CHAPTER IV

DESIGN AND PROCEDURE OF THE STUDY
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The purpose of the present study is to find out the effect of Assertiveness Training on students' anxiety, self-concept, achievement-motivation and risk-taking behaviour. The effects will be studied by comparing the anxiety, self-concept, achievement-motivation and risk-taking behaviour of two groups of students, one group will be given assertiveness training and the other will not be. This chapter seeks to outline the procedure followed, design employed, sample selected tools used, sequence of training of assertiveness skills, and procedure adopted for data collection.

4.1 Design

In the present study pretest post-test control group design was employed. It involved two groups of students, the experimental group which was given assertiveness training and the control group which was not given assertiveness training. The design comprised of three stages. The first stage involved pre-testing of students' anxiety, self-concept, achievement-motivation and risk-taking behaviour. The second stage involved training of three months. The experimental treatment consisted of giving assertiveness training to experimental group. The
third stage, the stage of post-testing, followed the completion of experimental treatment. The anxiety, self-concept, achievement-motivation and risk-taking behaviour were tested in this stage. The design of the study is presented in table 3.1.

Table 3.1

<table>
<thead>
<tr>
<th>Stages</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Treatment</td>
<td>Training of assertive-skills in some particular situations through assertiveness training model.</td>
<td>No training was given.</td>
</tr>
</tbody>
</table>

4.2 Variables involved

Method of assertiveness training constituted the independent variable and the anxiety, self-concept,
achievement-motivation and risk-taking behaviour comprised of a set of dependent variables.

4.3 Sample

The sample comprised of 48 students studying in S.P.B.V.T.C. Rohtak. All the students have passed their tenth class. 24 students were assigned to experimental group and 24 students were assigned to control group randomly.

4.4 Tools Used

For the purpose of collecting data related to different variables covered in this study, four tools have been employed. They are:

1. Sinha Comprehensive Anxiety Test (SCAT) a test of anxiety, (Dr. A.K.P. Sinha and Dr. L.N.K. Sinha) to measure level of anxiety of students,

2. Self-Concept Questionnaire (SCQ) a test of self-concept (R.K.Saraswat) to measure the level of self concept of the students.

3. Achievement Motive Test (ACMT) by Dr. V.P. Bhargava to measure achievement motivation of the students;
4. Risk Taking Questionnaire (RTQ) a test of risk-taking behaviour (Dr. Virendera Sinha and Dr. Prem Nath Arora) to measure the risk-taking behaviour of the students.

4.5 Description of the Tools

4.5.1 Anxiety Test

A test of comprehensive anxiety developed by Dr. A.K.P. Sinha & Dr. L.N.K. Sinha was used to measure level of anxiety of the students. The test comprises of 90 items. The subjects were required to respond in terms of 'yes' and 'no'. The 'yes' response to any item was indicative of anxiety and was given score of one. A score of zero was given to a 'no' response. A high score on this test indicates a high level of anxiety and on the other hand a low score on the test indicates low level of anxiety. The test is given in Appendix- A.

The product moment correlation between the test and retest scores was 0.85. Using the Spearman Brown formula, the reliability coefficient of the test was found to be 0.92.

For the administration of the test, booklets were distributed to the sample students. An attempt was made to follow all the instructions laid down by Sinha & Sinha for conducting the test. Though no time limit was set, the
students were advised to complete the test as quickly as possible. Generally the students took approximately 15 to 20 minutes to complete the test. The scoring was done as described in manual of the test.

4.5.2 Self-Concept Questionnaire

A test of self-concept developed by R.K. Saraswat was used to measure the self-concept of children before and after the experimental treatment. This is a forty-eight item-test, yielding scores in six different dimensions of the self-concept and on the total. These dimensions are: physical, social, temperamental, educational, moral and intellectual. The statements of the test are simple and declarative about self, seeking response to any one of the five responses given against each item. A high score on this test indicates a high self-concept while a low score indicates a low self-concept. The test is given in Appendix-B.

The test-retest reliability of the test is 0.91 for the self-concept measure. This test is reported to have reasonable content and construct validity.

For the administration of the test, book-lets containing test items were distributed to the sample students. An attempt was made to follow all the instructions
laid down by R.K. Saraswat for conducting the test. Though no time-limit was set, the students were advised to complete the test as quickly as possible. Generally the students took approximately 20 minutes to complete the test. The scoring was done as prescribed in manual of the test.

