></th>
<th>Hindu</th>
<th>132</th>
<th>104</th>
<th>236</th>
<th>$X^2 = 15.56^{**}$ (df=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Muslim</td>
<td>12</td>
<td>31</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>6</td>
<td>15</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

n.s. = Not significant  

The boys and girls in the sample are comparable on 5 out of 7 variables (indicated by non-significant t and $X^2$ values) and therefore the sample of boys and girls is essentially comparable. In the case of religion, a large majority of boys are Hindus, but this is not the case with girls, in whose case a substantial number of them are Muslims and Christians. This is because a large section of girls in the sample were from single sex schools (which were missionary schools) and the incidence of Hindus in these schools is less than in other schools.
Assessment Techniques

The tools considered for the main study after analysing pilot study results were the following:

1. Information Schedule
2. Career Factor Checklist (O'Neil et al 1980)
3. Vocational Aspiration Scale (Sudha and Satyanarayana, 1978)
4. Vocational Expression Blank (Chadha et al 1982)
5. General Anxiety scale for Children (Sarason et al 1960)
6. Commitment to career choices scale (Blustein. et al 1989)
7. Career Planning and Career Exploration subscales from Career Development Inventory - School form (Thompson and Lindeman, 1981)
8. Educational Interest Record (Bansal and Srivastava, 1975)
9. Bell's Adjustment Inventory (Bell, 1962)

Details regarding each of the tools are as follows:

Information Schedule (Refer Appendix B):

A personal information schedule was devised to elicit information on relevant personal, school and family factors. The student was also required to indicate whether or not he/she was willing to participate in a career development program which would be implemented by the researcher in the school.
Career Factor Checklist (CFC) (Refer Appendix C)

i) Rationale: This scale measures the degree that career and sex role socialisation factors affect people's career decisions and their awareness of these factors, according to the authors. O'Neil, Ohlde, Tollefson, Barke and Piggott (1980).

ii) Description: The CFC model hypothesises that individual, societal, familial, socio-economic, situational and psychosocial emotional factors affect both sex role socialisation and career choice process. The CFC measures these 6 general factors and 22 subfactors, with a total of 28 items.

iii) Procedure: This is a self-administered inventory which can be given in a group setting. It takes about 10-15 minutes to complete the questionnaire. The subject is instructed to indicate the degree to which he/she thinks each of the given factors affect his/her career decision making. on a 5 point scale ranging from "strong effect" (5) to "Unsure of effect" (1).

iv) Scoring: The scoring system is simple. Each item is given a score from 1-5 according to the marked number. The average score is taken for each general factor by totalling the score for all items in the general factor and dividing this total by the number of items in it (each item is a sub factor). Thus a single score for each of the 6 general factors is obtained.
v) Reliability and Validity: Reliability estimates are reported to range from 0.65 to 0.81. The authors also have demonstrated construct validity for the scale.

Vocational Aspiration Scale (VAS) (Refer Appendix D):

This scale was developed by Sudha and Satyanarayana (1978).

i) Rationale: Aspirational level represents a person's expectations and goals for his/her future achievements in a given task. This level of vocational aspiration is viewed as being affected by economic, personal, socio-cultural and familial factors.

ii) Description: The VAS is a subscale of the Educational and Vocational Aspiration Scale. The full scale consists of 40 items, of which the first 20 measure educational aspiration and last 20 measure vocational aspiration. In this study only the Vocational Aspiration subscale was administered. Each item is followed by four possible responses.

iii) Procedure: The scale can be administered individually or to a group. The subject is instructed to read each statement and then decide which one of the four given responses best indicate his/her view.

iv) Scoring: The authors have provided a scoring key from 1-4 for the responses to each statement. Thus the person's score over all 20 items are totalled. Low
scores indicate a low level of aspiration and high scores indicate a high level of aspiration.

v) Reliability and Validity: Test retest reliability is reported to be 0.77 for the VAS.

