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Comparison of upper body power and lower body strength between volleyball and handball players

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Abstract

The purpose of the study was to compare upper body power and lower body strength between volleyball and handball players. To conduct the study, fifteen volleyball and handball players were selected as sample. The selection of volleyball and handball players was participation in inter college level tournament. To fulfill the objectives of the present study, fifteen volleyball and handball players from colleges in Amravati were also selected. The age range of selected subjects from both the groups was within 18 to 25 years. The tools and instruments were used to collect data: Upper body power measured by two hand medicine balls put (6 lbs) and lower body strength measured by standing vertical jump. The analysis of data, collected by administering the standard test to the player's t-test was employed at 0.05 level of significant. Result showing that there was no significant difference between the volleyball and handball players in upper body power and significant difference found in lower body strength.

Keywords: upper body strength and lower body power

Introduction

Physical fitness is one of the core preconditions of health. We cannot imagine a person to be healthy without being physically fit. Physical fitness therefore needs to be appreciated in full measure. The common perception of physical fitness is the absence of ailment. If individual is not suffering from any perceptible disease, then he is considered physically fit. Is it true? Another significant issue is whether there is a universal condition of physical fitness which is uniformly applicable to all. It is not so. Physical fitness of young people is different from that of the aged. The physical fitness of a sports person is different from that of the persons working in army factory or a layman. In fact, physical fitness means different things to different people. In this lesson, let us discuss various aspects of physical fitness^[1].

Muscle strength is the ability of the muscle or muscle to bring strength to overcome the most resistance in an effort. The strength can be measured based on the weighted amount. Power is a component of fitness related to skill that is needed to become superior in athletic performance. Increased power does not always translate into increased power^[2].

Methodology

To conduct the study, fifteen volleyball and handball players were selected as sample. The selection of volleyball and handball players was participation in inter college level tournament. To fulfill the objectives of the present study, fifteen volleyball and handball players from colleges in Amravati were also selected. The age range of selected subjects from both the groups was within 18 to 25 years. The following tools and instruments were used to collect data: Upper body power measured by two hand medicine balls put (6 lbs) and lower body strength measured by standing vertical jump.

Analysis of Data:

The analysis of data, collected by administering the standard test to the player's t-test was employed at 0.05 level of significant. The statistical analysis of data pertaining to upper body power and lower body strength is given below.

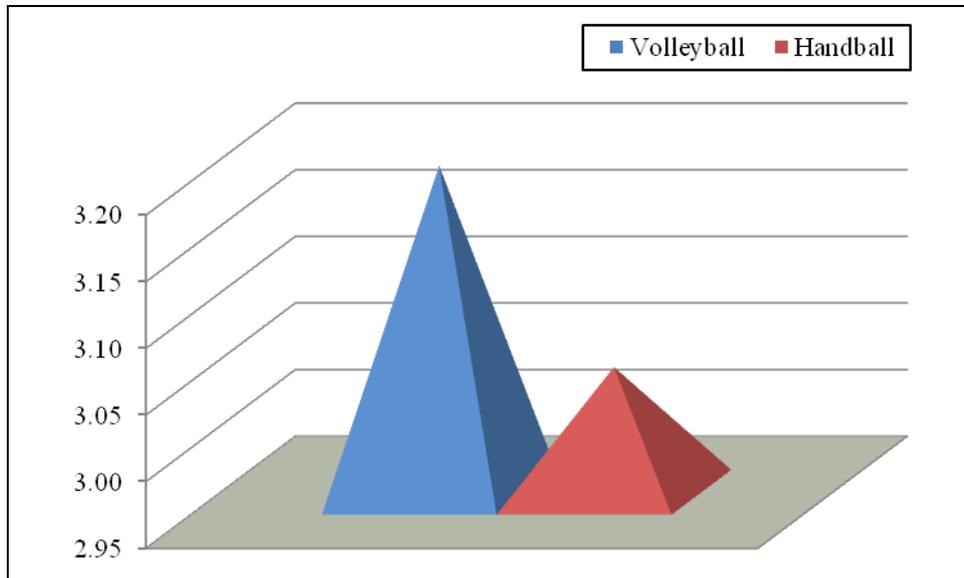
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Table 1: Independent-t test for comparing different scores of upper body power in the volleyball and handball players

Group	Mean	SD	SE	MD	Ot	df	Tt
Volleyball	3.20	0.90	0.25	0.15	0.61	48	2.01
Handball	3.04	0.86					

Above Table - 1 reveals that there was no significant difference between the volleyball and handball players in

upper body power. As the calculated ‘t’ value 0.61 was lesser than tab t value of 2.01 at .05 level.



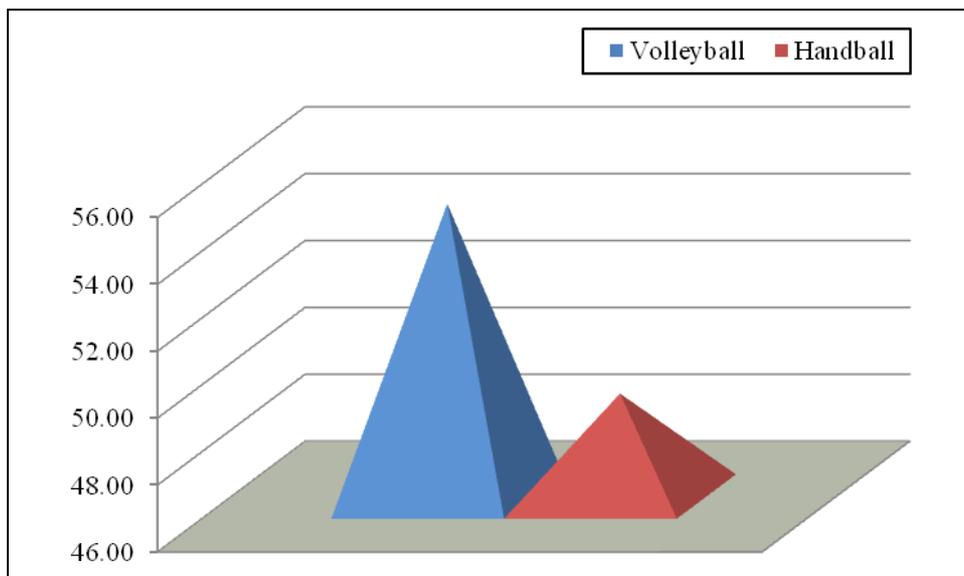
Graph: 1 Mean scores of upper body power in the volleyball and handball players

Table 2: Independent-t test for comparing different scores of lower body strength in the volleyball and handball players

Group	Mean	SD	SE	MD	Ot	df	Tt
Volleyball	54.76	8.44	2.37	5.68	2.40	48	2.01
Handball	49.08	8.30					

Above Table - 2 reveals that there was significant difference between the volleyball and handball players in lower body

strength. As the calculated ‘t’ value 2.40 was greater than tab t value of 2.01 at .05 level.



Graph 2: Mean scores of lower body strength in the volleyball and handball players

Conclusion

On the basis of findings of the present study it can be concluded that there was no significant difference between the volleyball and handball players in upper body power and significant difference found in lower body strength. Naturally everyone is losing their Physical strength and power to face

the challenges of the daily life. Muscular strength and power is a vital for persons to achieve every day activities and everyday jobs such as taking out the trash moving furniture or appliances, or changing a tire and lifting, pulling or pushing objects. Many tasks involve use of the upper body and lower body lines. In an emergency a strong individual has a better

change of avoiding serious injury then compared with a weak person. In many cases upper body strength can make the difference between a serious injury and escaping harm.

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