CHAPTER - III

METHOD & PROCEDURE
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The purpose of the present study is to bring out:

1. the differences in the self and other's perception of populars, neglectees and isolates, when they are required to evaluate their ownself and others on a list of 16 opposite pairs of adjectives;

2. the differences among three groups in the evaluation of 32 adjectives (unfolded from the 16 pairs) in terms of social desirability, importance and rareness; and

3. the differences among the three groups in terms of various bias components viz., leniency error, halo-effect and rater-trait interaction, in their ratings.

Operational Analysis of the Variables:

Following are the operational definitions of the terms used in this study.

a) Sociometric Status:

Sociometric status and social status are used interchangeably. Both terms refer to "the number of choices that each individual receives in a network of interpersonal relations".

b) Social Structure:

Social structure refers to "the patterns of choices to and from individuals revealing the network of interpersonal ratings among group members".

c) Sociometric Test:

A method of evaluating the social structure is the sociometric test.

d) Sociomatrix:

Sociomatrix, a two fold table, is the convenient way of organizing the sociometric results.

e) Sociometric Categories:

1) **Popular**: An individual receiving more choices on sociometric tests than could be expected by chance alone, is a popular. He is sometimes called a 'star'.

ii) **Neglectees**: The individual receiving relatively fewer choices than expected by chance is a neglectee. Even though such individuals receive some choices, yet they remain neglected by the majority of the group members. They are also called "Fringers"

iii) **Isolates**: An individual receiving no choice is an isolate. Although he is physically a member of the group, but is psychologically isolated. He is sometimes called an "Outsider".
f) Importance:

The magnitude of a subject's rating of a trait adjective in terms of its importance is the measure of the relative importance he/she attaches to a particular trait.

g) Desirability:

The trait which is rated to be desirable is the socially desirable trait.

h) Commonness:

The trait which is considered to be possessed by majority of people is the common trait, whereas, the trait which is rarely found to prevail among people in an uncommon trait.

PROCEDURE

The present study was conducted in two phases. In the first phase, three sociometric groups were required to assign ratings to themselves and others, in order to determine their self and others' perception; and were also asked to evaluate trait adjectives in terms of their importance, desirability and rareness. In the second phase, self and others' ratings of the three groups with respect to some selected traits, were analyzed to determine various errors. Since the present study required three groups of subjects, viz., populars, neglectees and isolates, first of all a sociometric test was used to identify these three groups. After their identification, all the three groups were asked to rate themselves and three other boys viz., a popular, a neglectee and an isolate, on 16 opposite pairs of adjectives,
using a 5-point scale. The 16 pairs of adjectives were then unfolded into 32 adjectives and the three groups were asked to evaluate these 32 adjectives in terms of their social desirability, importance and rareness. After the analysis of evaluative ratings of 32 adjectives, only 4 pairs of adjectives were picked up on which all the three groups differed significantly with respect to all the three types of ratings viz., desirability, importance and rareness. In the second phase fresh groups of populars, neglectees and isolates were identified and they were asked to rate themselves and others on the chosen 4 pairs of adjectives. The purpose was to find out the leniency error, halo-effect and rater-trait interaction for the three groups.

Sample

Four hundred and fifty students from fourteen sections of class 9th and 10th made the sample of this study. The sample was drawn from the Zakir Hussain Model Higher Secondary School, Aligarh; S.T. High School, A.M.U., Aligarh; and Girls High School, A.M.U., Aligarh. As per sociometric requirements, all the members of the sections were included in the sample.

Test Material:

Sociometric test:

The present study required three groups of subjects, viz., populars, neglectees and isolates. For the identification of sociometric status a sociometric test was used.
While administering a sociometric test, the members of a particular group are asked to choose from among themselves partners for some specific activity. In the present study each student was asked to nominate:

1) "Which three students of this classroom would you like to have as sitting companions"?

ii) "Which three students of this classroom would you like to play with during recess in school"?

iii) "Which three students of this classroom would you like to do a class assignment with you"?

Administration:

The following instructions were given to the subjects, before the sociometric test started:

"You have so many classfellows, you like some of your classfellows very much. You would be happy to do certain activities with those of your classfellows whom you like very much. Below are given some questions about your choices of classmates, you like much. Please answer these and be sure to fill in each space" (Appendix - 'A').

Scoring:

For the identification of different categories, Bronfenbrenner's (1945) scheme of scoring was used. According to it students can be classified into six cate-
categories - Popular, Above average, Average, Below average, Neglectee and Isolate - depending on the number of choices they received. The same is as under:

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of choices received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular</td>
<td>15 and above</td>
</tr>
<tr>
<td>Above Average</td>
<td>10 - 14</td>
</tr>
<tr>
<td>Average</td>
<td>9</td>
</tr>
<tr>
<td>Below Average</td>
<td>4 - 8</td>
</tr>
<tr>
<td>Neglectee</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Isolate</td>
<td>0</td>
</tr>
</tbody>
</table>

Bronfenbrenner (1945) has also given the estimate of critical sociometric status scores for varying number of choices applicable upto three sociometric criteria. The critical raw sociometric status scores are applicable to any group which consists of not less than ten and not more than fifty members. The table presented below elaborates the score system.
Table 1: Critical Raw Status Scores for Diverse Sociometric Situations.

