



**A COMPARATIVE STUDY ON FLEXIBILITY BETWEEN MALE HANDBALL AND
VOLLEYBALL PLAYERS OF THE UNIVERSITY OF JAMMU**

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Abstract

The purpose of the study was to compare the flexibility between Male handball and volleyball players of the University of Jammu. The study was conducted on a total number of thirty Jammu University male players of whom 15 were from handball and 15 from volleyball discipline who had participated in the intercollegiate or Inter-University championship. The age of the subjects ranged from 20 to 28 years. The variable taken for the study was flexibility. To measure the flexibility Sit and Reach test was used. The test was administered after proper demonstration and warming up of the players. The collected data was statistically analyzed for the significant difference using Descriptive statistics and an independent T-test. The level of significance was set at 0.05. The result showed no significant difference between the flexibility of male handball and volleyball players of the University of Jammu.

Keywords: Flexibility, Handball, Volleyball, etc.

Introduction

In today's world, it is widely accepted that exercising regularly keeps one healthy and away from diseases and chronic illness. As a result, Physical education has received much attention in several schools and colleges in recent years. The majority of schools have included physical education as a mandatory subject. Besides, many colleges and universities offer physical education as a degree programme. Physical education is a necessary area of education as it contributes to the overall development of the student. It teaches students the value of maintaining a healthy body and mind. It

benefits children to stay fit, physically and mentally active, and healthy. Everyone is physically fit to some extent. However, it differs from game to game, individual to individual, and within the same individual from time to time. Physical fitness is a desirable characteristic. Without physical fitness, a man cannot move an inch. Physical fitness is both a basic and an element of total fitness. It refers to physical traits, social adaptability, emotional stability, and mental clarity.

Flexibility is understood as an individual's ability to move the body and its parts through as wide a range of motion as possible without causing undue strain on articulation and muscle attachment. Sports movements are the result of a combination of joint movements. Before any physical activity, stretching exercises are commonly practiced so that the range of motion of joints is maintained to avoid injury. Higher levels of flexibility, on the other hand, make it easier to attain the desired movement amplitude without putting too much strain on the muscles. Being flexible enables a greater range of movement in the execution of movements around the court may be easier.

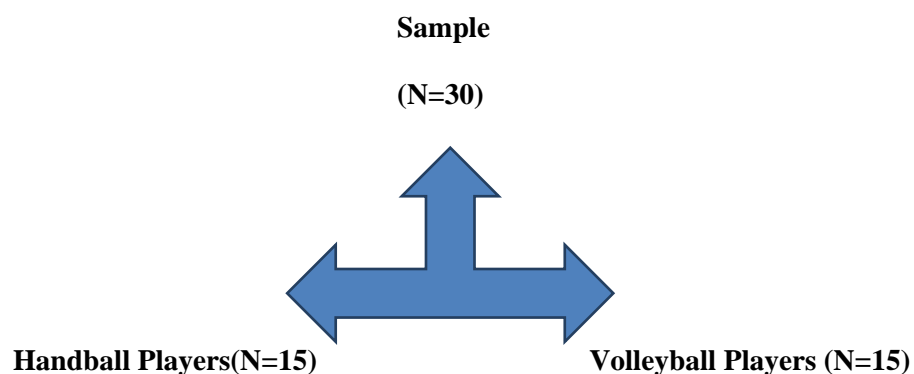
Objective of the Study

The main objective of the study was to test whether there is a difference between the flexibility of male handball and volleyball players of university of Jammu.

Methods and Procedure

Selection of the Sample

Purposive random sampling technique will be applied for the selection of samples of 300 chess players. On the basis of objectives of the study, the samples will be categorized into two groups, male volleyball players (n=15) and male handball players (n=15). The age of the subjects will be ranges from 20 -28 years.



Administration of the Tests and Collection of Data

The variable selected for the present study was flexibility. The criterion measure selected for examining the flexibility was Sit and reach test. The score was measured to the nearest centimetre and millimetre i.e. the distance between the initial and final position.

Results and discussion

Table 1 Descriptive Analysis of Flexibility of Male handball and volleyball Players

| s.no | Variable | N | Group | Mean | Standard deviation |
|------|-------------|----|------------|-------|--------------------|
| 1. | Flexibility | 15 | Handball | 25.10 | 5.57 |
| | | 15 | Volleyball | 24.10 | 5.28 |

The above Table shows the descriptive analysis of flexibility. Mean values of flexibility for male handball and volleyball players are 25.10 and 24.10. The standard deviation values of flexibility for male handball and volleyball are 5.57 and 5.28. A graphical representation of the above table has been given below in Figure 2.

