CHAPTER IV

PROCEDURE OF THE DATA COLLECTION AND THE ROOLS OF RESEARCH

The preceding chapters, which explain the aims of the present study, its theoretical framework, need, plan of research and the related literature, initiate the researcher to present the methods and techniques of research. The present chapter, thus, proceeds to explain:

1. The sample chosen for the present study.
2. The tools of the research.
3. Administration of the tools.
4. The methods of analysing the data.

The sample for the present study has following characteristics which satisfy the criteria of a good sample:

(1) Himachal Pradesh has two types of geographical areas - one is that of high hills comprising Dholadhar and the high Shivaliks and the other is that of lower hills comprising lower Shivaliks. Both these areas are different in cultural language and the ways of living of the people. In the present study, the sample has been selected from both the areas.

(2) The sample has been selected from urban as well as from rural areas to avoid bias.
(3) All the types of Higher Secondary Schools - boys, girls and co-educational have been included in the sample.

The higher secondary schools that extended their permission and co-operation for the present study were:

(i) Government Boys Higher Secondary School, Simla (Simla District)
(ii) Portmore Girls Higher Secondary School, Simla (Simla District)
(iii) Government Higher Secondary School, Kandraur (Bilaspur District)
(iv) Government Higher Secondary School, Swahan (Bilaspur District).

The first two of the four schools are situated on the high hills and the last two on the lower hills. Thus, the sample has been selected from both type of the geographical areas comprising Himachal Pradesh. The first two schools are from the urban area and the last two from the rural area. The first school is a boys school (co-education upto V class), the second school a girls (co-education upto V class), whereas the last two schools are co-educational schools. Thus, all the types of schools - boys, girls, co-educational have been included in the sample. It deserves mention here that both the rural schools are co-educational schools whereas the urban schools comprise of one boys school and one girls school (co-educational only upto V class). No purely boys or girls school is available in rural areas of the Pradesh.
The unit of study in the present investigation is the higher secondary school. Thus, the researcher had no choice but to accept all the principals and teachers of the schools included in the sample. As far as students were concerned as already pointed out in the limitations, only one section of IX, X and XI classes was studied. In as much as the aim of the study was to find out the social interaction among students, so the number of students as existed in the sections studied had to be accepted. In this way the sample of the study consisted of 4 principals, 118 teachers and 405 students, in IX, X and XI classes. Classification of the sample on the basis of the variables undertaken in the present study has been given in the Appendix III. However, general information about the schools studied is given below:

Government Boys Higher Secondary School, Simla:

This school is situated in Simla City. As the very name indicates it is meant exclusively for boys. It is quite an old institution established in 1862. This institution has the privilege of having the English and the Indians as its Headmasters and Principals. Well qualified persons have guided this institution in the capacities of principals and teachers. So this institution has got long traditions of a good academic and co-operative atmosphere. Simpa was once the summer capital of undivided India. Now it is the capital of Himachal Pradesh. This school being situated at the
headquarter of the state is well-equipped and has well-qualified staff.

The building of the school is very much attractive and spacious. Rooms are available for all the classes, laboratories and for all the activities pursued in the School. This school has a canteen being run by a private contractor. This canteen is supervised by the principal of the school. Building of the primary classes was made by the boys themselves with their school building funds and by their own labour. Only skilled labour was paid. This, in fact indicates healthy social interaction and spirit of devotion to a good cause in the school.

Thirty-four teachers of different categories are working in this institution. Out of these teachers 19 are male-teachers and 15 are female-teachers. There are 772 boys in all, in the school.

There are many co-curricular activities in the school which provide opportunities in social interaction. The school has house system, school magazine, wall-magazine, guidance programme, annual picnic, dramas, debates, declamation contests and others such co-curricular activities as provide a good deal of social interaction among the principal, teachers and students.
Portmore Girls Higher Secondary School, Simla:

This school is also situated in Simla City and is exclusively meant for girls. It is situated in a calm and cold corner of the city and has got long beautiful deodar trees all around it making the atmosphere full of happiness and congenial for the general health and studies. This institution has been functioning since 1948.

The building of school is quite attractive and spacious. Room are available for all the classes, laboratories and for all the activities pursued in the school. The school has a canteen being run by a private contractor. This canteen is supervised by the principal of the school. There is a girls-hostel adjacent to the school. A warden looks after the students staying in the girls-hostel. The community-kitchen of the girls-hostel is also being run efficiently. Some of the teachers take their lunch in this kitchen which in fact provides a good deal of opportunities in social interaction.

