Chapter - III
Methodology

Aim and Objective of the study:

9) To find out the mental health among interuniversity and intercollegiate kabaddi players.
10) To find out the responsibility among interuniversity and intercollegiate kabaddi players.
11) To find out the self-confidence among interuniversity and intercollegiate kabaddi players.
12) To find out the stress among interuniversity and intercollegiate kabaddi players.
13) To find out the mental health among male and female kabaddi players.
14) To find out the responsibility among male and female kabaddi players.
15) To find out the self-concept among male and female kabaddi players.
16) To find out the stress among male and female players.

Hypothesis:

9) Interuniversity kabaddi players will be significantly good mental health than the intercollegiate kabaddi players.
10) Interuniversity kabaddi players will be significantly high responsibility than the intercollegiate kabaddi players.
11) Interuniversity kabaddi players will be significantly high self-confidence than the intercollegiate kabaddi players.
12) Interuniversity kabaddi players will be significantly high stress than the intercollegiate kabaddi players.
13) Male kabaddi players will be significantly good mental health than the female kabaddi players.
14) Male kabaddi players will be significantly high responsibility than the female kabaddi players.
15) Male kabaddi players will be significantly high self-concept than the female kabaddi players.
16) Female kabaddi players will be significantly high stress than the male kabaddi players.

**Sample:**
For the present study were 400 samples was belonging to Aurangabad. The effective sample consisted of 400 subjects; out of which 200 subjects were male players 200 subjects were female players. The age range of subjects were 18-21 year ratio were 1:1, as well as ratio of male female was 1:1. Purposive Non-probability sampling was used.

**Tools:**

5) **Mental Health Inventory (MHI):**

**Purpose**
Mental health inventory (MHI) developed by Jagdish and Srivastav (1983) was utilized to access positive aspects of mental health. This test can be used as a group or an individual test, for ages 15 and above, no time and age limit is enforced in the testing. Each items from 1 to 56 given in the test booklet to be rated on 4 point rating scale. It covers the following 6 dimensions of sound mental health:


(2) Perception of Reality (PR) – related to absence of excessive fantasy, ability to face and accept realities of life.
(3) Integration of Personality (IP) – indicates balance of psychological forces in the individual, includes emotional maturity, ability to concentrate at work and interest in several activities.

(4) Autonomy (AUT) – the actions of people are independent rather than dependant on other persons.

(5) Group Oriented Attitudes (GOA) – ability to work with others and ability to find recreation.

(6) Environment Mastery (EM) – Efficiency in meeting situational demands

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimensions of M.H.</th>
<th>Reliability Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Positive self evaluation</td>
<td>.75</td>
</tr>
<tr>
<td>2.</td>
<td>Perception of reality</td>
<td>.71</td>
</tr>
<tr>
<td>3.</td>
<td>Integration of personality</td>
<td>.72</td>
</tr>
<tr>
<td>4.</td>
<td>Autonomy</td>
<td>.72</td>
</tr>
<tr>
<td>5.</td>
<td>Group oriented attitude</td>
<td>.74 &amp; .71</td>
</tr>
<tr>
<td>6.</td>
<td>Environment competence overall</td>
<td>.73</td>
</tr>
</tbody>
</table>

(b) Reliability of the Inventory

The reliability of the inventory was determined by ‘split half methods using odd even procedure. The table showing reliability coefficient.

Construct validity of the inventory in determined by finding coefficient of correction between scores on mental health inventory and general health questionnaire (goldberg, 1978) it was found to be 54 it is noteworthy here that high score on the general questionnaire indicates poor mental health. Two inventory scores yield positive correlation of (.57) revealing moderate validity.

The test is scored with the help of manual. 4 alternative responses have been given to each statement i.e. always often, rarely ad never. 4 scores to always, 3 scores
to often, 2 scores to rarely and 1 scores to never, marked responses are to be assigned for true keyed (positive) statements where as 1, 2, 3 and 4 scores for always, ‘often ‘rarely and never respectively in case of false keyed (negative) statements.

6) **Differential Personality Inventory (DPI):**

This test used for measuring decisiveness. This test is developed and standardized by L.N.K. Shinha and Arun Kumar Singh. The test consisted of 165 Items. The subjects were required to respond to each item in terms of ‘True’ OR ‘False’. The test – retest Reliability Coefficient Range from .73 to .86 which were high and significant indicating that the Different dimensions of the Scale have sufficient Temporal Stability.

