CHAPTER-III

METHODOLOGY AND PROCEDURE

In this chapter, the experimental design, sample, selection of subjects, selection of variables, selection of tests, collection of data, test administration, method of scoring and statistical procedure to be employed to analyze the data have been presented.

DESIGN OF THE STUDY

This was a survey type of study focused on players from selected disciplines of sports. The dependent variables of self-actualization, parental encouragement, risk-taking behavior were compared between the independent variables of performance of team and individual discipline has been studied. The random sampling design was used. The statistical measure used in this was t-test and coefficient of correlations.

In this chapter, to accomplish the purpose of the study, the design has been carefully formulated, systematically presented and explained under following heading.

1. Sample

2. Variables

3. Tool and techniques

4. Collection of data

5. Statistical analysis of data

SAMPLE

The researcher has been used the random sampling method for the selection of subjects for data collection and were drawn from the colleges and universities of Punjab and union Territory, Chandigarh. The sample consisted of 400 male players in the age group of 17 to 25 years, representing state, different intercollegiate and inter-university competitions.
Subjects were randomly selected from team and individual of 2 groups. The details about the sample are given in the table below:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Team games</th>
<th>Individual games</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Volleyball (20 players)</td>
<td>Athletics (20 players)</td>
</tr>
<tr>
<td>2</td>
<td>Hockey (20 players)</td>
<td>Judo (20 players)</td>
</tr>
<tr>
<td>3</td>
<td>Kabaddi (20 players)</td>
<td>Wrestling (20 players)</td>
</tr>
<tr>
<td>4</td>
<td>Kho-Kho (20 players)</td>
<td>Badminton (20 players)</td>
</tr>
<tr>
<td>5</td>
<td>Handball (20 players)</td>
<td>Boxing (20 players)</td>
</tr>
<tr>
<td>6</td>
<td>Softball (20 players)</td>
<td>Lawn-Tennis (20 players)</td>
</tr>
<tr>
<td>7</td>
<td>Baseball (20 players)</td>
<td>Swimming (20 players)</td>
</tr>
<tr>
<td>8</td>
<td>Cricket (20 players)</td>
<td>Gymnastics (20 players)</td>
</tr>
<tr>
<td>9</td>
<td>Football (20 players)</td>
<td>Archery (20 players)</td>
</tr>
<tr>
<td>10</td>
<td>Basketball (20 players)</td>
<td>Weightlifting (20 players)</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

Grand total 200 + 200 = 400 players.

SELECTION OF VARIABLES

1. Self-actualization

2. Parental encouragement

3. Risk taking behavior

A. Hills (A),
B. Space (B),
C. Sea (C),
D. Commercial Trades (D),
E. Police and Intelligence Services (E),
F. Fire (F)
G. Professional Trades (G)
H. Military Services (H)

TOOLS AND TECHNIQUES

With a view to measure the selected variables following tests were administered to the subjected:

1. Self-actualization inventory by Dr. K. N. Sharma (1986).
2. Parental encouragement scale by Dr. R.R. Sharma (1971).
3. Risk taking scale by Dr. Virendra Sinha and Dr. Prem Nath Arora (1983).

All these tests have been standardized in the Indian Cultural context and are used extensively. A specimen copy of each test used in the present study has been provided in appendixes A, B and C.

DESCRIPTIONS OF TESTS

Self-actualization inventory

The 1st tool used was the self-actualization inventory by Dr. K. N. Sharma which designed in 1986. The inventory contains 75 items in total. A three points rating scale indicated equal to nil, some and much degree of self-actualization characteristics has been provided in front of each of the statement. The statements were mixed randomly.

Administration of the test

Instructions are written over leaf of the inventory in Hindi. It can be administered either in group or individual situation and give the following instructions.

Below are some statements, in front of them there are places for three possible answers. ‘Equal to nil’, ‘some’ and ‘much’. Tick mark in a respective column after going through each statement carefully of a degree of which you think of yourself on that statement. Mark only at one place for one statement, your answer must be accurate after a good thought.

Although there is no time limit for the administration of the inventory but this takes about 30 minutes to complete it.
Reliability

The test retest reliability of the inventory on a small sample of 100 lights class students was found to be 0.85.

Validity

Since there is no test of self-actualization our label validation could not be done. However, the content validation of the items has already been made thoroughly.

Scoring

The scoring is simple. The three alternatives, ‘equal to nil’, ‘some’ and ‘much’ have been assigned 1, 2, 3 weights respectively. The score has to be counted in the end, the grand total of the marks should obtained frequencies of the three total response categories multiplied by respective weights.

Parental Encouragement Scale

The parental encouragement scale (PES) measures the degree/amount of encouragement which a child receives from his parents and also to categorize the students in terms of the degree/amount of their parental encouragement. It has been designed for the students, at a higher secondary stage. The final form of the parental encouragement scale (PES) contains 40 items with three response alternatives.

Administration

The parental encouragement scale was administered to above sample of students. There is no time limit for the completion of the scale however ordinary an individual student takes 25 to 30 minutes to complete it.

