CHAPTER-III

METHOD AND PROCEDURE

III.1 Introduction:

Physical Education and sports is usually conceived as physical pursuit because of the involvement of physique, at the apparent level. Physical Education and Sports, being human natural phenomenon, has the potential of providing means of self expression for people. There is great need of physical education and sports in modern life. Now a days, man is so much lost in artificial life after giving up the natural life that he feels necessity of adopting special methods for physical development.

Keeping in view the importance of sports department in promoting physical education and sports, the present study has been undertaken to evaluate the working and administration of the sports department.

According to Weber’s dictionary, methodology is the system of methods of classification as is applied by art. The study of procedure, fundamental to the organization of the field of study. In simple words we can say that methodology means the methods or procedure by which a research is conducted depending upon the requirements of research problem.

III.2 Primary and Secondary Sources:

Primary Sources:

The primary data collected for the present study mainly consisted of the views of coaches on various kinds of sports activities, programmes and their impact on the development of sports in the state. The sports functionaries/ machinery i.e. persons involved in handling and development of sports were also
asked to give their responses through structured questionnaire. The main functionaries contacted for this purpose were officials/officers of sports department selected for this purpose and coaches of different sports offices at each district headquarters. The primary sources are mainly as following.

(a) Questionnaire; and,

(b) Interviews

Secondary Sources:

Secondary data are those that have already been collected by others and which are usually available in the following secondary sources:

i. Reports of various committees and commissions appointed by the Himachal Pradesh Government.

ii. Annual administration reports of the department and government notifications;

iii. Himachal Civil Services rules and Himachal Financial rules;


v. Books;

vi. Sports Journals, periodicals and bulletins; and,

vii. Unpublished materials, thesis and dissertations:

Both of the sources were used in collection of the data. Data mostly collected from the administrators and coaches of the Himachal Pradesh Sports Department by interviewing them by the researchers personally. Respondents were assured that the information provided by them will be kept confidential and will be used solely for academic purposes and for research work.
Method:

Descriptive method of research was followed in the conduct of the present study. The descriptive studies, while making use of survey method provide information useful for solution of local problems and at times provide data to form the basis in research of more fundamental nature Weisberg and Rowen (1977) are of the view.

Survey research permits us to study public opinion as well as attitudes. It can also be used to obtain factual information. Not only is there variety in the type of questions which can be explored with surveys, but there are variety of survey designs that can be used to accommodate different substantive needs and problems if those problems are anticipated in the planning of the survey. Survey research can therefore be a flexible technique to as certain information about people.

The survey method in the present study was employed with a purpose to study the organisation and working of the Himachal Pradesh Sports Department while adopting qualitative approach. Parlett and Hamilton (1976), forcefully add in this regard:

Characteristically, conventional approaches have followed the experimental and psychometric traditions dominant in educational research. Their aim (unfulfilled) of achieving fully objective method” has led to the studies that are artificial and restricted in scope. We argue that such evaluations are inadequate for elucidating the complex problem areas they confront and, as a result provide little effective input to the decision making process. Illuminating evaluation is introduced as belonging to contracting “anthropological research paradigm”.
Peichardt and Cook (1979), while reflecting on beyond qualitative and quantitative methods for conducting evaluation research distinguish with between the two: By quantitative methods, researchers have come to mean the techniques of randomized experiments, quasi-experiments, paper and pencil ‘objective’ tests, multivariate statistical analysis, sample surveys and the like. In contrast qualitative methods include ethnography, case studies, in-depth interviews, and participant observation.

The present study was designed by drawing a sample from different population groups and collection of data by specially developed tools as explained hereunder.