Vocational Expression Blank (VEB) (Refer Appendix E):

i) Rationale: The present classificatory system devised by Chaddha, Nijhawan and Pershad (1982) classifies 232 occupations in two dimensions: one dimension covers 10 areas of vocational fields (non-hierarchical) and the second dimension covers 3 hierarchical levels of occupations based on education, training, income, responsibility and status. The format is a $10 \times 3$ contingency table.

ii) Description: The 232 occupational titles are distributed in 10 interest areas as follows: Engineering, Medical and Health, Teaching and Welfare, Administrative and Clerical, Sales and Business, Services, Literary, Artistic and Musical, Outdoors, and Protective.

iii) Procedure: The VEB is a self-administering inventory. The student is told to go through the list of occupations and write down in the blank space provided the occupation which he/she aspires for the most. Administration takes about 10 minutes.

iv) Scoring: The response is first categorised in one of the 10 non-hierarchical areas. Next, the location of level of occupation is determined by referring to the $10 \times 3$ contingency table.
v) **Reliability and Validity** The authors report that percentage agreement on repeated testing of 9th and 10th Standard boys of urban schools ranged from 70 to 100%. The VEB was satisfactorily validated against the Strong Vocational Interest Blank (adapted by Sidhu, 1974).

**General Anxiety Scale for Children (GASC) (Refer Appendix F):**

i) **Rationale:** According to the authors, Sarason et al (1960) the experiencing of abnormal amounts of anxiety seems to be indicative of some malfunction in the individual's ego or control apparatus.

ii) **Description:** The GASC consists of 46 items, out of which 11 comprise the Lie Scale. The questions relate to personal feelings experienced in various situations and events.

iii) **Procedure:** The questionnaire can be administered in a group setting and the subjects are instructed to read each statement and answer either 'Yes' or 'No'. The questionnaire takes about 15 minutes to be answered.

iv) **Scoring:** All the 'No' responses are given 1 score on the Lie scale items. All the 'Yes' responses are given 1 score on the Anxiety Scale. The authors recommend that response sheets with a high Lie score should not be considered for analysis.

v) **Reliability and Validity:** The authors report that the test is a reliable and valid instrument. It has been
validated against the Rorschach Ink Blot Test and the Test Anxiety Scale for children (Sarason et al 1960).

Commitment to Career Choices Scale (CCCS) (Refer Appendix G):

i) **Rationale:** In the vocational realm, commitment to career choices encompasses a clear sense of one's occupational preference along with a firm attachment to a particular vocational goal. This dimension is referred to as 'Vocational Exploration and Commitment' (VEC). The authors, Blustein, Ellis and Denevis (1989) propose a second dimension to the commitment process that assesses intrapersonal differences in the 'Tendency to Foreclose' (TTF) which appears to be a relatively pervasive characteristic which may be independent of one's degree of commitment.

ii) **Description:** The scale has 3 aspects - Number of occupations considered by the student, a commitment scale and a foreclosure scale. There are 28 items of which 9 items measuring foreclosure are interspersed with 19 items measuring commitment.

iii) **Procedure:** The inventory is self-administering and takes about 20 minutes to complete. The subject is required to list all the careers he/she is currently considering as future possibilities. The subject is instructed to read each statement and indicate his/her response to each, on a 7 point scale ranging from "Never true about me" to "Always true about me".
iv) **Scoring**: The responses are scored according to the scoring norms provided by the authors. The number indicated is taken as the score for that item; for 6 items the scoring pattern is reversed. High scores on VEC dimension reflect an uncommitted posture with respect to career choices. High scores on TTF dimension reflect a strong tendency to foreclose on career choices.

v) **Reliability and Validity**: The authors report test-retest reliability estimates ranging from 0.82 to 0.92. External validity correlations are reported to be from 0.55 to 0.72.

