



ISSN Print: 2664-7559
ISSN Online: 2664-7567
IJSHP 2022; 4(2): 28-29
www.physicaleducationjournal.in
Received: 09-08-2022
Accepted: 11-10-2022

Jasmati
Research Scholar Department
of Physical Education Guru
Ghasidas Vishwavidyalaya,
Bilaspur, Chhattisgarh, India

Vishan Singh Rathore
Professor of Department of
Physical Education Guru
Ghasidas Vishwavidyalaya,
Bilaspur, Chhattisgarh, India

Comparison of explosive leg strength between volleyball and basketball female players

Jasmati and Vishan Singh Rathore

DOI: <https://doi.org/10.33545/26647559.2022.v4.i2a.42>

Abstract

Objective: The objective of the study was to compare Explosive leg strength between Volleyball and Basketball Female Players.

Methodology: The researcher randomly selected 10-10 female players of Volleyball and Basketball. Subject were selected for this study from Bareilly Sports Stadium. The age range between 16 to 19 years. The subjects were evaluated for their Explosive Leg strength. To measure the explosive strength, Standing Broad Jump test was applied on plane surface. The measurement was recorded in centimeters with the help of inch-tape by researcher for the analysis of the data independent t-test was used. The level of significance was set at 0.05 levels. All statistical functions were performed with the SPSS software.

Result: of the study revealed that there was no significance difference existed between Volleyball and Basketball female players in relation to explosive leg strength.

Conclusion: By the help of result it is concluded that there is no significance difference between explosive leg strength between Volleyball and Basketball female players.

Keywords: Eye hand coordination, arm muscle strength, basketball players, hand held dynamometer

Introduction

The game volleyball and basketball are very popular sports in the world in terms of spectator sports. It is fast, quick and aggressive. They are consider strenuous games because the games demands a high degree of fitness as well as intelligence and alternes of mind, jumping ability, speed which are basic qualities of a players. To achieve the best possible performance. The training has be formulated according to the principles of periodization (Bompa, 1999). The training induced changes observed in body composition.

Performance in a different games is supposed to better physical fitness. More stress is being laid on conditioning and practicing of skills and the use of other valuable devices to achieve better physical fitness by players. As the level of performance increases the players attain high degree of physical fitness. Petter and Haliski (1950) supported this view that the successful participation in any game is directly related to physical fitness. Bernard (1966) reported that physical fitness improves in those who take regular physical exercises. Regular participation in games significantly contributes to higher level of performance and great degree of physical fitness among the players. Physical fitness is generally achieved through exercise, correct nutrition and enough rest. It an important part of life. Different games provided to do the body activities differently.

Objective of the study

Objective of the study was to compare leg strength between Volleyball and Basketball players.

Methodology

Selection of subjects

To achieve the purpose of the study the researcher randomly selected 10 Volleyball players and 10 Basketball players. Subject were selected from Bareilly Sports Stadium. They were state level players. The age ranged between 16 to 19 years.

Criterion measures

The explosive leg strength was measured by standing broad jump test.

Physical variable

Unite of measure

Standing Broad Jump Test

Testing measure

Explosive Leg Strength

Centimeters

Corresponding Author:
Jasmati
Research Scholar Department
of Physical Education Guru
Ghasidas Vishwavidyalaya,
Bilaspur, Chhattisgarh, India

Tools

The subjects were evaluated their explosive leg strength. To measure the Explosive leg strength, standing broad jump test was applied on plane surface. Measurement was noted in centimeters with the help of inch-tape by researcher.

Procedure

The test was administered on the subjects during morning conditioning who are regular players of Bareilly Sports Stadium. Before conducting standing broad jump test for explosive leg strength, players were allowed to warming up for 15 minutes.

Statistical Technique

Keeping in view the purpose of the study, the data was collected by standing broad jump test. For the analysis of data, independent t-test was used. The level of significant was set at 0.05 levels. All statistical functions were performed with the SPSS software.

Finding and result

The researcher reached at the results of this empirical investigation which is presented by the

Table 1: Comparison of the explosive leg strength between Volleyball and Basketball female players

Group	N	Mean	S.D.	T-Value
Volleyball	10	234.6000	12.58041	1.245
Basketball	10	228.2000	10.29347	

*Significant at 0.05 level, tabulated t-value required to be significant at 18 = 2.101

It is thus, evident from the table-1 that, the calculated t-value (1.245) is less than the tabulated value (2.101), which means that there is no significant difference of explosive leg strength between Volleyball and Basketball players. Calculated t-value was (1.245) less than the tabulated value (2.101) required to be no significant at 0.05 level with (2, 18) degree of freedom.

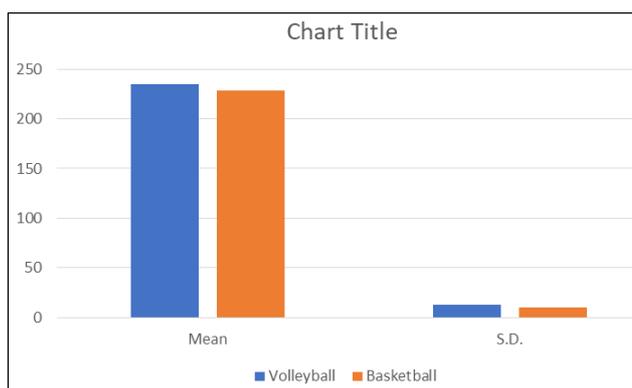


Fig 1: Graphical representation of Mean and S.D. score of explosive leg strength between Volleyball and Basketball Female players.

Discussion and finding

The aim of the study was to compare the explosive leg strength between Volleyball and Basketball female players. The result of the study shows that there was no significant difference of explosive leg strength between Volleyball and Basketball female players. This might be due to nature of

training. Age of the subjects and level of playing was equal for all participants.

Conclusion

Collet date were analyzed and result was summarized with the help of facts which revealed that there is no significant difference of explosive leg strength between Volleyball and basketball female players.

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