Sample:

The sampling adopted for any type of research study depends upon the objectives of the study. Generally the convenience, cost and time are also considered in determining the sample size. In the present study the population of universe consists of administrators and coaches working in the sports department. The present investigation aimed at studying the organisation and working of the sports department in Himachal Pradesh. To serve this purpose, samples of administrators and coaches were drawn from the respective populations. The details of the sampling procedure are given as under:

a) Administrators:

The number of administrators working in the Sports Department is not very large, therefore it was decided to send the questionnaire to all the administrators. The administrators included District Sports Officers (D.S.O.) posted in each district head quater of Himachal Pradesh, Director, Joint Director, deputy director and Superindent recruited in the Directorate of Physical Education and
Youth Service at Shimla. The total sample included 21 administrators.

b) Coaches:

A sample of 56 coaches was taken from all coaches working in the Sports Department. The number of coaches working in the department is not very large, so, it is decided to send the questionnaire to all the coaches. Out of these coaches, 14 coaches are J.S.O., 6 coaches are senior coaches and 36 coaches are SAI coaches posted at each district head quarter and sub-centre in the field.

The summary of total sample of administrators and coachesis given in the following table:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Sample</th>
<th>Sample Size</th>
<th>Number of Respondents</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Administrators</td>
<td>21</td>
<td>21</td>
<td>100</td>
</tr>
<tr>
<td>2.</td>
<td>Coaches</td>
<td>56</td>
<td>56</td>
<td>100</td>
</tr>
</tbody>
</table>

III.3 Methods For Data Collection:

Following tools were used for the collection of data:

a) Primary Data:

1. Questionnaires
2. Schedule

b) Secondary Data:

1. Office Records
a) Primary Data:

1. Questionnaire:

Two types of questionnaires were developed for the present study as mentioned earlier to collect the required information. The researcher personally visited various offices where administrators were serving. Questionnaires were handed over to the administrators. After brief instructions the researcher requested them to fill up the questionnaire on the spot and collected the papers after completion.

In case of the coaches sample the investigator himself visited each district head quarter where coaches were serving and in the field of some district where some coaches were deputed in the sub centre of sports department. With the kind permission and co-operation of the concerned district Sports Officer (D.S.O.) the researcher approached the coaches. Questionnaires were handed over to the coaches after brief instructions. The questionnaires were filled by the respondents on the spot and were collected by the researcher.

2. Schedule:

The researcher visited 12 sports centre at each district head quarter and directorate of sports and youth service at Shimla from where the administrators and coaches were selected. Schedules were filled up by the investigator after having relevant information by physical verification and through the office records.

b) Secondary Data:

1. Office Records:

The investigator visited various offices to gather information concerning the research study. Report was created among the concerned persons. They were encouraged to answer freely about every item of the questionnaire.
Development of Tools:

The detail of the development of the questionnaire and the schedule is as under:

i. Questionnaire for Administrators:

A questionnaire was developed by the investigator to obtain the required information from the administrators. In order to develop a comprehensive questionnaire so as to fulfil the objectives of the study, the contents included, were analysed, studied and listed carefully. The contents to be covered in the questionnaire were divided into the following items:

1. Administration Effectiveness
2. Administrative Independence
3. Delegation of power
4. Recruitment Policy
5. Qualifications for recruitment
6. Promotion Avenues
7. Transfer Policy
8. Pay Scales
9. Training, Refresher and Orientation Courses
10. Coordination
11. Relationship between sports Department and Secretariat
12. Programmes and Policies
13. Efficiency Specialisation
14. Financial Administration (Budget)

15. Playing Facilities

The items of the questionnaire were framed on the basis of the above theme. Preliminary draft consisted of only close ended items. Each item was to be responded on a three point scale. That is why the present study had to develop the separate questionnaire for administrators which are given in the annexure I.

ii. Questionnaire for Coaches:

A questionnaire was developed by the researcher to obtain the required information from the coaches. In order to develop questionnaire for coaches, same procedure was followed as was adopted for developing questionnaire consisted of similar themes as in case of questionnaire for administrators. The contents covered in this questionnaire for administrators. Some additional information had to be collected from coaches separately which were given as following.

(a) Playing facilities

(b) Budget Provision.

That is why the present study had to develop the questionnaire for coaches which are given in annexure-II.

An introductory note was prepared in order to acquaint the respondents with the purpose of the present study. While preparing the items, it was observed that they were in accordance with the sub items stated earlier and the objectives of the study. The items were framed in such a way so as to improve the quality of the responses and respondents feel comfortable.

