Chapter III

PROCEDURE

This chapter contains, selection of subjects, collection of data, administration of questionnaire, description of questionnaire, method of scoring and the statistical technique which was used to compute the data are presented.

Selection of subjects

Four hundred forty eight (448) male subjects were selected from contact and non-contact sports for this study. Their age ranged from 18 to 25 years. These subjects belonged to All India Inter-University first four position holders and for relay events (Swimming and Track & Field) that finished in first eight positions.

The scholar chose 224 male subjects from Hockey, Football, Basketball and Handball as contact sports. In the same way the scholar chose 224 male subjects from Cricket, Volleyball, Track & Field (relay events) and Swimming (relay events) as non-contact sports.
Collection of data

The data pertaining to Group-Cohesion was collected by administering “Group Environment Questionnaire”. For Self-Esteem data was collected by administrating “Self-Esteem Scale”, and for Ego-Strength data was collected by administrating “Ego-Strength Scale”.

The data was collected on 448 All India Inter-University men players belonging to contact sports (Hockey, Football, Basketball, and Handball) and non-contact sports (Cricket, Volleyball, Track & field relay events and Swimming relay events). Before administrating the questionnaire the purpose of the study was explained to the subjects and the researcher solicited their co-operation which all of them readily agreed to extend. The questionnaire was administered one day before the tournaments.

Assessment of the performance

To determine the performance of the contact and non-contact sports, subjective judgment was made with the help of three judges from coach/trainer of the particular team and other experts.
Administration of the Questionnaire

The Group Cohesive Questionnaire, Self-Esteem Questionnaire, and Ego-Strength Questionnaire were administered to each team separately during their rest period one day before the match days. The research scholar personally met the team incharge and all the subjects and explained them clearly the purpose of the study along with how the questionnaire had to be filled up. After making sure that the subjects had clearly understood the procedure to fill up the questionnaire, they were asked to record the answer. All the items of "Group Cohesive Questionnaire", "Self-Esteem Scale", and "Ego-Strength Scale" were to be answered by all the subjects.

Description of Questionnaire

To determine the effect of Group-Cohesion, Self-Esteem, and Ego-Strength with the performance in contact and non-contact sports various questionnaires were administered which are as follows: -
Group-Cohesion

To determine the relationship of Group-Cohesion on performance "Group Environment Questionnaire" was administered which consist of eighteen with four aspects. The aspects under which the statements can be grouped and the number of statements under each aspect has been shown in Table 1.

Table 1

ASPECTS OF COHESION AND THE NUMBER OF STATEMENT IN EACH ASPECT

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>Aspects</th>
<th>No. Of Statements</th>
<th>Serial No. of the Statements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Attraction of Group Task (ATGT)</td>
<td>4</td>
<td>2, 4, 6, and 8</td>
</tr>
<tr>
<td>2.</td>
<td>Attraction of Group Social (ATGS)</td>
<td>5</td>
<td>1, 3, 5, 7 and 9</td>
</tr>
<tr>
<td>3.</td>
<td>Group Integration Task (GIT)</td>
<td>5</td>
<td>10, 12, 14, 16 and 18</td>
</tr>
<tr>
<td>4.</td>
<td>Group Integration Social (GIS)</td>
<td>4</td>
<td>11, 13, 15 and 17</td>
</tr>
</tbody>
</table>
There were eighteen statements, which measures general aspect of cohesiveness. These eighteen statements were divided into four different aspects, namely:

- Attraction of Group Task (ATGT)
- Attraction of Group Social (ATGS)
- Group Integration Task (GIT)
- Group Integration Social (GIS)

These four factors were resolved from the Carron’s conceptual model, where Group-Cohesion was divided into Group Integration and Individual Attraction to group and each of them were further divided into Social and Task Aspects of Cohesion.

Individual Attraction to group task was a composite measure of individual team member’s feeling about their personal involvement with the group task, productivity goals and objectives. Individual attraction to group social was a composite measure of individual team member’s feelings about personal involvement desire to be accepted and Social Attraction with the group.

Group Integration Task was a measure of individual team member’s feelings about the similarity, closeness and bound within the team as a whole
around the group task. Group Integration Social was a measure of the individual team member's feelings about the similarity, closeness and bound within the team as a whole around the group as a social unit.

**Scoring of Questionnaire**

Each item had nine points scale. The subjects were asked to encircle any one of the points from 1 to 9. The scoring was according to the direction given in the key for Group Environment Questionnaire. The following were the direction:

The first aspect was Attraction to Group Task. Items 2, 4, 6, and 8 were scored from:

- Strongly disagree  9 to 1
- Strongly agree  1 to 9

The second aspect was Attraction to Group Social. Items 5 and 9 were scored from:

- Strongly disagree  1 to 9
- Strongly agree  9 to 1
Items 1, 3 and 7 were scored from:

Strongly disagree 9 to 1

Strongly agree 1 to 9

The third aspect was Group Integration Task. Items 10, 12 and 16 were scored from:

Strongly disagree 1 to 9

Strongly agree 9 to 1

Items 14 and 18 were scored from:

Strongly disagree 9 to 1

Strongly agree 1 to 9

The forth aspect was Group Integration Social. Items 15 was scored from:

Strongly disagree 1 to 9

Strongly agree 9 to 1

Items 11, 13 and 17 were scored from:

Strongly disagree 9 to 1

Strongly agree 1 to 9
**Self-Esteem**

To determine the relationship of Self-Esteem on performance "Self-Esteem Scale" was administered which consist of ten items. The ten items were answered on a four-point scale ranging from strongly agree to strongly disagree.

**Scoring of questionnaire**

To score the items, assigned a value to each of the 10 items as follows:

- For items 1, 2, 4, 6, 7.
  
  Strongly Agree  = 3
  Agree  = 2
  Disagree  = 1
  Strongly disagree  = 0

- For items 3, 5, 8, 9, 10. (Which were reversed in valence.)
  
  Strongly Agree  = 0
  Agree  = 1
  Disagree  = 2
  Strongly disagree  = 3.
Ego-Strength

To determine the relationship of Ego-Strength on performance “Ego-Strength Scale” was administered which consist of eight items.

Scoring of Questionnaire

To score the items, assigned a value to each of the 8 items as follows:

- For items 1, 3, 4, 8 score, 1 point for each true response.
- For items 2, 5, 6, 7 score, 1 point for each false response.

Note: Ego-Strength exhibited by higher scores, indicates the person has higher positive characteristics, including physical stability and good health, sense of reality, feelings of personal adequacy, permissive morality, lack of ethnic prejudice, and conventional orientation toward religion.

Statistical Technique

Pearson Product Moment Correlation Coefficient was used to find out the relationship of Group-Cohesion, Self-Esteem, and Ego-Strength with the performance in contact and non-contact sports.

Formula: \( r = \frac{n \Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{n (\Sigma x^2)} - (\Sigma x)^2 \sqrt{n (\Sigma y^2)} - (\Sigma y)^2} \)