C H A P T E R - IV

Method and Procedure
Chapter IV

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Design of the Study:

The main focus of the present study was to ascertain the effects of interpersonal relationships in a classroom group that constitute the social structure of the school. The investigator also wanted to find out the matrix of relationships of the sociometric status of pupils with their personality adjustment and the consequential dropping out of school. This has been facilitated by differentiating the high drop-out incidence and low drop-out incidence groups; and pupils having high adjustment and low adjustment as a whole on the one hand, and even sex-wise on the other. These groups have been differentiated on the variables, viz., socio-economic status; Sociometric Status and Creativity.

Variables:

Independent variables are as follows:

(i) Sociometric Status;
(ii) Socio-economic Status;
(iii) Creativity.

Dependent Variables:

(i) Dropout;
(ii) Maladjustment.

There are several studies that have shown that socio-economic status affects the drop-out incidence while as majority
of the studies indicate its positive and significant effect on drop-out incidence. Likely, several studies have indicated that socio-economic status affects the social acceptance variable whereas others show that social acceptance by peers is a factor independent of socio-economic level. Some studies have shown that socio-economic status differences in creative abilities are probably not valid, however, generally high socio-economic status subjects score better than low socio-economic status subjects.

Further, the relationship between independent and dependent variables, can be correctly understood when the socio-economic status variable which is significantly related to both the incidence of drop-out and maladjustment is taken note of. The socio-economic status variable has therefore been included in the present study.

**Assumptions and Hypotheses:**

The study assumes that social acceptability helps in improving the adjustment and reducing the drop-out incidence among pupils.

Keeping in view the objectives of the study, the following hypotheses have been formulated for this study:
1. Incidence of drop-out is negatively correlated with social acceptability (i.e., the higher the social acceptability the lower the incidence of drop-out and vice versa).

2. Children having high sociometric status will have better adjustment and vice versa.

3. Children with high creativity will have high sociometric status and vice versa.

4. Children having high creativity will have low drop-out incidence.

5. Adjustment is positively related with creativity.

6. Drop-out incidence is positively related to the social structure of the school.

Preliminary Study:
To begin with, a preliminary study was conducted with the aim of trying out and finalising the tools to be included in the main study later.

A sample of 100 students representative of the main sample was selected according to the random stratified sampling. In this, the subjects from the schools, government, private, urban, rural, boys and girls were included.
Sample:

The sample for the main study was taken from the varied kinds of schools that exist in the valley of Kashmir (India). Five government schools were selected, out of them two exist in the rural areas and three in the urban areas. In addition to it, one more private school was also included in the sample. Thus the sampling was a purposive one.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the school</th>
<th>No. of students</th>
<th>Classes</th>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1.</td>
<td>Girls M.S.Khanyar</td>
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</tr>
<tr>
<td>2.</td>
<td>Boys M.S.Khanyar</td>
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<td>40</td>
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<td>3.</td>
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<td>31</td>
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<td>5.</td>
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<td>43</td>
</tr>
<tr>
<td>6.</td>
<td>Islamia M.S.Pulwama</td>
<td>30</td>
<td>23</td>
</tr>
</tbody>
</table>

|                | 362 | 258 | 267 | 887 |

Selection of Students:

The population taken as sample for the purpose of this study consisted of students of VI, VII and VIII grades from six schools ranging in age from 11 years to 14 years. All the students who were on rolls on the eve of collecting the data were taken. One section of one class was taken as one group.
Procedure of data collection:

The questionnaires and inventories (discussed in chapter V) selected on the basis of feasibility and comprehensibility of the students were administered on the students. The normal procedure for administering standardized tests were adopted by the investigator. The tests used in this study are described briefly as under:

(1) Sociometric Test: Sharma's (1970) Sociometric Questionnaire was translated into Urdu and was administered to the students in a group situation. As this test has three well defined criteria, each pupil was asked to choose three classmates (within his own section) with whom he would prefer to be associated in the school-setting as (i) seating companion; (ii) companion at the school play-field; (iii) companion for studying together. These could be used as criteria for making a choice. The number of choices each pupil receiving on each criterion would indicate the degree to which he is accepted by his classmates.

(2) California Test of Personality: The California Test of Personality has been developed by Thorpe, Louis, P.
et al. (1953) with the main purpose to provide the data for aiding individuals to maintain or develop a normal balance between personal and social adjustment. It helps in identifying the types of maladjustment from which a student may be suffering. Individual reactions to items are obtained, not primarily for the usefulness of total or section scores, but to detect the areas and specific types of tendencies to think, feel, and act which reveal undesirable individual adjustments. (For full details see "Tools").

While keeping in view the appropriateness of the 'California Test of Personality', the same was employed to collect the data for the present study. Review of research studies shows that it has been more or less used in all the studies aimed at investigating the relationship between social acceptance and adjustment. Bonney (1944) used this tool and a sociometric questionnaire on a group of 80 children and found that the total adjustment score of the inventory correlated .49 with sociometric status. Grossman and Wrighter (1948) found that 6th-grade students who were very high in sociometric status secured much higher total adjustment scores on the California test of personality than did a similar group of students who were very low in sociometric status. Semler (1960) in a large scale study found substantial positive correlations between sociometric status and personal adjustment as measured by California test of personality. Heath (1971) also used California Test of Personality in a
study of the relationship between school size and personal and social adjustment of high school seniors. Hinkelma (1952) found significant differences between delinquents and non-delinquents on the California test of personality.

