CHAPTER-III
METHODOLOGY

3.1. Statement of the problem

“A Study on Anxiety, Depression, Self Confidence and Mental Health among Sportspersons”

3.2. Significance of the study

This study reveals the effect of age gender and residential area on the psychological factors of the sports players of the Hyderabad Karnataka region. The study also showing the influence of the external effects on the sports players.

3.3. Objectives of the study:

➢ To find out the level of anxiety among different level of competition in sports players
➢ To find out the depression level among different level of competition in sports players
➢ To find out the mental stability among different level of competition in sports players
➢ To find out the level of self confidence among sportspersons.
➢ To know the anxiety, depression, self confidence and mental stability among team games and individual games sports players.
To identify the psychological differences due to the age factors like, Age category –I (19 to 21 years) & Age category –II (22 to 24 years) sports players.

To identify the psychological differences due to the gender difference in the sports players.

To identify the selected psychological differences due to the nature of the sports (Team games & Individual games).

3.4. **Hypothesis of study:**

- There would be the significant difference in the anxiety, depression, Self confidence and mental health level among the sports players of team games and individual games.

- There would be the significant difference in the anxiety, depression, self confidence and mental health among the sports players due to their gender difference.

- There would be the significant difference in the anxiety, depression, self confidence and mental health among Age category –I (19 to 21 years) & Age category –II (22 to 24 years) sports players.

3.5. **Limitation of the study:**

- The present study sample group will be selected from the Gulbarga University affiliated colleges.

- The study consist both team games player and individual game players in equal numbers.
The study will be selected 200 sports players both male and female.

The study limited to the sports players studying in Gulbarga university affiliated colleges.

The study limited to Inter collegiate level participated players will be the sample of the study.

3.6. Sample:

The present study sample will be chosen from the degree colleges of Hyderabad Karnataka, the random sampling procedure.

1) 200 Sports players participated in Inter collegiate level competitions.

2) The present sample consist of both group games & individual games players in equal level.

3) The sample consists of male & female players of group games & individual games.

4) The sample consists of equal numbers of Age category –I (19 to 21 years) & Age category –II (22 to 24 years) of group games & individual games sports players.

5) The sample consists of equal numbers of who are studying in under graduate level.

**SAMPLE OF STUDY**

<table>
<thead>
<tr>
<th>Group Games</th>
<th>Individual Games</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td><strong>Female</strong></td>
</tr>
<tr>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Age Cat-I</td>
<td>Age Cat-II</td>
</tr>
<tr>
<td>25</td>
<td>25</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Cat-I</th>
<th>Age Cat-II</th>
<th>Age Cat-I</th>
<th>Age Cat-II</th>
<th>Age Cat-I</th>
<th>Age Cat-II</th>
<th>Age Cat-I</th>
<th>Age Cat-II</th>
</tr>
</thead>
</table>
3.7. Tools

1. Sports Competition Anxiety Test:

The investigator used sports competition anxiety test (SCAT) by Martens (1977) (Appendix-II) to measure a player’s level of competitive anxiety. The test-consists of 15 statements related to competitive situation, which player answers by making a Tick Mark (✓) corresponding the ‘hardly ever’, ‘sometimes’, or ‘often’ for each item. Five items are spurious. Therefore only ten items were scored to yield a competitive anxiety measure, Martens (1977) reports the test-retest reliability to be .77 across age, sex and time. The internal consistency was found to be .96. The levels of anxiety are as follows:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Range of Score</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1-10</td>
<td>Low Anxiety Level</td>
</tr>
<tr>
<td>2.</td>
<td>11-20</td>
<td>Optimum Anxiety Level</td>
</tr>
<tr>
<td>3.</td>
<td>21-25</td>
<td>Above Average Anxiety Level</td>
</tr>
<tr>
<td>4.</td>
<td>Above 25</td>
<td>Extreme Anxiety Level</td>
</tr>
</tbody>
</table>

3.8. Scoring method:

For each item one of three responses are possible; (a) Hardly ever (b) Sometimes and (c) Often. The 10 test items are 2, 3, 5, 6, 8, 9, 11, 12, 14 and 15. the spurious items: 1, 4, 7, 10 and 13 were not scored items 2, 3, 5, 8, 9, 12, 14 and 15 are negatively worded So that they were scored according to the following key:

1 = Hardly ever

2 = Sometimes

3 = Often
Item 6 and 11 are positively worded and scored according to the following key:

1 = Often

2 = Sometimes

3 = Hardly ever

The range of scores on SCAT is from 10 (low competitive A - trait) to 30 (high competitive A - trait).