**Career Development Inventory - School form** (CDI) (Refer Appendix H):

i) **Rationale**: The scale has been made available for general use as a sound instrument for assessing career development and vocational maturity. The authors Thompson and Lindeman in collaboration with Super, Jordaan and Myers developed the scale over nearly 30 years till it was published in 1981.

ii) **Description**: The school form was designed for use in grades 8 through 12. The CDI consists of 5 scales. In the main study, 2 subscales were used, as the Pilot study results had indicated that the other 3 subscales were not feasible for use in the main study. The
Career Planning (CP) subscale comprises 20 items in which the student reports the extent of career planning so far engaged in. The Career Exploration (CE) subscale is also a 20 item self-report scale. It is an attitudinal scale and is a measure of the quality of exploratory attitudes.

iii) Procedure: The CDI can be group administered. Students are requested to answer each question truthfully. The time taken is generally about 10 minutes per subscale.

iv) Scoring: The CE responses to each item are scored from 1 to 4 and the total score is the sum of the values for the 20 items. The CP subscale is easy to score. The subject is given a score of 1 to 5 depending upon the nature of the response to each item.

v) Reliability and Validity: The authors give evidence of reliability in terms of the internal consistencies (Cronbach alpha coefficients) of the 5 scales, ranging from 0.79 to 0.88. The authors also give evidence of content and construct validity.

Educational Interest Record (EIR) (Refer Appendix I):

i) Rationale: The authors Bansal and Srivastava (1975) stress that the identification and measurement of interests is very essential for an understanding of educational and vocational behaviour. An interest represents a tendency to select certain activities or things in preference to certain others.
ii) **Description**: The present record contains curriculum subjects belonging to 8 different educational interest areas. They are: Science, Engineering, Medicine, Agriculture, Humanities, Home Science, Fine Arts and Commerce. It is in a 8 x 8 tabular form, with two educational areas in each square.

iii) **Procedure**: It is a self administering record and can be group administered. The students are instructed to put a tick mark next to each subject they are interested in.

iv) **Scoring**: Each tick mark is assigned 1 score. The row and column totals are calculated and added for each of the 8 educational areas. It is then possible to identify which are the main areas of interest.

v) **Reliability and Validity**: Test retest reliability is reported to be 0.74 to 0.86 for the different interest areas. The coefficient of correlation when validated against teacher ratings varied from 0.56 to 0.70.

**Bell's Adjustment Inventory (BAI)** (Refer Appendix J):

i) **Rationale**: The author of this scale, Bell (1962) has conceived of the developing self as "a kind of central exchange station between demands of the organism on the one hand, and the influence of the physical and social environment on the other." Adequate adjustment refers to a balance between the two.
ii) **Description**: The BAI has a total of 200 questions which provide 6 measures of adjustment: Home, Health, Submissiveness, Emotionality, Hostility and Masculinity-Feminity.

iii) **Procedure**: The inventory is self-administering and can also be given in group setting. Ordinarily about 40 minutes are required to fill in the questionnaire. The student is asked to read each question carefully and indicate 'Yes', 'No' or in very difficult situations, mark '?' for each statement.

iv) **Scoring**: The inventory may be scored by hand or by using stencils according to the scoring pattern given. The scores are then totalled for each of the 6 areas.

v) **Reliability and Validity**: The coefficients of reliability for each of the 6 areas are reported to be between 0.80 and 0.89. Cross and construct validity as reported are also satisfactory.

**General Procedure:**

Once the relevant questionnaires were ready, work was started almost simultaneously in all the 5 schools. The students were first put at ease and rapport established. The purpose of the study was briefly explained. They were urged to be free and frank in their responses, as these would be kept strictly confidential. They were also asked to clear any doubts by asking the researcher.
In order not to disturb the school study schedule the period when the students were to be met by the researcher was arranged with the concerned class teacher. All the students were contacted at least once a week. The whole class was tested, and the number of students in a class ranged from 45 to 60. The total time taken by a class to answer all the questionnaires was about 4-5 hours. No student was allowed to take home the questionnaire. The questionnaires were administered one after the other usually two in a 40 minute period.

