CHAPTER III

METHODOLOGY AND PROCEDURE

Data collection is essentially an important part of the research process. It gives objectives, quantitative and qualitative judgement which helps the researchers to develop more precise generalisation, qualified by exactness, consistent and completeness. Data collection is systematic, intensive, scientific and objective analysis of controlled observations recorded on paper to find facts, which are directed towards the solution of the particular problem based upon the empirical evidences. Thus the research activity is aimed at evaluation, interpretation and to discover relationships that exist between existing non-manipulated variables.

Since, it is not possible to encompass the entire population in order to collect data for any research problem in the social science. One has to delimit the sample to be selected from the population under study and advise appropriate tools for measuring the attributes concerned. The present investigation has been undertaken to study the work motivation and job-satisfaction of physical education teachers of high school in Himachal Pradesh in relation to sports facilities.

The present research is of survey type. The terms “survey” suggest gathering of information relating to the research problem. Survey according to Whitney (1956) is an organised attempt to analyse, interpret and report the present status of a source institution, group or area.

In order to understand any type of research it is necessary to plan and design all
the procedure to be used before hand. It help to achieve economy in time and co-
ordination of efforts.

The following factors were considered while collecting the data:

3-1 Population
A population is usually defined as all the members of any well defined class of people,
events or objects. It represent a census or complete enumeration method in which all the
units are reached or at least theoretically conceived to have been reached.

In the present study, the population consisted of all physical education teachers
serving in the government high schools of Himachal Pradesh.

3-2 Sample
The primary purpose of research is to discover principles that have universal application,
but to study a whole population in order to arrive at generalisation would be
impracticable, if not impossible. The process of sampling makes it possible to draw valid
inferences on generalisation on the basis of careful observation of variables with in the
relatively small proportion of the population.

The small representative proportion of population is called sample.

To obtain a representative sample, the researcher selected each unit in a specified
way under controlled condition. Sampling is the base of scientific investigation. The
sample selected should exhibit the characteristic of entire population.

The sampling of present study comprises 300 physical education teachers of high
schools of Himachal Pradesh. The sample was drawn from 25 schools of each district
randomly.
3-3 Research Tools Used

For conducting scientific research, the researcher requires certain tools to gather relevant information. It is universally acknowledged that the selection of tools is of vital importance for conducting meaningful research. The researcher has to select some tools out of available ones. In case of non-availability of suitable tools, researchers may construct his own tool or may modify the available one. Following tools were used in the present study to collect the required data:

3-3.1 Work-Motivation Scale (Hindi) by K.G. Agarwal (1988)

As the present study was related with the work motivation the investigator used work motivation scale prepared by K.G. Agarwal (Appendix –I) on the subject. The work motivation scale consisted of 26 items about different aspects of work motivation process. There were five options regarding every statement which are as follows:

A  B  C  D  &  E

Statements included in the work-motivation scale have following features:

1. All statements are to be marked on ABCDE or a Five point Scale
2. The statement are not of ‘Yes’ and ‘No’ type.
3. All the statements are selected to various aspects of work-motivation.
4. The statements are in the form of opinion rather than a narration of fact.
5. The statements are simple, deep and specific.

(a) Scoring Scheme

All the items were likert type which were rated on the five points scale. Since the items were likert types, summated scoring is done by assigning 5 to the most positive response
and 1 to the extreme negative response. So in this way scores, 5, 4, 3, 2, 1 were given to each items alternatively, a, b, c, d, e can also be assigned respectively.

