CHAPTER III

PROCEDURE

The chapter contains brief description of the selection of subjects, design of the study, selection of variables, reliability of data, administration of the questionnaires, collection of data and the statistical procedure used for analyzing the data.

**Selection of Subjects**

The present study was conducted 500 cricket and other team game players of India. Keeping in view the objectives, the players were categorized into two main groups: Cricket (N=250) and Other Team Game (N=250) players. The sample representing the different college of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad from 2009 to 2011.

For the purpose of this study, both the samples were considered the true representative of the entire team game population of India at the time their assessment of the psychological variables was done.

**Selection of Variables**

Out of myriads of psychological variables associated with outstanding athletic performance, it was really a Herculean task to identify the most crucial
ones. The availability of reliable and valid instruments is also an important consideration in directing one’s ingenuity for the choice of variables. Many psychological instruments i.e. test and inventories are relevant more often than not to the populations on which they have been standardized and for which they have been constructed. The Four variables are:

1. Extroversion.
2. Neuroticism.
3. Psychoticism.
4. Sport Competition Anxiety

**Reliability of Data**

The reliability of data was ensured by establishing the instrument reliability and reliability of subjects.

**Instrument Reliability**

The instruments used in the collection of data were selected because they were found to be most reliable and have been very extensively used in research in the field of physical education and sports throughout the world. The reliability quotients as given in the manual of respective test are as under:
Table – 1

Reliability Quotient of Various Instruments

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Variable</th>
<th>Test</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sports Competition</td>
<td>Sports Competition Anxiety Test (SCAT)</td>
<td>0.85</td>
</tr>
<tr>
<td>2.</td>
<td>Personality Trait</td>
<td>Eysenk Personality Inventory</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Reliability of Subjects

The subject’s reliability was ensured by assuring the players that their response would be kept confidential and would be used only for research purpose. It was made clear to the subjects that their response had nothing to do with their suitability for the as per the instruments contained in the each instrument. This naturally had a salutary effect on them with the result that their bias in responding to the questions / statements contained in various instruments was minimized and reliability of data enhanced considerably.

Administration of the Questionnaires and Collection of Data.
As explained in the foregoing pages, the tests were administrated to the two sample groups – Cricket and Other Team Game players. The managers of all the teams were contacted personally and requested to permit their respective team member to serve as subjects for this study. Subjects were contacted personally when they were not busy and their sincere co-operation was solicited.

Necessary instructions were given to the subjects before the administration of each test. As the same research scholar motivated the respondents by promising to send a separate abstract of the conclusions of her study to each of them. It was clearly explained to the subjects that overall purpose of the study was to allow each subject to acquire deeper insight into her psychological functioning. Confidentiality of response was guaranteed so the subjects would not camouflage their real feelings. The four tests were administered to the subjects in the following order:

1. Eysenck Personality Questionnaire (EPI)
2. Sports Competition Anxiety Test (SCAT)

Care was taken that no boredom set in. after each test a short session of pep talk of ten minutes followed in order to rejuvenate the players for the next “ordeal”. No time limit for filling in the questionnaire was set. However, the
subjects were made to respond as quickly as possible without brooding over any question / statement once the instruction were understood clearly.

**Eysenck Personality Questionnaire**

**Purpose:**

The Eysenck Personality questionnaire (Appendix-A) was used to assess the level of Personality Trait of the players. The test retest reliability of the questionnaire was reported to be 0.79.

**Procedure:-**

The questionnaire on mental toughness (Appendix-A) prepared by Eysenck has eighty nine items, which has three categories namely: Extroversion, Neuroticism and Psychoticism.

The subjects were instructed to respond to each item according to how they generally felt in competitive sports situations.

Every statement has two possible responses i.e. True or False.
There was no time limit for the completion of the questionnaire but the subjects were instructed not to ponder too long over any statement and respond to all the statements in the questionnaire independently. A total score of 89 was possible on this questionnaire.