The responses of the 300 students were scored for each of the questionnaires in accordance with the prescribed procedure for scoring.

Based on the results of the analysis, the Intervention sample was selected.

INTERVENTION PROGRAM (Stage IV)

Sample

The intervention sample would consist of those students who show a low level of career development when compared to other students in the sample, in relation to the four aspects of career development. This would depend on the results of factor analysis among the four independent variables. All those students who require intervention would then be segregated into an experimental group which would receive intervention and a control group which would not.
The scores of the 300 students on the four dependent variables viz. Career Planning, Career Exploration, Tendency to Foreclose and Vocational Commitment were analysed.

In order to make the 4 scores comparable, 'z' scores or standard scores were computed for the whole sample on the 4 dependent variables, with a mean of 50 and a standard deviation of 10 (SPSS computer package).

Factor analysis of the 4 Dependent Variables had indicated that Tendency to Foreclose (TTF) and Career Exploration (CE) were heavily loaded on a single factor and this was called "Career Foreclosure". This was Factor 1. The Rotated Factor Matrix also revealed the presence of Factor 2 which was the Career Planning factor (CP). Factor 3 which emerged was Vocational Commitment (VEC).

Students who obtained scores of below Mean -1 S.D. on the four scales i.e. CP, CE and VEC and those who obtained scores of above Mean +1 S.D. on TTF were determined. Those who were in the Critical groups on all 4 scales were too few; and those who were in the critical group on any one were too many, for any meaningful intervention. Hence it was decided to concentrate on any one factor alone for the purpose of this intervention sample. For this study the scores on Career Foreclosure factor were the basis for determining the Intervention Sample since research had indicated the
importance of tendency to foreclose and career exploration at the high school level (Thompson, 1981; Blustein, 1989).

Keeping this in mind, the researcher selected those students with a high Tendency to Foreclose (z score > 60) and/or those with low Career Exploration scores (z score < 40). This led to a group of 76 students comprising of 54 girls and 22 boys.

These 76 students from the main sample of 300 formed the intervention sample at this stage of the study. Of these, 67 were available (as the other 9 students and changed school and could not be contacted). Of these 67, two groups were formed: an Experimental group (E group) and a Control group (C group). The E group students would receive intervention while C group would not. The grouping of students into E and C groups was based on the following considerations:

i) The E group would consist of a single sex group (either all girls or all boys)

ii) The groups would number not less than 5 and not more than 9 (Gazda, 1978 suggested that the optimum number for group intervention was around 6).

iii) There would be only group intervention.

iv) Where there were more than 9 students in a class, allotment into E and C groups would be made randomly.
Table 4: Number of boys and girls in the Experimental and Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group</th>
<th>Control Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>11</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td>Girls</td>
<td>26</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>30</td>
<td>67</td>
</tr>
</tbody>
</table>

Procedure
Pre-Intervention testing

Instructions to Experimental (E) group

The E groups were contacted and instructed as follows:
"You have all met me earlier when I had come to your school. In the earlier sessions, you had filled in answers to some questionnaires. I thank you all for your cooperation which has enabled me to proceed in my study. I will be coming to your class this year too. All sessions will be held in your school, and I have arranged with your class teacher to meet you during the academically lighter periods. Please cooperate with me and surely the sessions will be helpful in that you will be knowing about various careers, how to plan for a career, your interests, likes and dislikes, etc. All you have to do is to take part in all the session activities, lectures and discussions. I am sure you will find them as rewarding and enjoyable as I am going to. Thank you." All
the students in the group volunteered to take part in the program.

Instructions to Control (C) group

"You have all met me earlier when I had come to your school. I thank you for your co-operation which has enabled me to proceed in my study. I will be coming to your class for a few more similar sessions during school hours. Thank you."

