

# Comparative Study on Sports Stress between University Level Female Basketball and Volleyball Players

**Dr. K. M. Valsaraj**

Associate Professor & Head, Deptt. Of Physical Education, LCC Lucknow

**Abstract – Every age has its monsters, this century is no exception. Stress is one of the biggest monsters of the present century. Stress may be defined as the adaptive physiological response of the human organism to internal and external forces and events which disturb the homeostatic balance of the individual. The imbalance may be caused by psychic, physical and social agents or conditions.**

**The present study was undertaken to compare the sports stress between male and female university Basketball and Volleyball players. Sports stress has been assessed using Sports Stress Test constructed by Everly & Girdano. The reliability has been found to be 0.87. The total 24 students (12 female university Basketball players and 12 female university volleyball players) from Lucknow region who participated in Inter University tournament in basketball and Volleyball for the session 2010-11 to 2011-12 were selected as subjects by using purposive sampling technique.**

**The age of the subjects ranged between 18-22 years. The obtained data were analyzed by applying the students “t” test between the scores of Basketball and volleyball female university players. The result of the study indicated that the significant difference exists between university female Basketball players and university female Volleyball players on sports stress. The university female Basketball players were significantly better in stress control as compared to university female Volleyball players.**

**Key Words- Sports stress, Volleyball & Basketball.**

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## INTRODUCTION

There are enormous environmental demands before every person whenever a person finds that he is unable to cope up with the environmental demands of the time he feels stressed. In the case of players prospects, performance, energy and being left out of the team creates stressful situation for him. The stress may be of three types; acute, episodic, and chronic. In the case of sports person's mostly episodic stress is experienced. It is at the time of playing a match or participation in the tournament or going for championship this stress occurs. It may become weaker or go away after the competition is over, but the other two types are sustainable and can affect episodic stress. According to Sandhu (2002) sports competitions, involving individuals and teams, are full of stress encounters. While physical work may produce some stress in an individual, the psychic aspect

of sport may indeed be the most powerful stressor operating in the situation.

The level of stress varies from training session to actual performance session. Crisfield (1976) reported the fact that there is a need to develop psychic stress tolerance in the players on the one hand, and on the other, we need a method to reduce it, if possible without any loss to performance.

Can there be a life without some kind of stress is a question which is always answered in affirmative. As Symond (1981) says stress is an integral part of our lives. It is a natural byproduct of all our activities. Life is a dynamic process and thus forever changing and stressful. Our body responds to acute stress by liberation of chemicals. This is known as the fight-or-flight response of the body, which is mediated by adrenaline and other stress hormones, and is comprised

of such physiological changes as increased heart rate and blood pressure, faster breathing, muscle tension, dilated pupils, dry mouth and increased blood sugar. In other words, stress is the state of increased arousal necessary for an organism to defend itself at a time of danger. Alterations of hormones in the body include not only adrenaline, but also substances like testosterone and human growth hormone.

Farrell (1982) asserts that the sports, besides requiring certain physical attributes on the part of the player, also require specific psychological characteristics. To be able to take part in sporting activity a sportsperson needs to manifest competitiveness, self assertion, independence, controlled aggression, the will to win and the ability to dominate his or her opponent. These attributes are the same as those that are designated stereotypically 'masculine' that is normal desirable and appropriate in the male and by contrast, abnormal, undesirable and in appropriate in the female.

Sports Stress is one of the psychological factors, which influence the performance of any player and it may be differ in inter university female players of different games. Keeping in view the determining role of Sports Stress in Basketball and Volleyball female players, the investigators decided to undertake this study.

## SIGNIFICANCE OF THE STUDY

The result of the study may provide useful information to coaches, physical education teachers and athletes regarding the behavioral characteristics of sportspersons and may thus be instrumental in effective psychological parameters of athletes. This may also help to assess the differences in the female university players of different sports as far as the sports stress is concerned.

## METHODS AND MATERIAL

The purpose of the study was Comparative study of sports stress between female Basketball and Volleyball university players.

For this purpose, by using purposive sampling technique, 12 female university Basketball players and 12 female university Volleyball players from lucknow region were selected. The age of the subjects ranged between 18-22yrs. All subjects voluntarily agreed to extend full cooperation and coaches/managers ensured that the subjects were made available for collection of data.

## ADMINISTRATION OF THE TOOLS

Stress has been assessed by using Sports Stress Test. This test was constructed by Everly & Girdano. The reliability has been found to be 0.87. This tool consisted of 14 statements rating to various situation of life there was four levels of responses almost, always, seldom true and never true. The subjects were made to mark a tick in the column to which ever response the player felt was true to his nature. The scoring is done by giving 1 mark for Never, 2 mark for Seldom true, 3 marks for usually true and 4 marks for almost always true. The range of score varies from 14 to 56. The lesser the score the lower the psychological stress.

## COLLECTION OF DATA:-

The data has been collected by the investigator in the 2 natural settings. Before actual collection of data, the investigator gave a short orientation lecture explaining to the subjects. The time taken for data collection was about 7 minutes. Respondents gave their answer on their respective answer sheets after reading items from the test booklet. Thus all the responses were recorded on the test booklet and answer sheet.

## RESULTS:

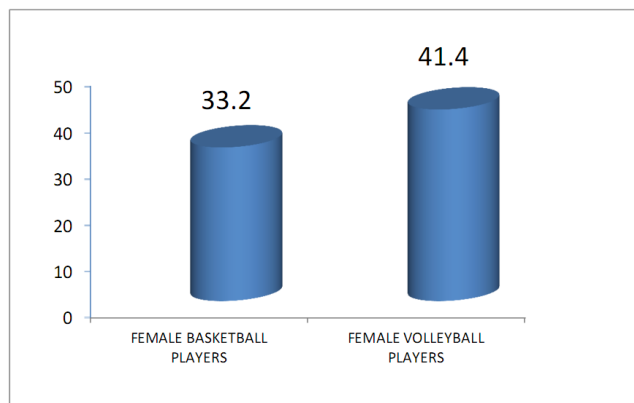
The results obtained after applying the students "t" test between the scores of female university Basketball and Volleyball players is presented in the Table-1.

TABLE-1

Teams	N	Mean	SD	"t" value	Level of significance
University female Basketball players	12	33.2	6.51	3.08	2.07*
University female Volleyball players	12	41.4	5.32		

\*significant at 0.05 level

The observation of the table depicts that the obtained "t" value is 3.08 which are statistically significant at 0.05 levels as they are more than tabular value of 2.07. This data provide sufficient evidence to ensure that the mean Sports Stress is significantly higher for university female Volleyball players in comparison to female university Basketball players. Comparisons of the mean value between groups are also graphically presented in figure-1.



**Figure-1: Comparisons of the Mean Value between Groups**

Farrell, P., Gates, W., Maksud, M., & Morgan, W. (1982): Increases in Plasma B-endorphin/ B-lipotropin immunoreactivity after treadmill running in humans. *Journal of Applied Psychology*, 52, 1245-1249

## DISCUSSION & CONCLUSION ON RESULTS:-

The study reveals that significant differences exist between university female basketball players and university female Volleyball players. The data about the significant difference between groups established the fact that university female Basketball players are significantly better in stress control as compared to university female Volleyball players. The reason for this may be that at university level female Basketball players have better control on their level of stress; they are less affected by awkward performance and environment due to their family background, since this game is known as rich people's game in comparison to Volleyball. This may be due to fact that the new rotation system in volleyball puts more demand on volleyball players to score points which is not in the case of Basketball. Basketball players may have more chances of participation in games and sports at junior level in schools which develops in them some kind of protection and confidence.

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