CHAPTER-IV
METHOD AND PROCEDURE

This chapter includes the design of the study, sample procedure, tools used, administration of the tests, data collection and statistical techniques used.

4.1 DESIGN OF THE STUDY

It is necessary to adopt a systematic procedure to collect the necessary data, which helps to achieve the objectives and to test the hypotheses of the study. The present study was designed to investigate value patterns of school teachers in relation to life satisfaction and personality dimensions and also to see the differences in value patterns in relation to life satisfaction and personality dimensions based on gender, levels of school teaching, teaching subjects, teaching experience, type of school management, school area where teachers studied and marital status. The methods of investigation used were descriptive, exploratory survey.

The present study is descriptive in the sense that it has aimed at exploring the nature and distribution of variables. As such, it has described the value patterns, life satisfaction and personality dimensions of school teachers. It is exploratory survey in the sense that the investigator has tried to explore the relatively less explored field of value patterns of school teachers in relation to life satisfaction and personality dimensions. Although much work has not been done in this field, yet whatever studies are there, they require a thorough probe because of the lack of consistency as far as results are concerned.

4.2 SAMPLE

In research, it is impossible to study the whole population for which the problem is investigated. Hence, every research has to resort to sampling. The
concept of sampling has been introduced with a view of making the research findings economical and accurate. A sample is the representative portion of the population selected for observation and analysis. Multi-staged, stratified, random sampling techniques for the selection of the sample were used in the present study. It was not possible to cover the entire teacher population of the state of Punjab. So, sample was drawn from the urban areas of Ferozepur district. The district is further divided into eight blocks. The location of these blocks has been shown in Figure 4.1.
District-wise and Tehsil-wise list of government and non-government; elementary, secondary and senior secondary schools was procured from Punjab School Education Board, Mohali. On this basis a list of government and private; elementary and secondary schools of urban areas of Ferozepur district was prepared. It was found that urban areas of each block of the district has 8 to 21 schools. Name of the block, name of the school, level of school, number of male and female teachers, type of school management were written on the slips. All the slips were given serial numbers from 1 to 93. Every even numbered slip was picked up and then the name of the block, name of the school, number of male and female teachers, elementary or secondary level teachers, type of school management were noted down from the slip in a diary. Subsequently, same procedure was followed for other slips also. Making a choice in the way gave the total number of schools as 46 and the number of schools varied in different blocks from 4 to 10 depending upon the size of the block. It was also decided that at least 4-8 schools from each block be selected randomly so as to make the sample representative of the district as a whole. In this way 600 school teachers (300 elementary level school teachers out of whom 150 male and 150 female teachers; and 300 secondary level school teachers out of whom 150 male and 150 female school teachers) formed the sample of the study. The total number of schools from each block of urban areas of Ferozepur district and the list of the schools selected from each block in respect of level of school, gender has been presented in the Table 4.1.
Table 4.1 Block-wise Break up of the Sample

<table>
<thead>
<tr>
<th>Ferozepur District Blocks</th>
<th>Number of Schools</th>
<th>Elementary School Teachers</th>
<th>Secondary School Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Initial</td>
<td>Final</td>
</tr>
<tr>
<td>Makhu</td>
<td>4</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Zira</td>
<td>4</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Talwandi Bhai</td>
<td>4</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Ferozepur</td>
<td>7</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td>Guru Har Sahai</td>
<td>6</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Jalalabad</td>
<td>9</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Fazilka</td>
<td>6</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Abohar</td>
<td>6</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Total : 8</td>
<td>46</td>
<td>158</td>
<td>150</td>
</tr>
</tbody>
</table>
4.2.1 DESCRIPTION OF THE FINAL SAMPLE

District Education Officer concerned, (DEO Elementary and DEO Secondary) issued a demi-official letter to the principals of the concerned schools for extending co-operation and providing necessary facilities in conducting the research study. To start with, 850 teachers were contacted who volunteered to co-operate in the study. But during the process of filling up of the forms only 754 teachers were left and out of 754 teachers, ultimately 600 teachers were retained. (154 teachers were left out because of the incomplete data and certain cases as divorcée, widow, widower, issueless and recent death of a close family member were also left out) Out of whom 300 were elementary level teachers and 300 were secondary level teachers. Out of 300 elementary level teachers, 150 were male elementary teachers and 150 were female elementary school teachers. Out of 300 secondary level teachers, 150 were male secondary level teachers and 150 were female secondary stage teachers. Final break up of the sample is shown in Table 4.2