As against this, Kuhlen and Bretsch (1947) compared the pupils upper and lower in sociometric status in their responses to the 'Mooney Problem Check List' but the two groups were not differentiated in the frequency with which they checked problems as "sometimes" present. Bell's Adjustment Inventory has also been used extensively to measure social adjustment and not personal adjustment (Gautam, P. N., 1973). The Adjustment Inventory of Rajalakshmi (1973) has also been used by Asha, C. B. (1980) to study the health adjustment. Social Adjustment Inventory developed by Badami (1973) has also been used to find out the social adjustment. One more adjustment inventory has been developed by Srivastava, R. but that too has not been found appropriate for the use of present study.

All the adjustment inventories mentioned above as developed in India have, again, not been put to a fair use. They are yet in their infancy, hence their reliability coefficients have also not been confirmed by the use of different researchers. Further, they all are in Hindi form and could not be administered to Urdu-speaking subjects. The Bell's Adjustment Inventory has been developed for the use of adults only.
The feasibility of the California test of personality has been pointed out in the 'Educational Research Bulletin, New York, 1941 as the California test of personality is perhaps the most diagnostic of any test of this type. It is, however, best used for clinical procedure and is particularly useful with problem boys and girls. Syracuse University (1949) found that the California test of personality correlated more closely with clinical findings than any other personality test. Jackson (1946) reported that the personal, social, and total adjustment is more positively identified by the California test of personality. Buhler (1950) has pointed out that the California test of personality is a very useful instrument in obtaining controlled interview data and that the instrument may be regarded as a level I projective test.

(3) The Demos Dropout Scale: The Demos Dropout Scale developed by Demos, George D. (1965) to obtain information from the students in an objective way as the expressions of attitudes related to dropping out of school. The DDS helps in identifying students with strongly negative attitudes towards teachers and school (full details mentioned in the chapter "Tools").

IIIrd Phase:

The drop-out rate of students from their respective schools taken for the present study has been calculated from
the available school records also. This has been done classwise and section-wise and also determines the cohort according to the first year of schooling to VIII-grade in each school. (Details mentioned in the chapter - Analysis of data and results).

(4) Verbal Test of Creative Thinking: Verbal Test of Creativity Thinking developed by Mehdi (1973) has been used to collect the data. This test has been translated into Urdu language and administered to students. (Details in the chapter - Tools).

While keeping in view the feasibility of this test, it was employed to collect the data for the present study. Review of research studies shows that it has been used extensively. Singh, Ajit (1979) showed positive and significant relationship between verbal creativity in teachers and their self-concept and teaching behaviour. Singh, R. P. (1980) reported that creativity was found to be positively and significantly related to social, educational and total adjustment at .05 level but no significant relationship was found between creativity and frustration reactions and level of aspiration. Shukla, P. C. (1980) made a study of creativity in relation to sex, locality and school subjects. He pointed out that male students were more creative than female students. Locality, art-science students also were found different with regard to creativity. Agarwal, S. and Kumari, S. (1980) reported that creativity and risk taking
were significant at .01 level. Singh, R. P. (1983) in one more study showed that there were significant differences between students in central schools and private schools with regard to creativity.

(5) Socio-Economic Status Scales (Urban and Rural): The Urban SES Scale developed by Kapoor (1970) and rural SES scale prepared by Pareek and Trivedi (1964) were employed to ascertain the socio-economic status of the subjects taken for the present study (Full details in the chapter - Tools).

**Statistical Treatment of the Data:**

Keeping in view the nature of the data and objectives and hypotheses of the study, parametric statistical techniques were used because parametric statistical techniques are more powerful than non-parametric.

So far different methods for analysing the sociometric data have been employed, ranging from simple counting to use of factorial analysis and matrix algebra. The investigator, however, restricted the present study to only a few of the simple methods of data analysis. Sociometric data were tabulated and a summary matrix was prepared to identify different sociometric categories. A few sociograms were constructed to present the data graphically. Computation of sociometric indices, i.e., index of group integration were
made in order to know the social structure of the school and classrooms as well. The following formula was used to find out the class integration in terms of sociometric choices:

\[
\text{Class integration index} = 100 \times \frac{\text{Number of isolates} + \text{Number of populars}}{\text{Total number of students in a class}}
\]

For describing the social structure of the classrooms, the number of isolates and populars in each of the classrooms were presented. Critical ratios were worked out to test the hypotheses by the following statistical method:

\[
P = \frac{N_1p_1 + N_2p_2}{N_1 + N_2}
\]

\[
Q = (1 - P)
\]

\[
SE = \sqrt{pq \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}
\]

\[
CR = \frac{(p_1 - p_2)}{SE} - 0
\]

Procedure adopted for the selection of pupils of high and low drop-out incidence and high and low adjustment:

The Ss falling above and below median were considered as having high drop-out incidence and low drop-out incidence. The median was considered as the cut-point. Similarly Ss falling above and below median were considered as having high and low adjustment.

In order to study the significance of difference between means of high and low pupils with respect to socio-economic status, sociometric status and creativity, "t" was
used. Hypotheses were tested with the help of 't' test which follows:

\[
t = \frac{M_1 - M_2}{\sqrt{\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}}}
\]

The coefficients of correlation between drop-out incidence with socio-economic status, sociometric status and creativity; adjustment with all these variables; socio-economic status with sociometric status and creativity were calculated through product moment method. The formula used is as under:-

\[
xy = \frac{xy}{\sqrt{x^2 - x^2}}
\]

where symbols have their usual meanings.

Chi-square (x^2) test was also used to compare the differences between high/low drop-out incidence with respect to high/low sociometric status.

**Mode of Calculation:**

All the major statistical computations in the present study were carried out at the Council for Social Development, Survey Research Training Centre, New Delhi.