PROCEDURE & METHODOLOGY

In this chapter the method and procedure has been used to compare the socio–psychological characteristics of team and individual athletes of various sports groups. The basic comparison is between the two categories of athletes namely team & individual athletes.

The sample for the present study was drawn from the colleges affiliated to Himachal Pradesh University and Himachal Pradesh University campus. About 63 colleges are affiliate to this university. These colleges are situated in twelve Districts of Kangra, Chamba, Solan, Shimla, Bilaspur, Kullu, Sirmour, Lahaul Spiti, Kinnaur, Hamirpur, Una and Mandi.

Himachal Pradesh University conducts tournaments of different disciplines at different colleges affiliated to it. Researcher traveled to the tournament venues for data collection related to his study.

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

1. Sample
2. Variables
3. Tools and Techniques
4. Collection of Data

5. Statistical Procedure

1. SAMPLE

A purposive random sampling device has been used to compare the socio-psychological characteristics of team and individual male athletes of Himachal Pradesh colleges. The total 500 male samples comprising 250 samples from team events and 250 samples from individual events are randomly drawn from various colleges of Himachal Pradesh. These subjects participated in the inter-college competitions of Himachal Pradesh University. All the players of team and individual events were participating in the inter-college competitions for the year 2000–2001 and 2001–2002. Some of them who have participated in All India inter-university representing Himachal Pradesh University were also considered.

Keeping in view the facilities, popularity and standing of Himachal Pradesh University, the following eight sports events and games were selected:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Individual events</th>
<th>No.</th>
<th>Team events</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Basketball</td>
<td>62</td>
<td>Wrestling</td>
<td>63</td>
</tr>
<tr>
<td>2.</td>
<td>Volleyball</td>
<td>63</td>
<td>Athletics</td>
<td>62</td>
</tr>
<tr>
<td>3.</td>
<td>Hockey</td>
<td>63</td>
<td>Weight-lifting</td>
<td>62</td>
</tr>
<tr>
<td>4.</td>
<td>Football</td>
<td>62</td>
<td>Boxing</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>250</td>
<td>Total</td>
<td>250</td>
</tr>
</tbody>
</table>

Grand total = 250+250=500
2. VARIABLES

Keeping in view the importance of socio-psychological characteristics in team and individual events, the following independent variables were considered for the study which could measure the socio-psychological make up of team and individual athletes belonging to Himachal Pradesh colleges:

1. Self-concept
   a. Physical self-concept
   b. Social self-concept
   c. Temperamental self-concept
   d. Educational self-concept
   e. Moral self-concept
   f. Intellectual self-concept

2. Adjustment
   A. Home adjustment
   B. Health adjustment
   C. Social adjustment
   D. Emotional adjustment
   E. Educational adjustment

3. Body image

4. Socio-economic status

3. TOOLS AND TECHNIQUES

The tools were selected by consideration of their validity, objectivity and reliability. Keeping in view these considerations, the
following tools were used for the collection of data:

Dr. Raj Kumar Self-Concept Scale (1984)

Self-concept scale by Dr. Rajkumar Sarswat was applied to measure the self-concept of team and individual athletes of Himachal Pradesh Colleges.

Description of Self-Concept Inventory

Self-concept inventory provides six separate dimensions of self-concept, i.e. physical, social, temperamental, educational, moral and intellectual. It also gives total self-concept scales. The operational definitions of self-concept are:

(a) Physical self-concept—It is the individual’s view of his body, health, physical appearance and strength.

(b) Social self-concept —It is individual’s sense of worth in social interactions.

(c) Temperamental self-concept —It is individual’s view of his prevailing emotional state or predominance of a particular kind of emotional reaction.

(d) Educational self-concept —The individual’s view of himself in relation to school teachers and co-curricular activities.

(e) Moral self-concept — It is individual's estimation of his moral worth, right and wrong activities.

(f) Intellectual self-concept — It is individual’s awareness of his intelligence and capacity of problems solving and judgements.

The total score have been taken to indicate the self-concept status.


Adjustment Scale was used to measure the adjustment of college students of Himachal Pradesh in respect of their five areas of adjustment i.e. home, health, social, emotional and educational.

(a) Home adjustment— individual's low scores indicate satisfactory and high scores tend to be unsatisfactorily adjusted towards their home surroundings.

(b) Health adjustment— low scores indicate satisfactory health adjustment and high scores indicate unsatisfactory health adjustment.