Table 4.2 Final Breakup of the Sample
(Sex and levels of teaching wise)

<table>
<thead>
<tr>
<th>Levels of Teaching</th>
<th>Sex</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Level School Teachers</td>
<td>Male</td>
<td>158</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>206</td>
<td>150</td>
</tr>
<tr>
<td>Secondary Level School Teachers</td>
<td>Male</td>
<td>189</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>201</td>
<td>150</td>
</tr>
<tr>
<td>Total Male and Female Teachers</td>
<td>Male</td>
<td>347</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>407</td>
<td>300</td>
</tr>
<tr>
<td>Total Teachers</td>
<td></td>
<td>754</td>
<td>600</td>
</tr>
</tbody>
</table>

The age range of teachers was between 21 years to 58 years and experience of teaching ranged between 1 month to 35 years.
The government school surveyed in this study is one which is administered, funded and run by the State Government or by the Local Bodies or by Municipal Corporation or Municipal Committee or Cantonment Boards or District Boards of School Education. The private school on the other hand is recognised, but may or may not be funded by the State Department or any other body. An elementary school teacher is defined as a teacher who teaches up to class 8th and secondary school teacher is one who teaches upto class 10th. Urban school is one which is located in a town i.e., with in Municipal Committee limits and rural school is the one which is located in a village. Science teacher is one, who teaches physics, chemistry and biology subjects and humanities teacher is one, who teaches mathematics, social studies and languages only.

4.3 TOOLS EMPLOYED

For the collection of data, it was necessary to adopt a systematic procedure. For every type of research there is need of certain instruments to explore new fields. The instruments employed for the collection of data are called tools. For a successful research, selection of proper tools is very important. The effort was made to select appropriate standardised tests of values, life satisfaction and personality dimensions.

Tools used for studying value patterns, life satisfaction and personality dimensions of school teachers were as follows:

A) Personal Data Sheet (Prepared by the investigator)
B) Teacher Values Inventory (TVI) (By H.L.Singh and S.P.Ahluwalia, 1994)
C) Life Satisfaction Scale (L-S Scale) (By Promila Singh and George Joseph, 1996)
D) Eysenck’s Maudsley Personality Inventory (M.P.I.) (Punjabi and Hindi version translated by S.S.Jalota and S.D.Kapoor, 1975)
These tests were selected due to (i) their suitability for the issues to be resolved, and (ii) their meeting the vigorous standards of reliability and validity as psychometric instruments.

Description of Tools

(A) Personal Data Sheet (Appendix-1)

It was developed for collecting biographical information from the teachers who were chosen for the study with a reason to have a means of investigating the background and personal characteristics like age, sex, level of school teaching, teaching subjects, teaching experience, type of school management, school area where teachers studied and marital status of teachers. But inspite of all the above mentioned factors, there were some general principles and procedure which were followed while constructing a data sheet (type and nature of test- items). While making the preliminary draft of the Personal Data Sheet, the researcher consulted some existing Personal Data Sheets. The preliminary draft had more number of items required for collecting the personal data. A rough idea of the reliable /suitable items was obtained by trying out on a small group of subjects from the target population. The items were then selected, edited and carefully worded instructions were issued which indicated briefly the nature and the purpose of the data sheet. The final manuscript of the preliminary draft was then submitted to the jury of experts, supervisor, school teachers and colleagues for their opinion. Certain modifications were suggested. After the necessary modifications in the light of experts suggestions, the final draft of the Personal Data Sheet was thus prepared.
(B) **Teacher Values Inventory (TVI)** (By H.L. Singh and S.P. Ahluwalia, 1994) (Appendix-II)

This inventory was chosen for two main reasons. First, because six value areas of this inventory were most clearly defined and most widely studied and secondly, the inventory was validated against a well established tool. The Teacher Values Inventory had been originally constructed for teachers specially and standardised on teachers working in schools. It has been based on the six values, the theoretical, economic, aesthetic, social, political and religious. The classification is based directly upon Edward Spranger’s “*Types of Men*” (1928).