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Measure work-motivation fully</td>
</tr>
<tr>
<td>B</td>
<td>Measure work-motivation to a great extent</td>
</tr>
<tr>
<td>C</td>
<td>Measure work-motivation to some extent</td>
</tr>
<tr>
<td>D</td>
<td>Measure work-motivation to little extent</td>
</tr>
<tr>
<td>E</td>
<td>Does not measure work-motivation</td>
</tr>
</tbody>
</table>

**Scheme**

**Scores**

(b) **Factors Score of Work Motivation**

Factor score can be worked out by using the following classification:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Factor</th>
<th>Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dependence</td>
<td>15, 16, 17, 18, 21, 22 &amp; 23</td>
</tr>
<tr>
<td>2.</td>
<td>Organisational Orientation</td>
<td>1, 8, 11, 12 &amp; 13</td>
</tr>
<tr>
<td>3.</td>
<td>Work Group Relation</td>
<td>6, 14, 19 &amp; 20</td>
</tr>
<tr>
<td>4.</td>
<td>Psychological Work Incentives</td>
<td>24, 25 &amp; 26</td>
</tr>
<tr>
<td>5.</td>
<td>Material Incentives</td>
<td>2, 3, 4 &amp; 5</td>
</tr>
<tr>
<td>6.</td>
<td>Job-Situation</td>
<td>7, 9 &amp; 10</td>
</tr>
</tbody>
</table>
3-3.2 Job-Satisfaction Questionnaire (JSQ) for Teachers

The researcher used job-satisfaction questionnaire (JSQ) developed by Kumar and Mutha (1976) (Appendix –II) for the present investigation for its modernity and reliability over other questionnaire and its specific utility for secondary teachers.

Job-satisfaction questionnaire (JSQ) developed by Kumar and Mutha consist of 29 ‘Yes’ ‘No’ types items. This questionnaire was developed with a view to provide handy instrument to assess the job-satisfaction of secondary school teachers for fundamental and applied research. The satisfaction and dissatisfaction of one’s job depend upon the positive or negative evaluation of one’s own success or failure in the realization of personal goals and the perceived contribution of the job to it. The questionnaire is a self-administering questionnaire with no time frame to complete the questionnaire. The only care is to see that each subject responds on each item.

(a) Scoring

All items except item number 6 and 29 are positively worded and for each positive response a score of ‘1’ is given. For negative response no score will be given. The item number 6 and 29 are scored just the opposite. The sum of these scores gives the job-satisfaction score which ranges between 0 to 29, for least job-satisfaction to highest job-satisfaction for the subject.
(b) Factors Score of Job-Satisfaction

The items of (JSQ) are classified into four different aspects of job-satisfaction in teaching:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Factor</th>
<th>Item Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Work and Work Condition</td>
<td>1, 2, 3, 4, 5, 13 &amp; 20</td>
</tr>
<tr>
<td>2.</td>
<td>Salary, Security &amp; Promotional Policies</td>
<td>6, 7, 8, 9, 10, 11, 12 &amp; 14</td>
</tr>
<tr>
<td>3.</td>
<td>Institutional Plan &amp; Policies</td>
<td>15, 16, 17, 18, 19 &amp; 21</td>
</tr>
<tr>
<td>4.</td>
<td>Authority, Co-Workers, Its Competence &amp; Functioning</td>
<td>22, 23, 24, 25, 26, 27, 28 &amp; 29</td>
</tr>
</tbody>
</table>

3-3.3 Check List

A self-prepared check-list, keeping in view the sports facilities required at school level mentioned in 'Five Year Plan' Sports Policy Document was used by the Investigator to collect the data regarding sports facilities (Appendix-III).

3-4 Statistical Techniques Used

In order to make comparisons among the groups framed in the existing sports facility level, statistical techniques of t-test was used to find the significance of differences in the mean score on work motivation and job satisfaction. For this following formula was used:

\[ t = \frac{M_1 - M_2}{\sqrt{\frac{(SD_1)^2}{N_1} + \frac{(SD_2)^2}{N_2}}} \]
where

\[ M_1 = \text{Mean score of first groups} \]
\[ M_2 = \text{Mean score of second groups} \]
\[ SD_1 = \text{Standard Deviation of first groups} \]
\[ SD_2 = \text{Standard Deviation of second groups} \]
\[ N_1 = \text{Sample size of first groups} \]
\[ N_2 = \text{Sample size of second groups} \]

df was calculated by subtracting 2 from N e.g. \((N-2)\), 0.05 and 0.01 level of confidence were used for evaluating the obtained "t-value".