4.5.3 Achievement - Motive Test

A test of achievement-motivation by V.P. Bhargava was used to measure the achievement motive of the students before and after the experimental treatment. The test is intended to measure the N Ach score of the person. The test consists of 50 items of incomplete sentences (stems) which are to be completed by the subjects by putting a check mark on any one of the three alternative responses given against each item. The test is given in Appendix-C.

The subjects were instructed about what they have to do and were required to check the item by choosing one of the alternative responses which indicate his true feelings with respect to the point asked through a particular item. There was no time-limit to answer the inventory. However, generally the students took approximately 25 minutes for the completion of the test. The scores of the subjects were obtained as described in manual, i.e. with the help
of the scoring key provided in the appendix of the manual.

Test-retest reliability of the test is 0.87. The test is reported to have reasonable validity.

4.5.4 Risk-Taking Questionnaire

A test of Risk-taking behaviour developed by Sinha and Arora was used to measure the risk-taking behaviour of students before and after the experimental treatment. Risk-taking questionnaire is a 40 item test, yielding scores in eight different areas (five items in each area) of risk-taking and on the total. The areas are Hills (A), Space (B), Sea (C), Commercial Trades (D), Police and Intelligence Services (E), Fire (F), Professional Trades (G) and Military Services (H). The subjects were to tick anyone of the five alternatives given against each item. In RTQ, the five leaning categories i.e. very much, much, moderate, less and very less carry the 5, 4, 3, 2, & 1 scores respectively. The sum of the scores in all the eight areas gives the total extent of risk-tendency in the testee.

The reliability of RTQ determined by K-R formula is 0.785. This test is reported to have reasonable face, construct, factorial and concurrent validity.

For the administration of the test, book-lets containing test-items were distributed to sample students.
Instructions described in manual were given to students. No time-limit was set. Students took approximately 35 minutes in completion of the test. The test is given in Appendix-D.

4.6 Experimental Procedure

1. Pre-testing:

Before the commencement of experiment, pre-tests were conducted. They were administered in both the groups by the researcher himself. All the sample students were taken into confidence. Objectives of the study were made clear to the students and were acquainted with the benefits of Assertiveness Training in life situations. Only one test at a time was given to students. In this way pre-testing took four days period i.e. first day - Anxiety Test, second day - Self Concept Questionnaire, third day - Achievement Motive Test and fourth day - Risk-Taking Questionnaire.

2. Experimental treatment

After administration of pre-tests, the students were randomly assigned to control and experimental groups. The 24 students were assigned experimental group and 24 students were assigned control group. First of all, training was given to students in different assertive skills (verbal and non-verbal) individually. These assertion skills include -
initiation of conversation, joining conversation, maintaining conversation, ending conversation, to make a request, to ask for a favour, to say 'no', to refuse for unreasonable request, to pay and accept compliments, asking 'why', disagreeing actively and passively, expression of negative feelings, to be honest in expression of feelings and emotions, to express joy, sorrow and sadness. After training in these assertive skills individually the training was given to students in such daily life situations in which the above mentioned one, two or more skills are required at a time. For this, certain daily life situations were selected. These situations were either selected by the investigator or were proposed by students themselves. The daily life situations through which students were trained to be more assertive were termed as 'model exercises'. The exercises are given in appendices F & G.

The medium of training was Hindi and training was given for one and half hour or two hours in a day. This was continued for three months. For this purpose, the students of experimental group were divided into four groups of six students each. For the training purpose the "Assertiveness Training Model" proposed by Joyce and Weil (1985) was adapted. The main techniques used for training
were instruction, coaching, modeling, role-playing and behaviour rehearsal. For the training purpose to experimental group, the following phases were followed:

Phase-I Identification of target behaviours
Phase-II Setting priorities for situations and behaviours
Phase-III Enactments
Phase-IV Observations and Feedback
Phase-V Reenactments
Phase-VI Integration of assertive skills (behaviours).

Phase-I Identification of target behaviours

First of all, the investigator and students discussed the situation occasions and instances where the students were having difficulties to express themselves honestly, directly and comfortably. They were enable to express their feelings and emotions. They found themselves either non-assertive or aggressive in different social situations. They never said what they wanted. These situations, instances and events were listed and ordered in terms of which ones occur most frequently were most acute.

