CHAPTER V

Description of Tests and Questionnaires

This chapter is devoted to the systematic description of various tests and questionnaires applied in the present research.

1. Socio Economic Status (SES) scale by Kupuswamy (URBAN), Form - B.

This scale constructed for the measurement of Socio Economic Status of Indian subjects has been extensively used by several investigators. It was standardized primarily for use of Socio Economic investigations in the urban part of Indian populations. The scale mainly deals with education, occupation and income of parents as the main measures of Socio Economic status.

The validity of the scale was tested by (a) matching against outside criterion (b) Distribution patterns and (c) Comparison of dichotomous groups.

In the first method several teachers and students were requested to give the class estimate of the
persons they know well and then their actual education, occupation and income were ascertained. The class estimates were then given on the basis of the Socio Economic Status scale. The scale worked satisfactorily for Social classes.

In the "Distributed Patterns" method the scale was applied to various families. The parents of children studying in the high schools and middle schools gave a normal probability distribution as far as Socio Economic Status was concerned.

In the third method a group of persons were asked to give the names, occupation, education and income of the 3 persons belonging to high Socio Economic Status and 3 belonging to low Socio Economic Status. Mean differences for each of the 3 variables being highly significant show the discriminating power of the categories.

As Kupuswamy views, the merit of the present scale appears to be its objectivity.

This Socio Economic Status scale is modified in accordance with the sample and problem of the present study. Detailed description of the modification is given in the Pilot study. Modified form of the scale is given in the Appendix.

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2. Raven's progressive Matrices (Adult form)

This test is administered in the present study to measure the I.Q. of the subjects and to calculate the relationship between I.Q. and aspiration.

It is supposed to be a culture free test. It is also easy to administer and score. This test further has one or two advantages viz, it is a nonverbal test and does not place any premium on the use of language skill. It is a power test and therefore does not handicap the subjects who are not quite used to speed.

Progressive Matrices is suitable for comparing people with respect to their immediate capacities for observation, accurate intellectual work and clear thinking. In other words, it measures the capacity of the testee to apprehend meaningless figures presented for his observation, to perceive the relationship between them and to conceive the nature of the figure which completes the incomplete ones.

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The scale includes 60 problems divided into 5 sets of 12. In each set the first problem is quite easy. But gradually the problems which follow become progressively more difficult. The five sets provide 5 different kinds of opportunities for grasping the method and 5 progressive assessments of a person's capacity for intellectual activity. (Raven - 1960)

To ensure sustained interest and freedom from fatigue, the figures in each problem are boldly presented, accurately drawn and as far as possible pleasing to look at. The scale is intended to cover the whole range of intellectual development from the time a child is able to grasp the idea of finding a missing piece to complete a pattern. It is also sufficiently long to assess a person's maximum capacity to form comparisons and reason by analogy without being unduly exhausting.

A person's total score in this test provides an index of his intellectual capacity irrespective of his nationality or education. That is why it is called a culture free test. The contribution which each of these 5 sets makes to the total provide a means for assessing the consistency of the estimate and the psychological significance of discrepancies in the test result.
The scale has a retest reliability varying with age from 0.83 to 0.93. It correlates 0.86 with Terman Merril's scale.

(Raven - 1960)

3. Questionnaire to record class performance.

A questionnaire was prepared to record the average percentage of marks secured by each subject in six examinations all of which were promotional and terminal tests. These six examinations are H.S.C. test, and final, P.U. Test and Final, First year degree Test and Final examinations. The questionnaire is given in the appendix.

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Rotter's Level of Aspiration Board.

It is a simple Psycho motor task. The apparatus consists of a board 38" long and 4½" deep and 9/10" wide running right through the centre of the entire length.

There are 19 numbered units each 3/4" wide increasing from 1 to 10 and then decreasing to 1 towards the further end. In the centre of the numbered units are small indentations preceding the numbered units. These 29 indentations are intended to slow down the speed of the ball and provide a resting place for it when it comes to a stop. The score is dependent upon how closely to the central unit the ball comes to rest regardless of the direction. The central unit bearing the black number 10 on it counts 10 points. The ones on each side count 9 points and so on. The other units painted alternatively blue and grey decrease to a value of one point. In order to stabilize the scores, aspiration estimated are made for a group of five trials.

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Suitability of Rotter's Level of Aspiration Board as a Test of Aspiration,

Rotter's Level of Aspiration Board has been extensively used in several studies of Level of Aspiration. Guided primarily by the criteria of novelty, intrinsic motivation, variable performance, inability to gauge performance and general adoptibility which had been agreed upon by Eysenck and Rotter, Rotter's Level of Aspiration Board was used as task. It is interesting, quickly learned and requires little native ability. Rotter stated that there is little improvement due to practice or learning. In this test more careful effort can produce a better score.

The Level of Aspiration Board devised by Rotter appears to fit the following criterians.

(a) The task be novel so that the subject can have no idea of how other people score, nor can he have built up previous attitudes towards his ability with the previous task.

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(b) The task should not be so easy or so difficult that any individual would feel himself at one or other extremes of talent without having any immediate comparison with others.

(c) Performance scores for all subjects should occupy fairly narrow range just above the middle of the distribution of possible scores.

(d) The task must be interesting to guarantee sustained and uniform attention so that it would be possible to have sufficient number of trials for adequate quantitative results.

(e) Performance scores should be variable enough so that the subject can only anticipate his scores approximately and is unable to avoid the conflict of whether to go up, down or stay at the same level merely on the basis of a stable score.

(f) Similarly the learning factor should be negligible so that the subject may not avoid the conflict simply by assuming a regularly increasing ability.

(g) Finally, with a view toward use of this technique for general, experimental and clinical purposes, general...
convenience and adaptability to a wide range of age groups should be considered (Rotter - 1942).

Among the other advantages of this technique are,

(a) The goal setting behaviour of the subject is operationally defined and quantified in terms of discrepancy score, frequency of success and other measures.

(b) The novelty of the motor task, a modification of pin ball apparatus fosters interest and facilitates ego involvement.

(c) The aspirations evolve around a non language task and speech handicaps can not directly interfere with performance.

(d) Although the task usually appears to be a game of skill, learning is negligible after the initial practice period. So aspiration scores are relatively independent of the motor performance.

(e) Extensive validity studies by Rotter have shown that the obtained scores are reliably so consistent that they correlate highly with the other level of aspiration measures.

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Rotter from interviews and observations of verbal and nonverbal behaviour showed that once the subject becomes ego involved in the task before him, he can attack the problem only through methods he has learned and handle the situation in his unique characteristic pattern. In this respect the Rotter Board is just like a projective technique. In setting goals on the Level of Aspiration Board, the subject constantly reveals the discrepancy between what he demands of himself and what his immediate experience tells of him.

Lastly, the Aspiration Board is convenient to carry and can be set up anywhere.

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Symbol Digit Test

This is a non-performance test commonly used as a measure of level of aspiration. In this task there are numbers ranging from 0-9 and for each number there is a corresponding symbol. This is used as a key for the task. Below the key there are 13 rows of symbols each row having 20 symbols. The subject has to substitute the proper numbers by using the key given at the top of the sheet. The time limit is 30 seconds, for completing two rows or forty symbols. The subject’s score for each trial would be the number of symbols he substitutes by correct numbers within the time limit.

The score range in this task is 0-40. Error if any would be deducted from the total score of the trial. Here 6 trials would be given preceded by one practice trial.