Both groups were told that the researcher had chosen a small part of the large total sample as it would be easier to work with a small number of participants, given the nature of the sessions.

Based on the nature of the results and a scrutiny of previous research in the area of Career development and guidance among high school students, a workplan for intervention spread over 13 sessions was drawn up. The groups were designated as Experimental or Control groups on a random basis. In this manner there were 5 Experimental and five Control groups.
<table>
<thead>
<tr>
<th>Session No.</th>
<th>Session Activity</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introductory lecture by researcher on nature of career development followed by discussion</td>
<td>1) Establishing initial rapport</td>
<td>i) Introducing basic concepts ii) Orienting students toward next sessions</td>
</tr>
<tr>
<td>3. Publications from DGET 1982 Ministry &amp; of Labour, New Delhi. distributed and discussed. Information on about 50 Indian careers was made available</td>
<td>Knowledge of World of Work</td>
<td></td>
</tr>
<tr>
<td>4. 10 problems from &quot;Decision Making subscale&quot; and &quot;World of Work Information Subscale&quot; of Career Development Inventory. Thompson &amp; Lindeman (1981) discussed</td>
<td>Decision Making Skills</td>
<td></td>
</tr>
<tr>
<td>5. ii) Decision making styles: Intuitive, Rational and Dependent discussed in relation to the above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Contents of &quot;Career Encyclopedia for Schools&quot; (Tandon, 1990) — detailed preferred information on 50 present day careers made available for discussion.</td>
<td>Knowledge of Preferred Occupation</td>
<td></td>
</tr>
</tbody>
</table>

(Contd..)
<table>
<thead>
<tr>
<th>Session No.</th>
<th>Session Activity</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Information obtained by each student regarding their career choices was discussed -- sources and content</td>
<td>Career Exploration</td>
</tr>
<tr>
<td>10</td>
<td>Career Education Questionnaire (Karlin, 1974) and Self Awareness Inventory</td>
<td>Knowledge of Self-Interests and Abilities</td>
</tr>
<tr>
<td></td>
<td>(Bachhuber and Harwood, 1978) administered</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Nature of aptitude testing discussed. Sample paper on &quot;Computer Aptitudes Test&quot; (NIIT, 1990) was administered.</td>
<td>Knowledge of self-aptitudes</td>
</tr>
<tr>
<td>12</td>
<td>i) Career clusters, career characteristics, career goals -- concepts from workshop on career exploration for high school Students, conducted by times of India group, Bangalore, 8-10 January, 1992 discussed.</td>
<td>Career Planning</td>
</tr>
<tr>
<td></td>
<td>ii) Sex role conditioning, sex discrimination, role conflict, marriage, etc. were some concepts discussed with girls</td>
<td>Special focus on enlarging girls'vocational identities</td>
</tr>
<tr>
<td>13</td>
<td>Field Visits:</td>
<td>Access Actual Knowledge of World of Work</td>
</tr>
<tr>
<td></td>
<td>* Police Station</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Travel Agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Industrial Relations and Electronics Marketing Office</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Business Management Consultant's Office</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Bio-chemical and Microbiological Laboratory</td>
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</tr>
</tbody>
</table>

**Procedure**

The general procedure with the experimental group of students for the 13 sessions (about 45 minutes each) was as follows:
Session 1

The introductory session was essentially a rapport-building session. The researcher explained the nature of career development and its importance. In the first session, the basic concepts eg. career, need for planning, career orientation etc. were explained, and a positive attitude toward work was a primary aim. They were told: "You are the youth of the country and are tomorrow's citizens. Four decades of planned economic development have turned the corner for India in every economic field. New technologies have brought a revolutionary change in the occupational structure of the economy. The career opportunities that have emerged in diverse fields throw a challenge to the youth of the country. A survey of Indian economy after four decades of planning shows that massive investments have built up a great potential for accelerating progress in every sphere of economic activity. As Pearl Buck pointed out, "Good luck is what happens when preparation meets with opportunity". Career opportunities to the youth do not restrict themselves only to industrial and agricultural sectors. In the fields of transport, communications, information and broadcasting, education, health and family planning, tourism, social welfare, etc. a wide variety of career opportunities exist.