<table>
<thead>
<tr>
<th>No. of choices allotted to each person for each criterion</th>
<th>One criterion critical score</th>
<th>Two criteria critical scores</th>
<th>Three criteria critical score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exp. value</td>
<td>Lower limit</td>
<td>Upper limit</td>
</tr>
<tr>
<td>1.</td>
<td>1</td>
<td>None</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>2</td>
<td>None</td>
<td>6</td>
</tr>
<tr>
<td>3.</td>
<td>3</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>4.</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>5.</td>
<td>5</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

Having identified 50 subjects in each of the three sociometric categories they were given a list of 16 pairs of adjectives. The subjects were required to (a) rate themselves, other populars, neglectees and isolates on 5-point scale in terms of each of the 16 pairs of adjectives, and (b) rate the importance, desirability and commonness of 32 adjectives unfolded from the 16 semantic differential scales.

Administration:

Instructions for self-ratings and ratings of others:

"Few days back you and your classmates were required to
indicate the choice of friends in different situations. On the basis of your responses, I have identified three categories of boys viz., (i) boys who are liked by most of the classmates, (ii) boys who are liked by few classmates, and (iii) boys who are not liked by the classmates.

Today you have to do something different. Below is given a list of opposite pairs of adjectives. Using each pair of adjective, you have to give numbers from 1-5 to indicate your judgement about the characteristics of yourself, a boy whom you think is liked by most of the classmates, a boy whom you think is liked by few classmates and a boy whom you think is not liked by the classmates. While rating others, first write the name of the most liked boy on top of the column and then rate him on the 16 pairs of adjectives. After completing the ratings of the most liked boy, write the name of the boy liked by few classmates on top of the second column and then rate him too in terms of the 16 pairs of adjectives. Do the same with the least liked boy" (Appendix - 'B').

Instructions for the ratings of importance, desirability and commonness of adjectives:

"Last time when I visited you, you were required to describe yourself and three boys of your class in terms of pairs of opposite adjectives. This time I am presenting you
the same adjectives one by one and not in pairs. You are requested to indicate how much the personal quality described by each adjective is 'IMPORTANT-UNIMPORTANT', 'DESIRABLE-UNDESIRABLE' and 'COMMON-UNCOMMON'. The meaning of these terms is given hereunder:

**Important:** An important characteristic is one, whose presence or absence in an individual on the whole make him a different type of person.

**Desirable:** A desirable characteristic is one which is in conformity to the norms of a particular society, i.e. which is liked by most people.

**Common:** A common characteristic is one which is more frequently found among people.

Taking each adjective, you have to give numbers from 1 to 5 to it, so as to indicate your judgement about its importance, desirability and rareness (Appendix - 'C').

**Instructions for the ratings of self and ratings of others on 4 pairs of adjectives, to locate the errors:**

"Today you will be required to judge yourself and your three class-fellows in terms of each one of the four pairs of adjectives written on two ends of a dotted line. You
have to place a crossmark (X) near left or right end of the line, if you have to indicate that person has much of the quality indicated by the adjective. The nearness to the mark to the end indicates the degree of quality written at the end. Placing a mark at the middle of line indicates that you are not in a position to decide whether the person has quality indicated by the left-hand side adjective, or the quality indicated by the right-hand side of the line.

"Remember, you have to rate (i) yourself; (ii) a boy, whom you think will be preferred by most of the classmates, (iii) a boy, whom you think will be preferred by few of the classmates, and (iv) a boy whom you think will not be preferred by any of the classmates" (Appendix-'D').

**STATISTICAL ANALYSIS:**

Means and standard deviations (SDs) of the self-ratings and other ratings of populars, neglectees and isolates were obtained. The t-test was applied to find out the significant differences between the self-ratings and other ratings of each of the three groups separately. Means and SDs of the three sets of ratings i.e., importance, desirability and commonness of the trait adjectives were also obtained for the purpose of inter-group comparisons. For the significance of
differences between means, the t-test was used.

Guilford's formulae (1954) were applied to find out the leniency error, halo-effect and rater-rate interaction error. As per Guilford's formulae we start with a matrix of arithmetic means for rater-ratee combinations. Each mean in the body of Tables a, b and c of Appendix 'L' is based on four observations (ratings on four pairs of adjectives). The variations among these means include the simple influences of rater differences and ratee differences which we must remove to find the rater-ratee interaction effects. The last columns in the said Tables show the deviations of rater means from the grand mean (4.08). These deviations ($X'_{kl}$) are the leniency errors of raters. Results are reported in Tables a, b and c of Appendix 'L'.

In order to obtain the halo-effect, the adjusted means of the rater-ratee combinations were drawn. The adjustment was a double one, eliminating the inter-rater differences and inter-ratee differences. From the mean in each cell of the Tables a, b and c of Appendix 'L' are deducted the corresponding deviations $X'_{kl}$ and $d_i$, which is the adjusted mean. This procedure ensures that the adjusted means for all raters and for all ratees will equal to the grand mean (4.08). The deviations of these adjusted means from the grand mean are the raters' halo-error.
Results are reported in Tables d, e and f of Appendix 'L'.

In order to estimate the rater-trait interaction error, the similar process was applied. Here, however, we average by combinations of raters and traits, ignoring individual differences among ratees. The steps are analogous to those in the above tables. Results are reported in the Tables g, h and i of Appendix 'L'.

The extension of the median-test was applied to find out the difference between the three sociometric groups, regarding the leniency error, halo-effect and rater-trait interaction.