7) **Self-Concept Scale (SCQ):**

This scale was constructed and standardize by Dr. Raj Kumar Saraswat. The inventory is useful in measuring Self-concept in six areas, namely Physical, Social, Temperamental, Educational, Moral and Intellectual. The inventory consists of 48 items, each item is provided with five alternatives ‘Strongly Agree’, ‘more agree’, ‘agree’, ‘disagree’, and ‘disagree’,

Reliability of the inventory was found by test retest method, and it was found to be .91 for the total self-concept measure. Reliability coefficient of its various dimensions varies from .67 to .88. Expert’s opinions were obtained to establish the validity of the inventory. 100 items were given to 25 psychologists to classify the items to the category to which it belongs. Items of highest agreement and not less than 80% of agreement were selected. Thus the content and construct validity were established.
8) PERSONAL STRESS SOURCE INVENTORY (PSSI):

In order to assess the stress of teacher educators, many types of scales have been used by the researchers. For the present study, Manual for Personal Stress Source Inventory PSSI was used for measuring the stress of teacher educators. The important factor for using this scale was the basic concept of stress level adopted by this scale. Another reason for using this test was that it is available both in Hindi and English languages. It can be easily administered and scoring is very simple.

Method:

In developing Personal Stress Source Inventory (PSSI) forty-five various sources related to personal life events that are likely to produce stress in a person were located. Then these sources were given to a group of judges (N=30) with a request to arrange them in order of severity ranging from 1 to nth (in this case 45th). 15 college teachers, 7 govt. employees and 8 Bank employees acted as judges. Those personal sources were finally retained about which most of the judges (40 out of 45 or 80%) had given similar ratings/rankings. In this way, 40 out of 45 personal sources of stress were retained for final scale. Then the inventory was administered on a sample of 100 subjects and item-total correlations were computed for checking the validity of the items. Five items (or personal sources) did not yield significant correlations. Hence, these five items were dropped and finally a set of 35 items or personal source of events constituted in the final inventory.

Scoring:

The scoring of PSSI is very simple. Every item marked as ‘Seldom’ by the testee is given a score of 1, marked ‘Sometimes’ is given a score of 2 and marked as ‘Frequently’ a score of 3. Unmarked items are given a score of zero. Subsequently, scores earned by the testers on every marked item are added
together to yield a total score. Higher the score, the higher is the magnitude of personal stress. Likewise, lower the score, lower is the magnitude of personal stress. The maximum score on PSSI is 105.

**Reliability:**

PSSI has both test-retest reliability and internal consistency reliability. For calculating test-retest reliability the inventory was administered twice with a gap of 14 days on an unselected sample of 200. The test-retest reliability was found to be .79 which was not only high but also statistically significant. Likewise, internal consistency reliability by odd-even method was found to be .78 (corrected to full length) which was highly significant. Thus PSSI possessed a sufficient degree of reliability.

**Validity:**

PSSI also yielded satisfactory validity. It has sufficient degree of content validity and concurrent validity. The inventory was correlated against the Hindi version of social Readjustment Rating Scale originally developed by Holmes and Rahe (1967) on a sample of 100 and the obtained correlation was .68 which was significant one providing evidence for sufficient concurrent reliability of the test. A group of experts (N=10) provided a high level of consensus regarding suitability of items in terms of being important indices or sources of personal stress. The coefficient of concordance (correlation), among the ranking of 10 judges was .62 which, in terms of chi-square test of significance, was significant (X²– K(N – 1) W). Therefore, the PSSI also possessed a sufficient degree of content validity.

**Procedures of data collection**

Two tests administered individuals as well as a small group. While collecting the data for the study the later approaches was adopted. The subjects were called in a small
group of 20 to 25 subjects and there seating arrangements was made in a classroom. Prior to administration of test, through informal talk appropriate rapport form. Following the instructions and procedure suggested by the author of the tests. The test was administered and a field copy of each test was collected. Following the same procedure, the whole data were collected.

**Variables of the study:**

**Independent Variable:**

3) Level  
   a) Male  
   b) Female  

4) Level  
   a) Interuniversity  
   b) Intercollegiate

**Dependent Variable:**

V. Mental Health  
VI. Responsibility  
VII. Self-Concept  
VIII. Stress

**Research Design:** 2x2 Balanced Factorial Designs was used.

<table>
<thead>
<tr>
<th>A = Gale Level</th>
<th>B = Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 = Interuniversity</td>
<td>B1 = Male</td>
</tr>
<tr>
<td>A2 = Intercollegiate</td>
<td>B2 = Female</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A1</td>
<td>A2</td>
</tr>
<tr>
<td>B1</td>
<td>B2</td>
</tr>
<tr>
<td>A1B1 (100)</td>
<td>A1B2(100)</td>
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