There is a principal-quarter adjacent to the school. This enables the principal to look after the school even after the school-hours.

This school has mainly the female-teachers on its roll. The number of the male-teachers is quite negligible. There are 41 teachers of different categories working in
the institution. Out of which 38 are female-teachers and only 3 male-teachers. Male-teachers are there only to teach certain technical subjects. There are 942 students in the school.

A lot of co-curricular activities are being pursued in the school which provide a good deal of opportunities in social interaction. The school has house system. The students of the school have been divided into the houses by cutting the barriers of the compartmentalized school classes. The different houses organise competitions and work on certain projects. All this makes the atmosphere of the school congenial and conducive to studies. The school organises a picnic party annually. Science club also provides ample opportunities for the creative talents of the students. School magazine provides opportunities for the expression of literary talents of the students.

Government Higher Secondary School, Kandraur:

This is a co-educational institution situated in the Bilaspur district of Himachal Pradesh. This school is situated on the bank of Govind-Sagar. Certain small villages with a few houses are there in the locality of the school. The villagers mostly depend upon agriculture. They do not take much interest in the education of their children. The students are also mostly busy in helping their parents in agricultural pursuits and are left with a little time and
energy to pursue academic activities. This school has been functioning as a higher secondary school since 1958. Before this, it was a middle school.

There is no sufficient accommodation for all the classes. Many classes sit outside the building under the shade of the trees. The classes without rooms, thus, find it difficult to continue their studies in the event of rain or scorching heat of the sun. The students of these classes are thus many a time let off earlier than school-hours whenever the vagaries of the weather force to do so.

The school has no canteen of its own. The students and teachers have to go to local market during recess to have some refreshment.

Twenty three teachers of different categories are working in this institution. Out of which 17 are male-teachers and 6 are female-teachers. There are 448 students in all in the school. Out of which 339 are boys and 109 girls.

The school follows certain co-curricular activities which provide opportunities in social interaction.

Government Higher Secondary School, Swahan:

This school is also in the Bilaspur district of Himachal Pradesh. It is situated on the famous Sri-Naina Devi road. This is also a rural co-educational institution. The villagers in the vicinity of the school are very poor.
They have a little interest in the education of their children and are mostly busy with agriculture and their cattle. The su students too are busy in helping their parents in the household duties and have a little time to devote to their studies.

This school has been functioning as a higher secondary school since 1961. Before this it was a middle school. The school has no canteen of its own. The students and teachers go to the local market during recess to have some refreshment. However, some teachers including the principal prepare their own contributory tea in the school and have that during the recess.

It is a single section school. The number of students in all the classes is very small. The building of the school is sufficient to house all the classes. There are twenty teachers of different categories working in the school. Out of these teachers, eighteen are male-teachers and two female-teachers. The total strength of the students studying in the institution is 316, out of which 256 are boys and 60 girls.

The school pursues certain activities which provide opportunities in social interaction.

4.2 The Tools

The tools used in the present study were of two types, firstly, those which have been designed by other
researchers for their own work and secondly, those which the present researcher prepared himself, for the present study. The tools of the first type were standardized and those of the second type were non-standardized. A list of both the types of tools is as follows:

**Standardized Tools:**

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Name of the area explored</th>
<th>Tool administered on students</th>
<th>Tool administered on teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personality adjustment</td>
<td>Saxena; Personality Inventory</td>
<td>Bell, Adjustment Inventory</td>
</tr>
<tr>
<td>2</td>
<td>Socio-Economic Status</td>
<td>Kuppuswamy; Socio-Economic Status Scale (Urban)</td>
<td>Kuppuswamy, Socio-Economic Status Scale (Urban)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pareek and Trivedi, Socio-Economic Status Scale (Rural)</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Standardized tools (Self-prepared)**

1. A sociometric interaction questionnaire to the principals, teachers and the students.
2. A situational interaction questionnaire to the teachers and the students.

