CHAPTER IV

DESIGN AND METHODOLOGY

The objective of present investigation was to study the effect of parents, i.e., mothers and fathers and their socio-economic status, i.e., high and low, on care, control, psychopathology and academic achievement of their children’s. Another objective was to find out how these various dependent measurers interact and intercorrelate.

Design of the study

In order to study the above parameters and fulfill the objectives of the study a 2x2 factorial design was used, with two levels of socio-economic status, i.e., high socio-economic status and low socio-economic of parents. The later being a very tricky variable, extra care was taken to categorize the sample into these two groups. To begin with, a broad criterion was taken i.e. the type of school in which a child was studying. Therefore, two types of schools, i.e. government and public were taken. However, in order to ensure it further the parental income level was also considered and only those children were included in the sample whose parents income fell on the extremes. Selection of the groups was partially randomised and partially criterion-based. So for the selection of the schools were concerned that was done on random basis and the selection of children of a particular class was made on the basis of parental income. The effect of the above two independent variables was studied on the dependent variable i.e.
care, control, psychopathology and academic achievement of children. The data for the
first three variables were collected from parents and for the variable form school
records.

Table - I Design of the study

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<td>LSES</td>
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Parents of the selected children were contacted individually to administer the
questionnaires pertaining to the dependent measures i.e. care, control and
psychopathology. These questionnaires deal with parents own assessment of their care
and control and also how they rate their children on psychopathology. The academic
achievement scores of children in their previous examinations were collected form the
school records.

Sample

The present study was conducted on a sample of 100 children and their parents
(Both mothers and fathers). Half of the children were from higher socio-economic status
and half of the children were from lower socio-economic status. The children were
drawn from the public and government schools. The schools were selected on random
basis. Two lists of schools were prepared separately one for public and the other for
government schools. Out of these lists a public school and a government school was
selected. Children studying in class ninth were selected. After that those children were included in the final sample who fulfilled the criterion of income, i.e. parent's income either high or low. They were further classified into high and low socio-economic groups respectively. Care was taken to include children with approximately same income level (Higher : Lower). This was further assured by computing the variability with in both the groups (Appendices IIIa, b, c, d, and e)

Table II Sample distribution

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<th>Children (N = 100)</th>
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Parents of all the 100 children, included in the study were contacted at their homes after collection of their addresses from the school office records.

Tools used

Standardized questionnaires were selected to measure the parental care and control and childhood psychopathology. While selecting the questionnaires the length of the questionnaires and applicability to the sample were considered. Both the tools have been developed and standardized on Indian population. The following questionnaires were used.
1. Parental Handling Questionnaires (PHQ Malhotra 1990)

   It is very simple questionnaire. It consists of fourteen items. Ten of them for care and only four for control. It is in English Language. It measures the parents own care assessment and control towards their children.

   It is a standardized questionnaire. The author has reported test-retest and inter-rater reliability for care and control. Test-retest reliability is .68 for care and .76 for control and interrater reliability is .82 for care and .66 for control. Both are satisfactorily high. The validity of the questionnaire has been established in terms of factorial, construct and concurrent validity. The validity of the questionnaire is also satisfactory. Total number of items in PHQ is fourteen. Item number 1, 2, 3, 4, 5, 6, 7, 8, 11, 12 measures care and item no. 9, 10, 13, 14 measures control. Each item can be responded to in one of the three categories of response. The instructions for scoring are if the answer is in yes than circle 0. If the answer is in sometimes than circle 1 and if the answer is in no than circle 2 (Appendix I). High score on care shows low care and low score on care shows high care. Likewise high score on control show low control and low score on control shows high control.

2. Childhood Psychopathology measures: (CPM)

   This scale was constructed by Malhotra, Varma, Varma and Malhotra (1988). It is a measure of childhood psychopathology in children as perceived by parents.

   It consists of 78 questions, which are divided into 8 factors. The 8 factors are as follows. Low intelligence with behavior problems (16 items), conduct disorder (17
items), anxiety (5 items), depression (13 items), psychotic symptoms (9 items), special symptoms (5 items), physical illness with emotional problems (4 items) and somatization (6 items) (Appendix II).

If the response is in 'yes' than score will be '1' and if it is no category the score will be O. Children who score 10 and above are likely to be clinically disturbed.