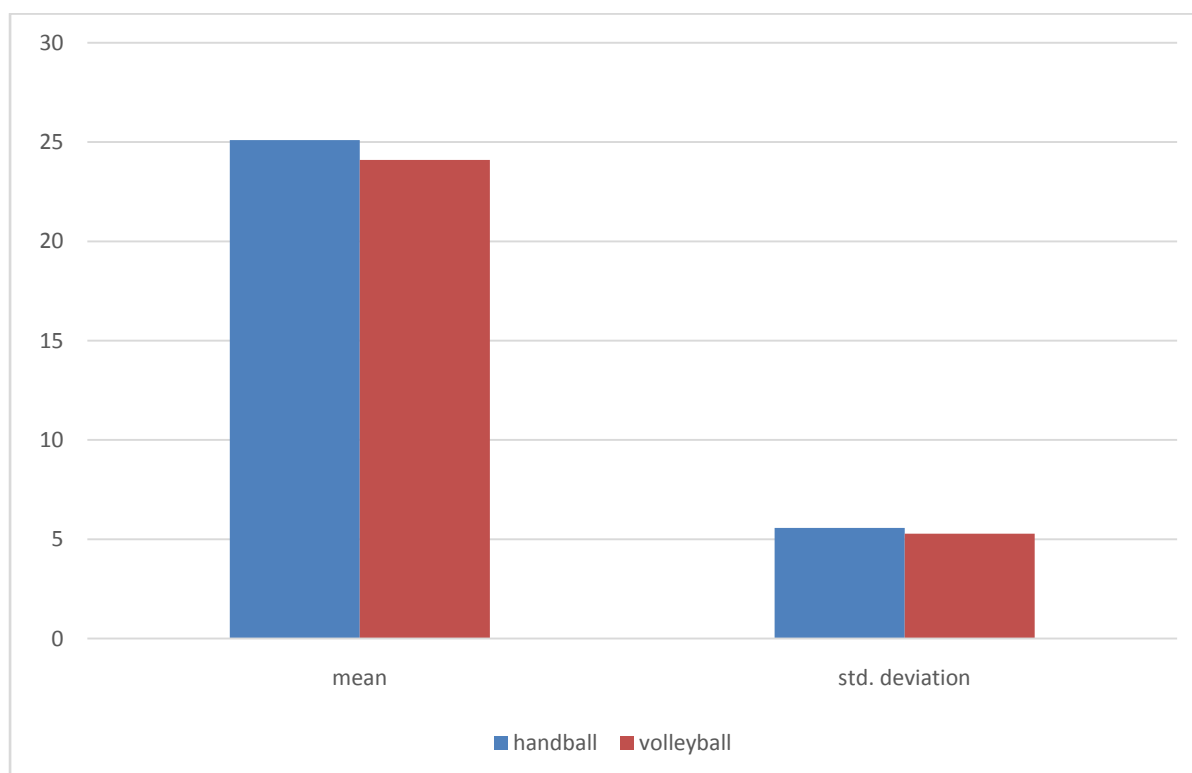


Figure 2: Mean and standard deviation values of flexibility of male handball and volleyball players.

Table 2

A significant difference between the Means of the flexibility of male handball and volleyball players

| | Group | Mean | Mean difference | T value | Df | Std. error mean | Sig(2-tailed) | Ho hypothesis |
|-------------|------------|-------|-----------------|---------|-------|-----------------|---------------|---------------|
| Flexibility | Handball | 25.10 | 1.0 | 0.504 | 28 | 1.43 | 0.618 | Accepted |
| | Volleyball | 24.10 | | | 27.92 | 1.36 | | |

*Significant at 0.05 level, $t=0.05=0.504$

Table 2 shows the significant difference (t ratio) of flexibility between male handball and volleyball was 0.504, which is more than the required value at 0.05 level of significance ($t=0.504$) and 28 degree of freedom. It shows that there is insignificant difference between the flexibility of male handball and volleyball players. Thus it may be concluded that no superior was observed, in both games the flexibility is required to smash and shoot the ball, hence there is no significant difference found.

Discussion of findings and Conclusion

This study was conducted with the objective of finding whether there was a significant difference between the flexibility of male handball and volleyball players. The sample size selected for the study was 30. The data was analyzed with the help of descriptive statistics and t-test. On the basis of this study, it can be concluded that there was no significant difference between the flexibility of male handball and volleyball players. A similar study was conducted by (Singh, 2019) among interuniversity football and volleyball players and found that there was an insignificant difference concerning flexibility between volleyball and football players. The study conducted by Singh was supported the present study. The scholar examined thirty players from two different . In order to test null hypotheses and performing comparative The hypothesis in relation to the objective was tested with viable statistical tool that reflected that there was no significant difference was found between the flexibility of male handball and volleyball players of university of Jammu.

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