CHAPTER VII

Main study

Kupuswamy's (1962) Socio Economic Status scale (urban) modified in Pilot study No. I was administered on 200 male and 200 female college students of the 2nd year degree class of some colleges of Orissa.

The subjects were specifically instructed to give correct information regarding the Socio Economic status of their parents with the assurance that the information would be kept strictly confidential and unanimous and would only be used for research purposes. The modified form of the scale is given in the appendix.

The investigator personally administered the scale on each subject in the calm and quiet atmosphere of the testing room.

For the record of academic performances, the subjects were requested to bring their mark sheets either in original or attested copies in case of final examinations of Board and University. Most of them followed

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the instruction without hesitation. For this purpose
the marks of High School certificate, Test and final,
Pre-University Test and Final and First year degree test
and final examination marks were considered.

Marks obtained by the subjects in the test exam-
inations were collected from the mark registers main-
tained by the institutions. Subjects who could not
supply the official record of their marks were elimi-
ated from the sample. Only average percentage of marks
secured were taken in to consideration.

When all the subjects filled up the socio eco-
nomic status scale and class performance record form,
scores were calculated.

On the basis of the Scores obtained in Socio
Economic status scale and average percentage of marks
in different examinations, the subjects were divided in
to High, Middle and Low groups. For classifying the sub-
jects in to High, Middle and Low groups the percentile
method was followed i.e., subjects securing between 0-33.5,
33.6-66.5 and 66.6 and above were classified in to
High, Middle and Low groups respectively.

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Following the design of the study, the total number was taken as 96 for each comparative group (High, Middle and Low) of each variable (Socio Economic Status, class performance). Further in each group of 96, 48 were Male and 48 were female subjects.

For sex as a variable the 288 subjects were classified into two groups such as male and female each group consisting of 144 subjects.

Thus, finally, the sample of the main study consisted of 144 male and 144 female subjects on whom the progressive Matrices (Adult Form) Test and Level of Aspiration tests are to be administered.

Subjects of the High Achiever group in class performance variable having previous failure due to reasons other than illness and other tangible factors were eliminated from the sample. This could be done by interviewing the subjects personally.

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Administration of Tests.

When final selection of the sample on the basis of Socio Economic status scale and class performance questionnaire was complete, the following tests and questionnaires were administered on the subjects individually with an interval of 15 minutes between each test. The investigator herself conducted the tests in the calm and quiet atmosphere of the testing room.

Raven's Progressive Matrices (Adult form).

A record form containing particulars like age, sex, class etc. to be filled in by the subject along with a copy of the standard progressive Matrices was supplied to the subjects. The investigator opened the book at the first illustration and said "Look at the upper figure. It is a pattern with a portion taken out. One of the figures given under 1, 2, 3, 4, 5 etc. would exactly fit the portion missing in the main pattern. Please mention the number of the place in the record form. " If the subject did not mention the exact place, he was again explained until he could grasp the nature of the problem to be solved.

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The experimenter further explained the subject that in each page there is a design with a part left out and the subject has only to write the number of piece in the record form which can complete the incomplete pattern.

Thus one after another, the subject filled the numbers of the bit in correct place of the record form which he thought completed each design.

The subject was given as much time as required by him without any interference. The time taken to complete the test varied between 30-40 minutes from subject to subject.

The other two tests of Level of Aspiration i.e., Rotter's Level of Aspiration Board and symbol digit substitution test were administered on the subject on the next day with an interval of 15 minutes after between each test.
Rotter's Level of Aspiration Board Test
Preliminary Arrangement

Data sheet: -

Two data sheets were prepared for the Rotter's Board Test, one for the experimenter and the other for the subject.

In the former, the subject's name, class, age, sex and his performance scores are to be recorded by the experimenter. In the other sheet the subject has to enter his aspiration scores before performance in the first trial and after performance for the subsequent trials. Also his performance scores for each trial are to be recorded.

The subject was instructed to write down his aspiration scores rather than the usual method of telling the aspiration scores to the experimenter inorder to avoid the subjective factors which may hinder his free expression.

The Rotter's Level of Aspiration Board was set in the experimental table along with the ball and the
stick in a calm and quiet testing room. The subject was seated in front of the Rotter's Board.

After these preliminary arrangements the following instructions were given to the subject.

**Instruction** :-

"You have to hit this steel ball with the stick so that the ball moves along the groove. The ball should always be placed at the starting point before you hit it. The number of the board opposite which the ball stops is your score for that hit. If there is no number or if the ball bounces out of the groove, your score for that hit is nothing. Look at the way the numbers are marked increasing from 1 to 10 and then decreasing to 1. The idea is always to aim for the 10. But whenever it stops and which ever number it shows that will be your score for that hit. Now have some practice hits ".