**4.21 Description of the Tools**

**Bell's Adjustment Inventory:** (Adult Form)

The Adult Form of the Adjustment Inventory provides five separate measures of personal and social adjustment:
The Inventory has been successful when used as an aid in counseling adults whose personal problems pertaining to any of the categories included in the test. It is suitable for use with both sexes. The high reliabilities of the separate measures made possible comparison of one individual with another. The measurement of five types of adjustments by the one blank permits location of specific adjustment difficulties. The use of the small letters a, b, c, d and e, corresponding to the five measures of adjustment, as well as the numbers, enables the counsellor to discover readily the particular questions relating to each measure. The total score may be used to indicate the general adjustment status. Tentative norms found by Santosh (1972) in a study on 190 trained graduates have been adopted in the present study to make the inventory suitable in Indian situation.

Saxena's Personality Inventory:

This inventory seeks to discriminate between well adjusted and poorly adjusted persons ranging in age groups from eleven years to adulthood. The inventory provides five
separate measures of adjustment - namely,

Element A - Home Adjustment.
Element B - Health Adjustment.
Element C - Social Adjustment.
Element D - Emotional Adjustment.
Element E - School (or College) Adjustment.

The inventory contains 90 items, seeking responses in "Yes", "No" or "?" (doubtful). Responses are obtained on an answersheet and the booklet can be used over and over again.

To know the level of adjustment of an individual three scales of norms have been provided by the designer. These are:

1. Stanine Norms on raw scores.
2. Norms based on PE units on T-scores.
3. Norms based on SD units on T-scores.

In the present study Norms based on PE units on T-scores have been used in the interpretation of the level of adjustment of the students.

Socio-Economic Status Scale (Urban):

This is a standardized tool for use in socio-economic investigations in urban parts of India.

The scale can be used by collecting information about an individual's occupation, education and income.
Persons getting scores on the scale are classified into different categories of status in the following manner:

<table>
<thead>
<tr>
<th>Scores</th>
<th>Category of status</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-29</td>
<td>I Upper</td>
</tr>
<tr>
<td>16-25</td>
<td>II Upper Middle</td>
</tr>
<tr>
<td>11-15</td>
<td>III Lower Middle</td>
</tr>
<tr>
<td>5-10</td>
<td>IV Upper Lower</td>
</tr>
<tr>
<td>Below 4</td>
<td>V Lower</td>
</tr>
</tbody>
</table>

Socio-Economic Status Scale (Rural):

This scale prepared by Udai Pareek and G. Trivedi can be used to measure socio-economic status of rural families. The scale calls for information about a rural family on important aspects of socio-economic status of a family - the occupation, education and social participation of the head of the family, the caste of the family, their land, house, farm powers and material possessions, and the general nature of the family.

After all the information about a rural family on the different nine categories has been collected and scored, it is easy to calculate the total score received by the family or the person concerned.

The total scores can be further categorized as follows:-
Symbol Category Scores on the Scale
A Upper Class Above 43
B Upper Middle Class 33-42
C Middle Class 24-32
D Lower Middle Class 13-23
E Lower Class Below 13

Sociometric Interaction Questionnaire:

Sociometric interaction questionnaires (Appendix I) were prepared by the researcher himself. Three different questionnaires were designed for the principals (Appendix I(a), the teachers (Appendix I(b) and the students (Appendix I(c)). The blanks started with eliciting the information about the personal data like name, designation, age, sex, etc. from the respondents.

The questionnaire pertaining to the principals studied two types of social interaction, i.e. firstly, social interaction between the principal and the teachers and secondly, social interaction between the principal and the students. In both the types of social interactions mentioned above two questions each were asked in connection with the teachers as well as the students. The first question concerned with positive social interaction and the second with negative social interaction.
The questionnaire which was meant for teachers dealt with three types of social interactions: social interaction between the teachers and the principal, social interaction between the teachers and the students; and the social interaction among the teachers themselves. In the first section which dealt with the social interaction between principal and the teachers only three questions were asked which have been designed to measure social distance between the principals and the teachers ranging from acceptance to rejection. The teachers were asked to tick any one of the following alternatives: Always, Often, Rarely. Two marks were given for always, one for often and zero for rarely. This was done arbitrarily. In the second section which dealt with the social interaction between the teachers and the students, two questions were asked, one pertained to positive social interaction and the other to negative social interaction. The section which dealt with the social interaction among the teachers was also designed similar to that of the social interaction between the teachers and the students. The sociometric questionnaire which was meant for students was designed similar to that of teachers. It was in Hindi so that the students could follow very well. It may be mentioned that the information collected through the sociometric interaction questionnaires meant for the teachers and students have been appended in the Appendix IV: Sociometrics.
Situational Interaction Questionnaire:

This questionnaire (Appendix II) was designed to find out the pattern of social interaction among principals, teachers and students in the higher secondary schools of Himachal Pradesh under certain situations.