Two measures of reliability were studied. Test-retest and interrater on 20 subjects each. Significant correlation values have been reported for test retest reliability, after two weeks interval, ranged between .78 to .96 for all the items. Construct validity was established on the basis of a sample of emotionally disturbed and normal healthy children and have been reported to be significantly high. Criterion validity also reveal that sick group scores significantly higher on all the factors.

The CPMS in its final form comprise of 75 items both in Hindi and English language, to be rated as Yes-No responses, can be used as an interview schedule, as a self administered questionnaire as well as a guide to clinical interviewing. It is applicable to children of both sexes in the age range of 4-14 years. It can be used as a screening instrument to identify disturbed children in population surveys.

3. Scores on academic achievements

The scores on academic achievement were taken from the school records and consisted of marks obtained in the previous annual examination. This was done especially keeping in view the uniformity in the standard of examination. Conduct of middle classes examinations, right from setting of evaluation is done by board of education which is an external body, such papers to evaluation is considered relatively
objective and impartial. The examiners are not familiar with the children therefore, the marks obtained by children, under the same board, can be considered somewhat more dependable.

Procedure:

After determining the independent and dependent variables, designing the study and selecting the required sample. The actual work began with the preparing of the lists of schools both Public and Government. Two schools, one from each of the two lists, are selected randomly. Children whose parents income fell on extremes were selected for high and low socio-economic status groups. All the ninth class sections were taken as a whole. Then their income was derived from school records at first and further validated from parents themselves.

The parents of both high and low socio-economic status were contacted at their homes. Their addresses were collected from the record registers of the schools (of their children) with due permission from the principals of the schools. On average two houses could be visited in a day. Both mothers and fathers were interviewed after prior appointment with them.

Mothers and fathers were administered the questionnaires separately. The mentioned questionnaires were administered in two sessions. In the first session information regarding socio-demographic variables such as age, sex, rural urban living, socio-economic status was collected. Then parental handling questionnaire was administered. They were given verbal instructions regarding filling the questionnaires. They were requested to adhere to the instructions given to them. At the end of the first
session appointment for the second session was taken. In the second session childhood psychopathology measurement was administered. Both the questionnaires could be self administered.

Method of data collection had to vary according to the educational background of the parents. Those parents who had the ability to read and write were self administered the questionnaires. In case of others the questionnaires were administered by the investigator and their responses were marked on the questionnaires as such. Some of the parents commented on certain items especially pertaining to CPMS. Lower socio-economic status group mothers pointed out that they do not take note of very minor behaviour and gestures of their children, their comments were taken note of by the researcher. It was observed that the parents of higher socio-economic status group were more readily cooperative than the parents of lower socio-economic status group.

Academic achievement scores were collected from school records. The marks obtained in their previous final examination were taken.

The data thus collected with the help of various questionnaires mentioned earlier, was duly scored. It is a 2x2 factorial design i.e. parents (i.e. mother and father) and their socio-economic status (i.e. high or low). The tables for parental care, control, psychopathology were made separately for mothers and fathers.

Rationale for using statistical tests

Two way analysis of variance was applied to find out the effect of parents and their socio-economic status upon the care, control and psychopathology of children (Appendix (IVa)).
For the purpose of computing correlation some transformations scores were required. In the parental handling questionnaire, the scoring procedure renders scores in reverse, i.e., high scores show low care of parents and low scores show high care. Likewise for control too high score indicates low control of parents and low scores indicate high control of parents. For the convenience of the interpretation the scores were transformed. Reciprocal system of transformation was used as given by Kurtz and Mayo (1980). After transformation the scores become positive. High scores on care and control indicate high care and control and low score on care and control revealed low care and control. Method of transformation is presented in (Appendix IV d).

$t$-test was computed to find out the significance of difference between the means of significant F values. Data on academic achievement was also operated upon $t$-test (appendix IV b) to find out the difference between the achievement of higher or lower socio-economic status groups. In addition to studying the effects of independent variables on dependent variables, certain correlations (Appendix IV c) were also computed between the various parental variables such as care, control, psychopathology and also relation of these with academic achievement. All the correlations between various combinations of the dependent variables were computed separately for all the groups in the factorial design.