(c) Social adjustment— Individual's scoring high are submissive and retiring low scores indicate aggressive behaviour.

(d) Emotional adjustment— high scores indicate unstable emotional individuals and with low scores tend to be emotionally stable.

(e) Educational adjustment—individuals scoring high are poorly adjusted towards their curricular and co-curricular programmes. Persons with low scores are interested in the educational activities.

The total scores have been taken to indicate the general adjustment status.

Body Image test

To find out the body image of Himachal Pradesh college males of various sports groups, researcher found the Doudlah's (1962) body image test most suitable, reliable and valid test of body
image pertaining to a vide range of human body parts. The test had been developed for female only. But it could be adapted easily for males.

Therefore, a revised version of Doudlah's test standardized by Darshan Singh (1991) on college students was preferred to be applied for the present study.

Body image test used in the present study consist 49 statements. Each statement of the test is a positive statement about one's body. For example "My shoulders are broad " or "I have good posture" etc. After each statement the following 5 points of agreement/disagreement are prescribed :-

1. Very much like this
2. Much like this
3. Uncertain
4. Not like this
5. Not at all like this.

The five points are given scores 4, 3, 2, 1, and 0. The lowest and highest possible score could be 196, low score indicating unfavorable body image and high score indicating most favorable body image.

Socio–Economic Status

To measure the Socio–economic status of Himachal Pradesh colleges male players, Dev Mohan's Socio–Economic Status Scale (1972) was revised in accordance with the present price index and applied to evaluate the socio–economic status of team and individual athletes of Himachal Pradesh colleges.
This scale consists of twelve items of information, each main information item has a number of sub-items. First of all this scale collects the information about the bio-data of the subject.

The I item of the scale gathers the information about the education of parents, guardian and other members of the family. The II item collects information about the profession/occupation of the family members. The III item along with sub-items collects information about the income of family from all sources. The items IV, V, VI and VII along with sub-items collect information about (i) landed property of the family, (ii) urban property, (iii) transport facilities and (iv) the modern things of luxury the family possesses. All these items provide us information about the economic-status of the family. The items VIII, IX and X give us information about the social life and social activities of the family. The item XI and XII provides the information about literary and cultural activities of the family. These items give information about how much a family can afford and how much it is interested in reading magazines, newspapers and other extra books in the home library.

In this scale, materialistic and non-materialistic possessions, social activities, literary activities are given due weightage to represent socio-economic status of the family. The scale indicates that higher is the score, higher is the socio-economic status, lower is the score, poor is the socio-economic status.

4. COLLECTION OF DATA

Researcher had applied four types of questionnaire tests, to collect the data.


The researcher visited various venues of the Himachal Pradesh inter-college tournaments of various sports groups. The data were collected on the subjects who were available from all the colleges affiliated to Himachal University. The managers and lecturers in physical education provided all sorts of cooperation and help in the administration of test inventories.

Before the distribution of test questionnaires and answer sheets to the subjects, a proper understanding and confidence was developed between the researcher and the subjects. They were explained the purpose and significance of the study. It was also promised that the responses of the questionnaires given by the subjects will 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 cooperation was sought from the subjects. They gave the clear understanding that their response towards questionnaires will be frank, honest and without any bias.

The test inventory was got filed 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 the response sheets was done according to the procedure and method explained in the test manual of each questionnaire. The questionnaire applied in the study has been given in the appendices of the thesis. Thus, the scores obtained
were organised and tabulated for the purpose of statistical analysis and subsequently interpretation of the results.

5. STATISTICAL ANALYSIS OF DATA

The data obtained through random sampling and tabulated variable wise. The statistical analysis was done at Panjab University computer center. At the initial stage the values of mean, standard deviations and "t" ratios of all the variables were computed to find out the significance of the differences of means of individual and team athletes on each variable.

At the second stage analysis of variance (ANOVA) test was applied to know the significance of differences among various team and individual sports groups against each variable, where the significance of differences were found significant at 0.05 and 0.01 level, the 't'–test was applied and results were tabulated in the form of 't'–ratio matrix to find out the significance of differences among various sports groups.

Finally the differences among the team and individual athletes on various variables were computed with the help of ANOVA test. 't' ratios were further computed to find out the significance of differences among individual and team athletes. A detailed computation is given in the form of tables and matrices. Wherever the F ratio was found significant the post hoc scheffe test was applied to find out whether the difference existed was significant.