The services sector under Central and State Governments has grown into a major employment sector and youth with
preference for 'white collar' jobs can enter various categories of services through competitive examinations".

"Simple computation will reveal that a major chunk of one's life is spent fulfilling the requisites of the vocation one has chosen. Therefore, it follows that the career one chooses should be one that is a medium that facilitates personal growth. Looking back into history we notice that originally man acquired all that he needed by himself. The issue of a job or a trade, arose when men began to live in communities. As a result of individual differences in abilities and interests, occupational specialisation began to set in. However, as society has become more complex, so too has the process of occupational choice".

"The issue of career choice is directly related to the individual's understanding of himself or herself. You must understand clearly what your aptitudes and inclinations are. Ask yourself, 'What are my talents? What do I enjoy doing the most? What are my capabilities?' An individual who takes up a job that goes against the grain of his personality structure, would end up as a frustrated person or as someone who has settled for mediocrity. In the following sessions, it will become clear to you, how one achieves this understanding of self. Next, you will need information on various vocations and about the world of work. In my classes, you will be undertaking certain activities inside and out of the
classroom to help you in this respect. The point I am trying to make is that the choice of a career should be a conscious decision on your part and not an accident - a decision that is based on an accurate understanding of yourself, upon exploration of the various avenues available and systematic planning to qualify yourself for that career. In the following dozen or so sessions, you will be taking part in discussions, class activities, lectures, etc. Keeping these ends in mind, I am sure you will find these as rewarding and enjoyable as I am going to. Thank you".

Session 2

The different values and occupational choices of men and women undoubtedly stem at least in part, from different patterns of socialisation. Conceivably, boys through identification with their fathers are more likely to learn the desirability of being a "good provider" for the family, while girls may be more likely to acquire the socio-emotional concerns of their mother (Vroom. 1964).

O'Neil et al (1980) believe that a host of factors influence both career decision making model and sex role socialisation process of an individual. It was explained to the students that these include Family factors (early childhood experiences, parental role model); Situational factors (chance, course of least resistance); Individual factors (self expectancies, abilities, interests, attitudes,
and achievement needs); Societal factors (educational experiences, peer group influence, and mass media); Socioemotional factors (fear of failure/success, lack of confidence, assertiveness and role conflict). Explanations were given with examples to make it easier to comprehend. They were asked to assess how much of these factors influenced their own career choice.

'How to plan your career' was discussed from the book 'Your Future Career' published by DGET, Ministry of Labour, New Delhi, (1982). These included the following points: Importance of school records and academics, the kind of work you aspire for, the type of environment you like to work in, your career and your home life, prestige, economic and security needs, etc. which were all discussed in detail. Certain job values from the same publication like leadership, esteem, security, self expression, profit, fame, social security, power and independence were discussed.

Sessions 3 and 4

52 publications which were acquired from Career study Center, Bangalore were distributed among the students in the classroom. These included 'Careers in Mass Communication', 'Life in the Army', 'Careers in Electronics', 'Marine Transport', 'Advertising for a career', 'Hoteliering', 'Admission to Para-medical courses', 'Self employment in small scale industries', 'The company Secretary' etc. These are
booklets published by D.G.E.T. Ministry of Labour, New Delhi. Students went through the careers of their interest in detail and discussed them in the class.

These sessions provided them details about the world of work.