The preliminary draft of the questionnaire along with its objectives was shown to a few experts to seek their suggestions for its improvement. The questionnaire was modified and revised on the basis of their suggestions.
Undoubtedly the language of items plays an impartment role in determining the validity of the responses. Carefully worded and unambiguous items tend to make the questionnaire more effective and reliable. Therefore, the questionnaire was shown to few language experts to point out the ambiguity, if any, in the language of the items and the set of instructions on the basis of these suggestions, modifications were made in the items of questionnaire wherever necessary. Five questionnaires were filled by the subjects on trial basis. Again shortcomings in the questionnaire were removed. Finally, a questionnaire consisting of 25 different items for administrator and 20 different items for coaches was prepared.

III.4 Statistical Analysis :

For the analysis of results the following statistical techniques have been applied.

1. Chi-square Test :
   a) Test of independence
   b) Test of goodness of fit

2. T-test

3. Ranking method

4. Tabular Analysis

The Chi-square test is a non-parametric test (i.e. where parameters of the population are not known). Non-parametric data does not follow the normal curve of probability and have unequal or unmeasurable scale intervals between categories. The information gathered through questionnaires from the administrators and coaches in the form of nominal data, hence $X$-test is considered
more appropriate in the present study. The value of Chi-square \((X)^2\) in below:

\[
X^2 = \sum_{i=1}^{n} \frac{(Q_i - E_i)^2}{E_i}
\]

Where \(X^2\) = Calculated value of the Chi-square

\(Q_i\) = The observed frequency

\(E_i\) = The expected frequency

The calculated value to Chi-square is compared with the table value of \(X^2\) for given degrees of freedom at a certain specified level of significance. If the stated level (general 0.05 level is selected) the calculated value of \(X^2\) is more than table value of \(X^2\) the difference between expected and observation is considered to be significant, i.e. it could not have arisen due to fluctuations of sampling. If on the other hand, the calculated value of \(X^2\) is less than the table value, the difference between expected and observation is not significant, i.e. it is regarded as due to fluctuation of simple sampling and hence ignored. The difference in the observed and expected frequencies is also tested whether difference is statistically significant at 5 percent level.

(a) Chi-square Goodness of Fit:

It is applied to test whether some observed pattern of frequencies conforms to an 'expected' pattern of frequencies. The responses are in the form of 'highly satisfied', to some extent and 'not at all'. The following are the steps in testing the goodness of fit.

(i) A null Hypothesis is established.

(ii) Level of significance i.e. 5% is determined.
(iii) A random sample is taken on which test is to be conducted.

(iv) The $X^2$ Value is calculated.

(v) Decision is given as: if the calculated value is more than table value the difference is significant. Hypothesis is not accepted.

b) Test of Independence:

Chi-Square is also used to test the associating or relationships between the variables or attributes. The relationship between the level of experience and the level of satisfaction from the different variables like refresher courses, organisational effectiveness, pay scales etc. are tested with the help of test of independence. The null hypothesis and alternate hypothesis are as follows:

$H_0$: There is no association or relationship between year of experience and level of satisfaction from the organisational, personnel and financial variables.

$H_1$: There is association or relationship in years of experience and level of satisfaction from managerial variables like in other research works, each hypothesis was tested at 5 percent level of significance.

T-Test

For testing the administrative effectiveness, t-test is applied. Mathematically it is:

$$t = \frac{\hat{P} - P_0}{\sqrt{\frac{P_0(1-P_0)}{n}}}$$

Where $\hat{P}$ is the observed value, $n$ is the sample size and $P_0$ is the value of null hypothesis.
Ranks:

The check list of possible reasons for dissatisfaction was prepared in the form of multiple choice questions. The aggregate of responses were then ranked to find as to which was the most important reason of dissatisfaction requiring necessary corrective action.

Table Analysis:

In tabular analysis, percentages are calculated to draw the inferences. In the present study it was used to support the inferences drawn from the above statistical analysis as non-parametric analysis is not that powerful as parametric test.