The value categories may be described briefly as follows:

- **Theoretical value**- characterised by a dominant interest in the discovery of truth and by an empirical, critical, rational and intellectual approach.
- **Economic value**- emphasising useful and practical values, characterised by dominance in money matters.
- **Aesthetic value**- placing the highest values on form and harmony, showing an interest in and enjoying fine arts, music etc.
- **Social value**- indicating love of and service to people, consisting mainly of altruism and philanthropy.
- **Political value**- showing interest primarily in personal power, influence and renown.
- **Religious value**- concerning with faith in God and interest in activities and rituals concerned with one’s own religion.

**Reliability**

As the total number of questions in the Teacher Values Inventory is 25, question number 25 was included in both the sub- scales to keep the number of questions equal i.e., thirteen in the two sub scales. The mean reliability coefficient, using a Z -transformation is 0.81 (Split-Half-Reliability which is quite high for the conduct of this investigation).
Validity

Coefficient of correlation was worked out by comparing the scores with Kulshrestha’s Hindi version of the ‘Study of Values’ and was found to be quite high and ranged between 0.36 to 0.61 (all significant at 0.01 level of confidence).

Administration

The Teacher Values Inventory is self-administering. The inventory was administered individually as well as in groups. It was found that teachers can fill in the responses themselves after reading the directions. However, it was desirable to give a few instructions.

- It was made clear that the answers should be written in the answer sheet only on pages with numbers corresponding to the question numbers. Nothing should be written in the TVI booklet by the respondents and no marks are to be made.
- It was pointed out clearly that the first preference had to be marked as ‘1’ and the last preference as ‘6’
- Asking of too many questions was discouraged. It was sufficient to tell them about the purpose of the test that it intended to find out.
- There was no time-limit, but it generally required 25-30 minutes to answer the questions in the inventory. The testees were not to be stopped before they finished but they were encouraged to work as quickly as they could.
- It was made sure that the respondents answered all the questions in the inventory.

Administration of the inventory began by having the respondents complete the personal data information on the sheet (name, age, sex, date etc.) Care was taken to provide a quiet environment where the respondents could concentrate and were free of distractions.
Scoring

Six scoring keys have been provided for the inventory, one for each of the values.

Step 1. Place Key "T" on the answer-sheet. To check that the key is placed properly, count the number of digits in any one of the five big boxes of squares. It should show 5 digits only.

Step 2. Count all the 1's and multiply the number by '6'; Count all the 2's and multiply the number by '5'; Count all the 3's and multiply the number by '4'; Count all the 4's and multiply the number by '3'; Count all the 5's and multiply the number by '2'; and finally count all 6's and multiply the number by '1'.

Step 3. Add up all the numbers and write the total in the box 'T' against raw scores (RS) provided at the bottom of the answer sheet.

Step 4. Follow the same procedure for the rest of the keys.

Step 5. To verify, check up the grand total of all the scores which should be 525.

(C) Life Satisfaction Scale (L-S Scale) (Appendix-III)

(By Promila Singh and George Joseph, 1996)

Life satisfaction is referred to as inclusive of the following dimensions.

- Taking pleasure in everyday activities,
- Considering life meaningful,
- Holding a positive self-image,
- Having a happy and optimistic outlook,
- Feeling success in achieving goals.

These dimensions can be referred to as "current" life satisfaction (Neugarten et al. 1968). This scale intends to measure the life satisfaction of the employees which includes the all round activities of the employee. Thus, the present scale was constructed by considering the above five dimensions of life satisfaction.
The scale was standardised on 600 male and female employees. The range of the age was between 25 to 55 years, the tool may conveniently be administered to the employees of every level operating in the context of industries or the other organisations.

Reliability

The test-retest reliability was computed after a lapse of 8 weeks. The obtained quotient was 0.91 which is quite high.

Validity

Life Satisfaction Scale coefficients of correlation between the scores of the present scale and Life Satisfaction Scale of Alam and Srivastava (1971) were computed. The coefficient of correlation was found to be 0.83.

Scoring

The scale consisted of 35 items, each item was rated on the five point scale – Always, Often, Sometimes, Seldom and Never and which were respectively scored as 5,4,3,2 and 1. The items are related to the individual’s all round activities and thus gave a global picture of one’s life satisfaction level. The higher the score on the life satisfaction scale, the higher would be the level of life satisfaction.