Sessions 5 and 6

Twelve problems from the Decision Making subscale and World of Work Information subscale of the Career Development Inventory (Thompson and Lindeman, 1981) were read out to the students. These dealt with career crisis situations and world of work situations. (Details are given in Appendix L and M). Initials are used to describe individuals in career crisis situations to avoid any sexist interpretations of the situations. Students were read out the situation descriptions with four possible solutions and asked to choose the most appropriate solution and justify the same. This led to lively discussions in class on the merits and demerits of each solution since there were no right and wrong answers. Concepts regarding models of decision making: self, cognition and career development (Kroll, et al 1970) were discussed. Students were informed about the three main decision making styles -- Intuitive (subjective basis); Dependent (other-oriented style) and Rational (objective basis). They discussed each style and felt that the rational decision making style would be most appropriate and helpful in
practically dealing with career crisis situations. They were also asked to apply these 3 decision making styles to the imaginary career crisis situation (Career Development Inventory, Thompson and Lindeman, 1981) while evaluating the 'best' alternative given. The aim of the sessions was to foster decision making skills.

Sessions 7 and 8

The aim of these sessions was to provide knowledge of preferred occupations. The contents of "Career Encyclopedia for Schools" (Tandon, 1990) were discussed. The information provided was up-to-date and relevant to the Indian job market. The areas covered were: Hotel Management, Fashion design, Industrial design, Legal profession, Management, Advertising, Mass Communication, Civil services, Social Work, Armed forces, Computers, Civil Aviation, Medical and Paramedical courses, Finance, Home science, Economics, etc. The information provided included entry points into the profession, description of jobs in the profession, training required, and colleges/institutes where training is available.

Session 9

Students were asked to make a list of their interests and abilities. They were administered the Career Education Questionnaire (Karlin, 1974) and Self Awareness Inventory (Bachhuber and Harwood, 1978). They are presented in Appendix K and L.
Session 10

The nature of aptitude testing was discussed. Potentialities or aptitudes could be measured by tests, and certain careers need specific aptitudes, without which the person may be a misfit or a failure in his/her job. A sample paper on "Computer aptitude test" was administered (NIIT, 1990)

Session 11

Concepts of 'Career clusters', 'career requirements' and 'Career goal' (Bachhuber and Harwood, 1978) were discussed. They were told "Every occupation is related to some other occupation by some similarities. This relation is referred to as career cluster. The abilities required for an individual to succeed in one career are similar to those required in other careers within that career cluster. Knowing the difficulties in gaining admission to training centers for the career of your choice, it would be worthwhile to consider similar or related careers. Every year a number of young boys and girls like yourself have to face frustration when they are unable to gain entry into a professional or technical institute. Surely, it is wiser to be prepared for such setbacks by reviewing the field realistically. Be aware of all the possible careers a person with your aptitudes, interests, financial background, motivation etc. can contemplate as future possibilities. Now
write down the career of your choice and other careers within that career cluster and identify specialisation levels and entry routes for each. Goal setting strategies (short term, intermediate, and long term) which were concepts discussed at a recently concluded workshop on 'Career exploration for high school students' in Bangalore to which the researcher was an invitee, were discussed. Students were asked to write down what they thought they would be doing within the next month, 2 years, and 5 years vis-a-vis their careers.

Session 12(a)

The students were asked to evaluate all that was discussed in the previous 11 sessions and write down 5 careers which interested them. They were asked to gather information for each career on the following points: entry points in the occupation, qualification and training required, a typical work day/week for a person in that career, the work environment, scope in future for individuals who take up that career.

Session 12(b)

Since the first part of the session was more in the nature of homework assignment, the rest of the session was utilised for the girls' groups only, by providing insight into obstacles to the career development of women, in terms of sex role conditioning, role conflict, focus on marriage, (especially in the Indian context) sexism and sex
discrimination (Weinrach, 1979). Ways and means of resolving such conflicts were discussed. An attempt was made to enlarge girls' vocational self concepts.