The researcher visited three institutions and asked the principals and some of the teachers and students of the institutions to give certain situations in which some interesting aspect of the patterns of social interaction among the principals, the teachers and the students can be brought to light. Out of the situations pointed out by the principals, teachers and students of the institutions, sixteen situations were selected for a try out in two higher secondary schools. The responses were quite encouraging. After this try out only seven situations which were quite clear were included in the final questionnaire and the rest of the situations were deleted.

Separate situational interaction questionnaires were prepared for the teachers (Appendix II(a) and students (Appendix II(b)) Both the questionnaires were designed identically. Firstly, the situations were mentioned and then three answers pertaining to those situations were written. Both the teachers and students were supplied with separate scoring sheets. The respondents were to encircle on the scoring sheets any one of the three answers (a), (b) and (c) dealing
with a situation. Results were calculated by the following formula: \( RS = (a) - (c) \).

Reliability and validity of the questionnaire was found by using test-retest method. Reliability computed is as follows:

**Teachers:**

1. Social interaction between the teachers and the principals. \( .95 \)
2. Social interaction between the teachers and the students. \( .76 \)
3. Social interaction among the teachers. \( .60 \)

**Students:**

1. Social interaction between the students and the principal. \( .79 \)
2. Social interaction between the students and the teachers \( .63 \)
3. Social interaction among the students. \( .64 \)

4.22 **Administration of the Tools:**

The time for administering the tools in a school was fixed with the Principal of the concerned school through correspondence. When the researcher visited the school, the Head of the institution introduced him to all the members of the staff. He also asked a senior teacher to accompany the researcher to a class under investigation, introduce the researcher to the students of the class, and explain the
purpose and importance of filling in all the questionnaires to the students. The senior teacher deputed for the work as well as many other teachers co-operated with the researcher in the completion of his work. The researcher became quite informal with the students of the classes he investigated. The students took keen interest in the questionnaires. They welcomed the presence of the researcher as a relief from the routine of classwork. This way a good deal of co-operation came forth voluntarily. The students were told again and again and were convinced that the replies given by them will be used for research purposes only and will not be leaked to any student, teacher or principal. Fair and frank replies, thus, could be got from the students.

As for the teachers and the principals were concerned, the researcher requested the principal to ask the teachers to gather in some suitable room so that the questionnaires could be filled in easily and methodically. When the principal and all the teachers gathered in a room, the researcher, who had become quite information with all of them by that time, spoke about the purpose and importance of the study. He also impressed upon them that the replies given by them will be kept secret and will be used for the research purposes only. The teachers were seated comfortably in the room. When they started filling in the questionnaires, they were requested to sit at a distance so that their questionnaires must not be
seen by their colleagues. In this way the rapport was fully established. The teachers and the principals took keen interest in filling in the questionnaires.

All the tools were administered to the students, principals and teachers in the following order:

1. Personality inventory.
2. Socio-Economic status scale.
3. A situational interaction questionnaire
4. A sociometric interaction questionnaire

The sociometric interaction questionnaire was got filled in by the respondents in the end because by this time they had become very much information with the investigator.

4.23 Patterns of Analysis of Data:

The data collected was analysed as follows:

1. The data was summarized by preparing NXN sociometric matrices.
2. The sociometric data, thereafter was interpreted in terms of the variables mentioned earlier. This was done with a view to study the influence of the variables on the patterns of social interaction among the principals, teachers and the students in the higher secondary schools of Himachal Pradesh. Computer has been used for computation of the results. Firstly, the patterns of interaction taking place in all the schools of the sample were studied collectively, and then the comparison was made between urban
and rural schools, and between boys and girls schools.

Three-point scale was used for measuring the social distance in the social interaction between principals and teachers and principals and students.

Following statistical formulas were used for computation:

(1) Gama
\[ y = \frac{Efa - Efi}{Efa + Efi} \]

(2) Linear Correlation
\[ r = \frac{NEXY - EX \times EY}{\sqrt{NEX^2 - (EX)^2 \times NEY^2 - (EY)^2}} \]