Norms

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>Range of Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>136-175</td>
</tr>
<tr>
<td>Average</td>
<td>81-135</td>
</tr>
<tr>
<td>Low</td>
<td>35-80</td>
</tr>
</tbody>
</table>

Table 4.3 Norms for the Life Satisfaction Scale
MAUDSLEY PERSONALITY INVENTORY (MPI) (Appendix-IV)

By H.J. Eysenck (Hindi and Punjabi versions by S.S. Jalota and S.D. Kapoor, 1975)

Purpose

The Maudsley Personality Inventory (MPI) is a brief, but standardised, as well as an easily administered and scored inventory which is designed for assessing Neuroticism-stability and Extraversion-introversion dimensions of personality. It is suitable for normal and abnormal adults and also for adolescents. This test can be used as a group or an individual test, for persons of ages 15 to 60 years and above. The vocabulary required is that of an average newspaper reader. Although no time-limit is enforced for testing, but the short-scale takes about 3 to 5 minutes, while the long-scale takes about 15 to 20 minutes. Items from serial number 1 to 12 given on the front page of the test booklet make the short-scale, while all the 48 items of the booklet constitute the Long Scale. Each of these items is answerable by making a tick mark into one of the three Boxes, marked with □. Instructions to answer the questions are given on the front cover page of the test booklet.

Validity And Reliability

The full scale as administered to seventy-five male and seventy-five female post-graduate students at Chandigarh. For the full scale the mean neuroticism score for the male and female groups combined was 23.2 with a S.D. of 10.0. For the extraversion scale the mean combined score was 27.8, S.D. 6.2. Findings with the short scale were similarly showing a mean neuroticism score of 7.1 with S.D. of 3.1; and an extraversion score of 8.2 with S.D. of 2.5. The correlation between N and E for the long scale was 0.223. The reliability coefficient by comparing the 1st half with 2nd half, yields for N, = +.358. When corrected to full length, these figures become for N, +.71, and for E for, +.42.
Instructions For Administration

The test items were printed on both the covers of the test booklets. They were 48 in number. The test was given under standard conditions for testing. It was always desirable to establish good ‘rapport’ with the testees, whether tested individually or in groups. They were put at ease and in a cooperative frame of mind when the test began. They were told that they would, in the long run, be doing themselves most good by being frank and trustful in their answers. They were also assured that the responses obtained on the inventory were to be kept as confidential.

The test-booklets of MPI were distributed on to each testee who filled in his name, date and all other necessary entries, one by one on the front page of the booklet. They were told not to read the questions unless asked to. Now, while the investigator read (before a group) the instructions aloud from the front cover of the booklet, the testees were also asked to listen them silently. The instructions were read slowly, questions and doubts were invited and removed before allowing them to begin the test. It was ensured that the instructions had been understood correctly by all. The testees were reminded not to ponder on each question, but to give the first response that occurred to them. When the testees had finished the test, they were asked to check back and make sure that they had not missed any question, their names or other particulars on the booklets.

Instructions for Scoring

The test was scored directly from the test-booklets. (It was made clear to the testees that their answers must be marked inside the boxes provided for the alternatives of the given items). The test booklets were scanned to ascertain that only one answer has been marked for each question. The scoring stencil was now placed along the anchoring points made on the test booklet. The raw scores were read off and added to give a total of N and E scores respectively. It was noted that all the items answerable in category “Yes” are assigned with a weight age of 2
scores (expecting 8 items Nos. = 14, 16, 18, 22, 24, 30, 36 and 40 – which belonged to extraversion dimension and re-assigned 2 scores only when answered in category "No"); and all "?" answers were assigned with one score when the testees marked them in the middle category. The response directions of correct answer (KEY) are given in Table 4.4- Column 5.