**Session 13**

This session included field visits. Each group was taken to one of 5 places of work depending on location, availability and co-operation of work staff, and convenience. They were: a police station, a travel agency, an industrial relations and electronic marketing office, a business management consultant's office, and a bio-chemical and microbiological laboratory. The students were asked to prepare jointly a list of queries to be put to the office staff. The students were very enthusiastic and showed considerable initiative in drawing up the list. Some of the questions they felt they would like to be answered, included:

a) What made you take up this particular profession?

b) Where did you do your training?

c) Is the training difficult?

d) Does your work affect your family life?

e) Would you like your children to follow your footsteps?

f) Would you say your job is boring or exciting?

g) What would you advise anyone wanting to take up a similar job?

h) Would you say a girl/boy would find it difficult to undertake these responsibilities? (gender-specific)

i) What special skills/qualities would help?
The various people in the workplace (whose co-operation was earlier solicited by the researcher) were most helpful and explained in detail the uniqueness of the occupation. The field visits were very useful, as reported by the students, and helped to complement what they had come to know theoretically in the earlier sessions. Subsequently the researcher met all the 10 groups (5 E and 5 C groups) in their respective groups for the post-intervention testing and administered the post intervention test forms.

POST-INTERVENTION ASSESSMENT (Stage V)

To ascertain whether the intervention measures employed were effective in facilitating career development the Pre and Post test method was used.

Post test intervention analysis was in the form of tests among students in the Experimental (E) and Control (C) groups:

i) Pre intervention E and C groups.
ii) Pre intervention and post intervention C groups.
iii) Pre intervention and post intervention E groups.
iv) Post intervention E and C groups.

Details of the analysis are presented in Chapter IV.

It was hypothesised (Subsidiary hypotheses 2 and 3) that if there were significant differences between pre and post intervention program assessments for the E group and non
significant differences emerged for the C group. Then the intervention program which was implemented had been effective.

The assessment techniques used were as follows:

1. **Ability Rating Scale** (Refer Appendix Q)

   The scale was used by Ferguson (1976) as a means of evaluating effectiveness of a career development program. Ferguson has reported the pre and post program means of each of the 14 items in the scale. All but one of the items when tested on 296 students in his study revealed a positive change. The scale was thus used in order to assess whether there would be any differences in the rating ability of students before and after intervention.

   The questionnaire requires students to rate themselves on a 6 point scale (ranging from 'don't know' to 'excellent'), with regard to their ability to identify, formulate and act on career decisions.

2. **Career Planning and Career Exploration Subscales of Career Development Inventory** (Thompson and Lindeman, 1981) (Refer Appendix H).

   Since career exploration was one of the prime considerations while drawing up the intervention sample, it was felt that this dimension had to be assessed. (Details regarding the scale are in stage II Page No.59,60).
3. **Commitment to Career Choices Scale** (Blustein et al 1989) (Refer Appendix G).

Since tendency to foreclose was the other factor in finalising the intervention sample, this dimension along with the other subscale. Vocational Commitment was studied for changes in pre and post intervention scores. (Details regarding the scale are in stage II Page No. 58).

4. **Career Factors Inventory** (Chartrand.1990) (Refer Appendix R).

Since the other 3 scales were used before intervention, it was felt that an entirely new scale may be helpful in assessing intervention effects. This multidimensional measure contains two information factors (Need for career information and Need for self knowledge) and two personal emotional factors (Career choice anxiety and Generalised Indecisiveness). The scale consists of 21 items and the subject is instructed to answer each by ticking one of the given alternatives for each question.

Test retest reliability is reported to range from 0.79 to 0.84 and the test has been satisfactorily validated.

The intervention program took about 4 months, including the pre and post intervention testing sessions. There were two dropouts from the experimental group. They expressed that they had absolutely no interest in their career development.
at this stage, after attending the first session. Hence they did not attend the remaining sessions. The co-operation and rapport meted out to the researcher by the other students was unconditional and absolute.