Phase-II Setting Priorities for situations and behaviours

The list concluded in Phase-I was prepared in such a way that it included both situations in which the students had difficulty in expressing their feelings and emotions and the kinds of feelings that they had found
difficult to express. This list provided the basis for both the investigator and the students to select the situations and behaviours (feelings, emotions like saying 'No', making a request, Refusal). They concentrated on different behaviours on the priority basis.

Phase-III Enactments

After the selection of the situations and behaviours on the basis of priorities the group (under-training) was engaged in behaviour rehearsal as follows:

(i) The enactments were carried out without any instructions, coaching or guidance so that there was an avoidance of expression of feelings and assertiveness. This was either through non-assertiveness or aggressive behaviours.

(ii) The enactments were discussed by investigator as well as by other group members. This was done for analyzing and determining its fidelity to real life and ways in which feelings were suppressed.

(iii) The role players were assigned roles as in proceedings of exercises by which the trainees were to be given an opportunity to rehearse the expression of feelings and emotions. The
respective dialogues and actions were attributed to respective role-players.

iv) The practical sequence of dialogues and role-play of different exercises were told to role-players.

v) Exercises were acted out in the form of enactments (through modeling and simulation) to practise the expression of feelings and emotions.

Phase-IV Observations & Feedback

(i) Planned observations of enactments were recorded by the investigator himself. These observations were made objectively with intense care.

(ii) Observations of the performances of role-players for their respective roles were discussed among group members and trainer (investigator).

(iii) On the basis of these planned and objective observations, feedback was provided orally or written or both to the role players (One of the example of observation schedule for one of the assertive skills is given in Appendix-E).

(iv) For providing feedback, the investigator instructed, guided, coached, modeled and directed the individual or group. The group members modeled for one another also.
(v) The role-playing were modified so that the expression of feelings and emotions would be both honest and adequate which is socially acceptable.

Phase-V Reenactments

To practise new behaviours and assertive styles, further enactments were undertaken. The group members were assigned different roles in different enactments and situations so that they practised different behaviours individually and perfectly. The group members practised different behaviours individually and perfectly. The group members practised different components of assertive behaviour (verbals and non-verbals) individually and with different conditions as per their requirements and capabilities. Feedback was provided to role-players by group members and investigator which was objective, positive or negative. The first four phases of the model were repeated in different exercises till the desired level of assertiveness was attained by the group members.

Phase-VI Integration of Assertive Behaviours

The ultimate aim of the assertiveness training was to help the students to learn new behaviours and to unlearn those which caused of non-assertiveness and aggressiveness. The final phase of the model was related to transfer of assertive behaviour in the real life situations of group
members. It was worthwhile therefore, for the group to make a commitment to try out the expressive responses and to report to the group the consequences of their doing so.

No training was given to students who were assigned to control group.

3. Post-Testing

After three months training in assertive skills through different daily life situations, all the four tests i.e. Anxiety test (Sinha), Self-Concept Questionnaire (Saraswat), Achievement-Motivation Test (Bhargava) and Risk-Taking Questionnaire (Sinha and Arora) were again given to all students (experimental and control groups both) to test their level of anxiety, self-concept, achievement motivation and risk-taking behaviour.

4.7 Statistical Analysis

In order to fulfil the objectives of the study the following techniques were employed for testing the significant differences between the means.

i) Mean ii) Standard Deviation and (iii) 't' values

As the hypotheses of the study were directional, the one-tailed test was employed for testing the significance of difference between the means of students anxiety, self-concept, achievement-motivation and risk-taking
behaviour. The value of 't' is computed with the help of the following formula:

\[
t = \frac{M_1 - M_2}{SE_D}
\]

\[
SE_D = S.D. \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}
\]

\[
SD = \sqrt{\frac{\sum x_1^2 + \sum x_2^2}{(N_1-1) + (N_2-1)}}
\]

where:

- \(M_1\) = the mean of group I.
- \(M_2\) = the mean of group II.
- \(\sum x_1^2\) = the sum of squares deviation around the mean of Group I.
- \(\sum x_2^2\) = the sum of squares deviation around the mean of Group II.
- \(N_1\) = Number of students in group-I.
- \(N_2\) = Number of students in Group-II.

The value of 't' was checked for its significance from the table of 't' values with the degree of freedom equal to \((N_1-1) + (N_2-1)\).
Thus, the procedure and design outlined in the foregoing pages of this chapter were employed in order to pursue the objectives of the study. The methodology, tools and techniques described above were used during the course of this attempt. This provided the investigator with the data which is presented in the next chapter. The analysis and interpretation of this data will also follow in the chapter to come.