Table 4.4 Distribution of items in the Neuroticism and Extraversion Dimensions of the Long and Short Scales of the M.P.I.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Items Number in Test Booklets</th>
<th>Number of Items</th>
<th>Maximum Raw Scores</th>
<th>Correct Response Directions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism in Long Scale</td>
<td>2,3,6,7,10,11,13</td>
<td>24</td>
<td>48</td>
<td>&quot;Yes&quot;</td>
</tr>
<tr>
<td></td>
<td>15,17,19,21,23,25,27,29,31,33,35,37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>39,41,43,45, &amp; 47</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism in Short Scale</td>
<td>2,3,6,7,10 &amp; 11</td>
<td>6</td>
<td>12</td>
<td>&quot;Yes&quot;</td>
</tr>
<tr>
<td>Extraversion in Long Scale</td>
<td>1,4,5,8,9,12,20,26,28,32,34,38,42,44,46,48</td>
<td>16</td>
<td>32</td>
<td>&quot;Yes&quot;</td>
</tr>
<tr>
<td></td>
<td>14,16,18,22,24,30,36 &amp; 40</td>
<td>8</td>
<td>16</td>
<td>&quot;NO&quot;</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion in Short Scale</td>
<td>1,4,5,8,9 &amp; 12</td>
<td>6</td>
<td>12</td>
<td>&quot;Yes&quot;</td>
</tr>
</tbody>
</table>
The 48 items of the test booklet are distributed among the two personality dimensions and scored as shown in figure 4.4. Each item has three response alternatives, scored 0, 1, 2 from lower to higher levels of neuroticism and extraversion and any single item contributes to only one of the two dimensions. The total composite neuroticism or extraversion score is simply the sum of raw scores on all the 30 items in the two dimensions. This amounts to an approximately equal weightage of each dimension its contribution to total personality stability.

4.4 DATA COLLECTION

The data was collected from November 2003 to January 2005. The principals of the selected schools were contacted and formal permission was sought to work with their teachers. It was ensured that the data would be used only for research purpose and would be kept confidential. With the permission of the principals, the teachers’ time-table was procured and time schedule and free periods of selected teachers were noted. These teachers were contacted personally by the investigator during their free periods. After following all the formalities, which were required to establish a rapport with the teachers, the first and second tool i.e., Personal Data Sheet and Teacher Values Inventory were personally got filled from the teachers after giving preliminary instructions by the investigator. Before administering the tools teachers were requested to give their natural free and frank responses to the items. Although no time limit was imposed, yet teachers took about 30-40 minutes to fill up both the tools.

Same teachers were contacted the same day during their another free period or during the recess, the third and fourth tool i.e., Life Satisfaction Scale and Maudsley Personality Inventory were administered. For filling life satisfaction scale a teacher took about 10 to 15 minutes and for filling Maudsley Personality Inventory 20 to 25 minutes.
There were some instances when the teachers were contacted individually during holidays at their homes or in the evenings. Many times, some teachers had to be contacted thrice or more times as some of the teachers were found out to be unwilling and not co-operative. Before leaving the premises of the school or the house of the teacher, it was ensured that all the four tools of all the teachers had been duly filled and collected.

The scoring was done for each tool according to their prescribed scoring procedure and data thus collected and scored was subjected to statistical analysis.

4.5 STATISTICAL TECHNIQUES USED

An analysis of the data and its interpretation was undertaken in an effort to draw logical inferences with a view to gauging what contribution the present study could make in the scientific area of values of teachers in relation to life satisfaction and personality dimensions and also concerning the achievement of main and subsidiary objectives of the study.

Analysis of the data in the present study includes the investigation into the value patterns, life satisfaction and personality dimensions of school teachers and also the comparison of rank orders of values of teachers with regard to sex, levels of school teaching, teaching subjects, teaching experience, type of school management, school area where teachers studied and marital status were made. For the above purpose, the following statistical techniques were employed:

- Scoring, recording, tabulating the data
- Calculating mean, mode, median, standard deviation, skewness, kurtosis, minimum scores, maximum scores obtained and their range, rank order, coefficient of correlation and t-ratios.
- Descriptive statistics, namely mean scores show the average performance of the group. To find out the hierarchy of values of teachers, the measure of central tendency ‘Mean’ was calculated.
• The Standard Deviation of any distribution shows the dispersion or the scatter of the scores in that distribution along with mean. Hence, in this study the standard deviation was calculated to find out the homogeneity of the groups of teachers under study.

• Pearson Product Moment coefficient of correlation was worked out to study the interrelationship of different variables.

• To compare the values between different groups of teachers, the 't' test was used. To test the significance of t-ratios the following levels of confidence were established.

  • Not significant
  • Significant at 0.05(*) and 0.01(**) levels of confidence