The responses of the players in each of the three categories i.e. Extroversion, Neuroticism and Psychoticism were recorded for statistical treatment.

**Sports Competition Anxiety Test (SCAT)**

**Purpose:**

The Sports Competition Anxiety Test is latest and most popular sport – specific anxiety test whose purpose is to assess individual difference in sports competitive trait anxiety or the tendency to pursue competition situation, as threatening, and / or to respond to their situation with elevated state anxiety.

Sports Competition Anxiety Test Questionnaire (SCAT) prepared by Rainer Martens, was originally constructed for children (ages 10-15), its adult version was developed later on by suitably modifying the instructions and items. A reliability quotient of 0.85 had been reported for the adult version of SCAT.

**Procedure:**
The SCAT questionnaire (Appendix-B) contains fifteen items. The subject were asked to indicate how they generally felt in competitive sports situation, and responded to each item using a three point ordinal scale (hardly ever, sometimes, or often)

Out of fifteen items, only ten of the items assess sports competitive trait anxiety proneness (e.g. “Before I compete I feel uneasy”) and used for scoring purpose. There ten items were: 2, 3, 5, 6, 8, 9, 11, 12, 14, and 15. The remaining five test items were the spurious items, which were added to the questionnaire to diminish response bias towards the actual test (e.g. “Something against others is socially enjoyable”). These five spurious items were not scored. These spurious items were: 1, 4, 7, 10 and 13.

Every statement had three possible responses i.e.:

1. Hardly ever
2. Sometimes
3. Often

While the subjects were responding to the questionnaire, the scholar went around verifying that they were recording answers sequentially and explained the meaning of the words in case of doubts.

**Scoring:**
The scholar scrutinized the complete questionnaire in order to ensure that the subjects respond to every item and there was no question left unanswered. The items 2, 3, 5, 8, 9, 12, 14, and 15 were worded in such a manner that they were scored according to the following key:

<table>
<thead>
<tr>
<th>Score</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hardly ever</td>
</tr>
<tr>
<td>2</td>
<td>Sometime</td>
</tr>
<tr>
<td>3</td>
<td>Often</td>
</tr>
</tbody>
</table>

In the case of item 6 and 11 scoring was carried out according to the following key:

<table>
<thead>
<tr>
<th>Score</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hardly ever</td>
</tr>
<tr>
<td>2</td>
<td>Sometime</td>
</tr>
<tr>
<td>3</td>
<td>Often</td>
</tr>
</tbody>
</table>

However spurious question i.e. 1, 4, 7, 10 and 13 were not be scored as suggested by Rainer Martens.

If a subject deleted one of the ten items, her prorated full scale score was obtained by computing the mean score for the nine items answered, multiplying
this value by ten, and round the product to the next whole number. When two or more items were omitted, the respondent’s questionnaire was invalidated.

Total scores of SCAT ranged from 10 (low competitive anxiety) to 30 (high competitive anxiety). The subjects were assigned to the following category according to the scores obtained by them:

<table>
<thead>
<tr>
<th>Raw/Mean score</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 17</td>
<td>Low Anxiety</td>
</tr>
<tr>
<td>17-24</td>
<td>Moderate Anxiety</td>
</tr>
<tr>
<td>More than 24</td>
<td>High Anxiety</td>
</tr>
</tbody>
</table>

Response obtained from the subjects on each statement of sports competition anxiety questionnaires were subjected to statistical keeping in view the purpose of study.

**Statistical Procedure**

Mean scores and standard deviation of Cricket (N=250), Other Team Games (N=250) and the total sample (N=500) were calculated in all the four variables i.e.
sports competition anxiety, Eysenck Personality Trait (consisting of Three categories Extroversion, Neuroticism and Psychoticism).

This was a comparative study of two (Cricket and Other Group) of team game players for finding out difference in criterion measure the mean difference of these groups were tested for significance by ‘t’ test and level of significance was set at 0.05 level.