Reliability

The reliability of the scale was measured firstly by split half method and value was found to be 0.83. Secondly two test retest-reliabilities were determined- one after an interval of 2 weeks and the other of 4 weeks. The value of these two reliable were found to be 0.73 and 0.76 respectively.

Validity:

(1). Content validity: The contents of each items of the parental encouragement scale were critically examined by 5 judges specialized in the field of education, psychology and sociology. The opinion of these judges conforms that the parental encouragement scale was sufficient valid instruments.
(2) **Convergent validity:** The validity of the parental encouragement scale was ascertained by correlating the scores of this scale with Uniyal and Agarwal’s parental encouragement scale.

The coefficient of correlation was found to be 0.68. This indicates that the scale is fairly a valid tool.

**Scoring:**

There are three alternatives in each item of scale. The subject has to choose only one alternative. The marks were allotted as follows:

<table>
<thead>
<tr>
<th>Response Alternatives</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
</tbody>
</table>

Thus, the total scores of each items range from 0 to 2. Whereas the grand total of PES ranges from 0 to 80. Higher score on the parental encouragement scale (PES) reveals greater amount of higher degree of parental encouragement, whereas lower score reveals, the lower degree of less amount of parental encouragement.

**Risk taking scale**

This questionnaire has been designed to measure the extent ‘risk’ taken by a particular individual in his personal, social life.

The risk taking questionnaire (RTQ) is safely usable on all types of Hindi male and female literature of India ranging in age of 14 years to senile age. It is designed to be used by guidance workers, sociologists, teachers and counsellors to know the nature and extent of risk-taking tendency of taste and to guide one for the proper job. The risk taking questionnaire (RTQ) is capable of assessing the magnitude of ‘risk’ in different areas of life.

Eight areas of risk are included in the test, which are considered to be the most important and affiliated areas of risk for Indian Life. These areas were listed by 85% of the experts. These are

1. Hills (A),
2. Space (B),
3. Sea (C),
4. Commercial Trades (D),
5. Police and Intelligence Services (E),
6. Fire (F),
7. Professional Trades (G)
8. Military Services (H)

In risk taking questionnaire, the names of different areas are not marked but the entire questionnaire is divided into eight parts, each containing item pertaining to one particular area of risk in the sequence already stated. The test is reliable. In 1982, Sinha and Arora computed the test-retest reliability of risk taking questionnaire as a whole for the tastes of three age groups (Adolescents, Adults and Olds). Reliability of whole sample was computed to be 0.785 (P>0.01) while the reliability of adolescent group was computed to be 0.79 (P>0.01). The test has been validated. The concurrent validity of the risk taking questionnaire is (·) 0.82 for the risk takers and (·) 0.542 for non-risk takers.

METHOD OF SCORING

The instructions are to be given to the tests are written in Hindi on the page of risk taking questionnaire. A few examples and some precautions to be taken are also given on the cover page. All these are self-explanatory. In risk taking questionnaire, the five categories, i.e., very much, much, moderate, less and very less categories are scored as 5, 4, 3, 2, and 1 respectively. The maximum possible scores in this tool are 200 and minimum 40 only.

COLLECTION OF DATA

The three questionnaires will be applied during competitions of different universities of Punjab State. The players were appraised off the purpose of collecting data and the significance of the study which shell be in the interest of their game. The subjects promised to extend sincere and full co-operation in the venture. Different competitions were attended by the investigator from time to time.

1. Self-actualization inventory by Dr. K. N. Sharma (1986).
2. Parental encouragement scale by Dr. R.R. Sharma (1971).
3. Risk taking scale by Dr. Virendra Sinha and Dr. Prem Nath Arora (1983).

The researcher visited various venues of the intercollege competitions and inter-universities camps of different sports groups. The data were collected on the subjects who were available from affiliated colleges of Punjab state. The managers and assistant professors in physical education provided all sorts of co-operations and help in the administration of test inventories.

Before the distribution of the test questionnaires to subjects, a proper understanding and confidence was developed between the researchers and the subjects. They were examined the purpose and significance of the study. It was also promised that the responses of the questionnaires given by the subjects would be kept strictly confidential. Therefore, they were requested to give answer to each question without any fear or hesitation to the best of their belief. An assurance of full co-operation was sought from the subjects. They gave the clear understanding that their response towards questionnaire would be frank, honest and without bias.

The test inventory was got filled one by one. They were asked to fill up the responses within the prescribed time limit of the inventory. The response sheets were collected immediately after they were filled by the subjects.

METHOD OF SCORING

The scoring of all sheets were done according to the procedure and method examined in the test manual of the each questionnaire. The questionnaire applied in the study has been given in the appendices of the thesis. Thus the scores obtained were organized and tabulated for the purpose of statistical analysis and subsequently interpretation of the results.

STATISTICAL ANALYSIS OF DATA

In this study, the psychological variables like self-actualization, parental encouragement and risk taking behavior were studied at team and individual sports players. To find out the differences between (among) the team and individual games t-test was applied. To compare the three variables co-efficient co-relation was applied to find the interactional effects. Further to find out the direction of differences
Means, S.D. and t-test was computed, which are detailed in the next chapter. Level of significant was set at 0.05.