3.9. Mental Health Inventory (MHI):

This scale was developed and standardized by Dr. Jagadish, Dept. of Psychology. R.B.S. College, Agra, & Dr. A.K. Srivastava Department of Psychology, Banaras Hindu University, Varanasi. The inventory consists of 56 statements. The investigator after consulting the research director decided to have 44 statements with regard to mental health inventory. For this the investigator selected 44 statements from the original mental health inventory. Senior most teacher educators working in colleges of education and university departments of education were consulted for the finalization of tool. The statements which were agreed upon by eighty percent of the experts were taken into consideration and rest was discarded. The scale consists of 44 items in which 16 are positive and 28 are negative statements. Copy of the mental health inventory was presented in Appendix-B.
 Statements:

Sl. No. in the tool Positive- 3, 5, 10, 16, 17, 21, 22, 24, 26, 27, 28, 31, 33, 34, 35, 36, 39, 40, 44
Negative- 1, 2, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15, 18, 19, 20, 23, 25, 29, 30, 32, 37, 38, 41, 42, 43.

Method of scoring In the present scale 4 alternative responses have been given to each statement i.e. Always, Often, Rarely, and Never 4 scores to „Always”, 3 scores to „Often”, 2 scores to „Rarely”, and 1 score to „Never” marked responses as 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. The over lined items are negative while remaining positive. Thus, on the total scale the scores range between 44-176. From the present study the range obtained scores for this sample was from 96 to 160.

3.10. Self-Confidence:

The self-confidence questionnaire is developed by M. Basavanna (1971). This questionnaire consists of 100 items. There are two response categories (True and False). The items can be scored with scoring key. The one who scores high is said to have high self confidence and vice-versa. The reliability and validity of scale is reported to be significant and adequate and was found to be 0.94.
3.11. **Beck Depression Inventory (BDI):**

The Beck Depression Inventory (BDI-II) was created by Dr. Aaron T. Beck. The original version of BDI was introduced by Beck and Beck in 1961 and revised in 1978 as Research Methodology 87 BDI-IA. The second edition of BDI-II was published in 1996. Both original and revised versions were found to be highly correlated. The BDI-II (Beck et al, 1996) is the most widely accepted measure of depressive distress. BDI-II is widely used as an assessment tool by healthcare professionals and researchers in a variety of settings. The Beck Depression Inventory II is a 21- item multiple –choice self-report inventory test which assesses the existence and degree of depression in adolescents and adults as per DSM –IV, 1994. Each item is a list of four statements arranged in increasing severity about a particular symptom of depression. There are seven options to indicate either an increase or decrease of appetite and sleep. BDI-II consists of items relating to depressive symptoms such as sadness, crying, hopelessness and pessimism, guilt, self dislike, self blame, agitation, suicidal thoughts, insomnia, fatigue, loss of interest in activities, worthlessness, weight loss, and lack of interest in sex. There is a four–point scale for each item ranging from 0-3. Numerical values of 0, 1, 2 and 3 are assigned to each statement to indicate the degree of severity. The highest possible score from the instrument is 63. A **total score of 13 is considered minimal depression, 14-19 score mild depression, 20-28 moderate depression, and 29-63 severe depression.**
Average reliability coefficient reported from previous studies is 0.86. The same tool was used in local studies by other researchers too. Beck’s Depression Inventory (BDI) is widely used as an assessment tool by healthcare professionals and researchers in a variety of settings. The BDI was adapted for Turkish use among pregnant women by Hisli (1988). The tool’s Cronbach Alpha Internal Consistency coefficient is 0.95. This tool was reported to be used in the screening of depression in pregnancy and validated for use in pregnancy by Holcomb et al., (1996). The BDI has been used in other studies investigating depression in pregnancy. (Ponirakis et Research Methodology 88 al,1998 ; Buist et al , 1999 ; Kurki et al, 2000 ; Zlotnick et al, 2001 ; Manber et al,2004) A search on Pub med returns 3,209 peer-reviewed articles that have used the instrument in measurement of depression. English and Malayalam versions of BDI are given in Appendix- F and Appendix - Q Table 3.3: Number of Items and Maximum Possible Score for BDI Tool Number of Maximum Items Possible score BDI 21 63.

3.12. Statistical Techniques:

Collected data was tabulated and t-test was used to find out the significant difference between group game and individual game players in the psychological factors.