The subject was given 20 practice hits and the scores for each hit were announced to him. Then the following specific instructions were given to the subject.
"You have practiced enough. Now let us begin the actual trials on this task. You will be given 20 trials. A trial consists of 5 hits. The score for any trial is the total number of scores for the 5 hits. The possible score range for 5 hits is 0-50. The maximum score for any trial is 50 and the minimum score is zero. After each trial I will tell you your score for that trial. As soon as I tell you your score and before you start on the next trial you will have to write in the data sheet provided to you what score you are going to make in the next trial. This will happen before each trial.

Now before you attempt the actual trial tell me what score you are going to try."

Conduction of the Test.

The task was explained to the subject. When the subject was acquainted with the task 15-20 practice hits were allowed. When there was no scope for further learning, the experiment started.

Before beginning the first trial the subject was asked to mention in the data sheet what score he was...
going to make on the trial. This was done to find out the aspiration score of the subject without any knowledge of his actual performance. Then he was asked to begin with the trial. After each trial he was told his score for that trial and then he wrote his estimate of the performance for the next trial in the sheet provided to him. This was noted to compare the aspiration score before and after performance.

The subject was given sufficient time to make an estimate of his ability and then actual trials were started.

This question "what score you are going to make in the next trial was repeated after every trial when necessary. The range of score for each trial was the sum of scores for the 5 hits. Soon after the subject completed one trial consisting of 5 hits, the scores of the subject for these 5 hits were added up, announced and recorded by the experimenter in the data sheet. Aspiration and performance scores for each trial were recorded in the data sheet.
In this way 20 trials were taken.

The experimental procedure followed in this test of aspiration is similar to those of other investigators in this field.

The testing was conducted individually on the entire sample (N = 288) by the investigator in the calm and quiet atmosphere of a testing room in a single session lasting for about 2 hours. Proper rest intervals were given to the subjects as desired by them to avoid monotony and provide relaxation.

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Symbol Digit substitution Test

Procedures

There were 6 trials for symbol digit test, one trial consisting of 2 rows followed by one row of practice. For each trial 30 seconds time was fixed on the basis of pilot study (No.3). In one trial the subject has to substitute 40 digits for 40 symbols.

Preliminary Arrangement.

Similar to the data sheets used in the Rotter's Level of Aspiration Board Test two data sheets are used, one for the experimenter and the other for the subject to record the aspiration and performance scores of the subject.

In a calm and quiet testing room the subject was seated comfortably. The symbol digit substitution test forms, two data sheets and a stop watch were brought and kept on the table.

Then the subject was given the following instructions.
"**Instruction** - In this task you should put numbers for the corresponding symbols looking at the key given at the top of the sheet. There are 12 rows of symbols, each row consisting of 20 symbols. Thus, there are 240 symbols in this sheet. The score range for each trial consisting of 2 rows is 0-40. The time limit for each trial on this task is 30 seconds. Your score will be the number of symbols you replace by proper numbers within the time limit. You have to fill up the rows one by one and work fast following the key given at the top of the sheet. Wrong substitution will be counted as errors and will be deducted from your score. Now go through the key and find out the symbols and their proper numbers. Have some practice."

After a row of practice trial when subject got acquainted with the test the following specific instructions were given to him "6 trials each of 30 seconds duration will be given to you. After each trial your score for that trial will be told to you. Before you proceed in the next trial, you will have to write in the sheet provided to you the amount of symbols you will try to replace by numbers in your next trial. Before we start..."
the actual trial please write down in the data sheet the total number of symbols you try to replace by numbers in the first trial. This was his aspiration score without any knowledge of his performance.

Conduction of the Test - When he wrote the aspiration score without having any knowledge of his performance, a 'ready' signal was given to him and the stopwatch was started to record time. After 30 seconds the subject was asked to stop. Then the experimenter read out the correct numbers for the symbols and the subject verified, counted and wrote the performance score in the space provided in the data sheet.

In this way, all the 6 trials were completed by the subject. After completing each trial and before he started the next trial, he was reminded to write down his aspiration score on the sheet provided to him for the succeeding trial.

After every trial in order to elicit the estimate, the subject was asked "what score are you going to try to get in the next trial?" This question was repeated...
after every trial and the same procedure was followed till the last trial.

In this way, the symbol digit substitution test was conducted individually on 288 subjects by the investigator. The subjects gladly volunteered themselves as subjects and showed genuine interest in the tests.