Chapter IV

Research methodology

OBJECTIVES:

The following are the objectives of the present study are as under –

1. To assess the influence of SES on the performance of sports persons.
2. To assess the influence of sports personality on the performance of athletes, in all the three track events of 100, 200 and 400mtr.
3. To study the influence of athlete’s motivation on the performance of players in 100mtrs, 200mtrs and 400mtr events.
4. To assess the effect of self-confidence on sports performance.
5. To examine differences in the performance of different sample subgroups of age and gender.

HYPOTHESES:

The following are the hypotheses of the study:

1. There is significant influence of SES on performance of players in all the three events.
2. There is a positive influence of sports personality on performance of athletes in all the three events.
3. There is significant influence of athlete's motivation on the performance of 100, 200 and 400 mtrs events.
4. There is a significant influence of self-confidence on the sports performance.
5. There will be significant age and gender differences in athletic performance.
THE SAMPLE:

Keeping the major objectives of the study in view, the appropriate design was followed. The study was conducted on the sample athletes (male and female) selected from All India Inter-University Athletic Meets. Attempt was made to categorize the sample into equal subgroups based on SES and other factors like personality, motivation and self-confidence. These would be accounted for assessing their influence on the performance of athletes in addition to the demographic variables like sex and age. Accordingly, the sample was categorized based on sports personality and athlete’s motivation and self-confidence. Finally the assessment of performance of sample (N=400) was done in all the three filed and track events like 100 mtr, 200mtrs and 400 mtrs speed tests to examine whether the selected independent variables like sports personality, motivation, SES and self-confidence would exert their influence on these speed tests. The sample design is given as under:

Table No.4.1:
Distribution of Sample

<table>
<thead>
<tr>
<th>SES</th>
<th>Gender-wise Distribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>High</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Low</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>

Source: Field Study.
STATISTICAL TOOLS:

I) **SOCIO-ECONOMIC STATUS SCALE (SESS):**

The SES scale is constructed by Bhardwaj (1971). This scale consists of 7 items/areas like family, social, education, professional, property, monthly income and caste perspective. As author claims, reliability of the test of the revised scale has been calculated by test and re-tests method. The reliability coefficient was found to be 0.86 which is significant.

II) **SPORTSMAN PERSONALITY TEST: (INDIAN ADAPTATION):**

This test is adopted by Dubey (2000) which consists of 60 statements characterizing sporting and non-sporting personality. Scoring is done by following the manual (scoring key). Respondents are classified as belonging to the category of sporting and non-sporting personality. This is done based on the norms of sports personality scale (Dubey, 2000) which clearly explains that one who scores above 45 is classified as belonging to sporting while the one who scores below 30 is classified as belonging to non-sporting personality category as a whole. As author claims the reliability (Test-retest) coefficient of the scale is 0.76 which is significant.

III) **ATHLETE’S MOTIVATIONAL INVENTORY:**

This test is adopted by Dubey (2000) which consists of three areas-psychological, social and monetary. Scoring is done using scoring key. As per the norms of the scale, one who scores above 30 is categorized as belonging to high motivation while one who scores 29 and below is
considered to be of low motivated. The reliability of the scale is found to be 0.84 which is significant.

IV) SELF-CONFIDENCE INVENTORY:

This is developed by Basavanna M (1971) which consists of 100 items. There are two response categories – true of false. The items are scored with help of scoring key. The one who scores high is said to have the lower self-confidence and vice-versa. The reliability and the validity of the scale are reported to be significant and adequate.

STATISTICAL ANALYSIS:

The following statistical techniques were used for analysis and interpretation of the data:

1. ‘t’ test to compare the sample sub-groups.

2. Analysis of variance (ANOVA) to assess the effect of independent variables on dependent variable.

3. Correlation – ‘r’ to examine the relationship between the variables.