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# Comparative Study of Selected Motor Fitness Parameters between Boys Volleyball and Kabaddi Players

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#### Abstract

The purpose of the present study was to Comparative Study of Selected Motor Fitness Parameters between Boys Volleyball and Kabaddi Players. Subjects were randomly selected (12 from Volleyball and 12 from Kabaddi Players) from various schools of Bagalkot, District of Karnataka State was taken as a sample. The data was collected during interschool competition organized by department of youth services and sports, Karnataka State. The age of subject ranged between 12-17 years. Motor fitness tests were used to measure the selected Agility variable of players. All the subjects were informed about aim and methodology of the study and they volunteered to participate in this study. 'T' test independent was used to analysis the data, level of confidence was set at 0.05 level. Study concluded that insignificant difference found between the means of selected Motor fitness Agility variable.

Keywords: Motor fitness, Agility, Volleyball and Kabaddi.

# Introduction

Motor fitness is a term that describes an athlete's ability to perform effectively during sports or other physical activity. An athlete's motor fitness is a combination of five different components, each of which is essential for high levels of performance. Improving fitness involves a training regimen in all five.

There are many different manifestations of fitness. Some examples include strength, stamina, speed, and flexibility. Certain types of fitness, such as an athlete's cardiac fitness level, are more important than others. An athlete needs to be aware of the various types of fitness to develop an effective training program that focuses on weak or important areas.

Motor fitness, or motor physical fitness, refers to how an athlete can perform at his or her sport, and involves a mixture of agility, coordination, balance, power, and reaction time. Improving this form of fitness is an indirect result of training in any of these attributes. All five components of fitness are essential for competing at high levels, which is why the concept is seen as an essential part of any athlete's training regime.

Agility refers to the body's ability to perform quick movements in different directions. It is sometimes described as how fast an athlete is able to change direction while competing on the field or on the court. Improving agility often involves sprinting between cones that are placed at a variety of angles.

Coordination is more difficult to describe than agility because it cannot be observed directly. An athlete with a high level of coordination is able to combine all forms of fitness-not just those that are part of motor fitness-in an effective and controlled way. The more coordinated an athlete is, the more efficient he or she will be during competitive activities.

Power refers to the athlete's ability to contract his or her muscles forcefully in an explosive movement. Most people have an intuitive sense of what power is, and why it's important for sports. Powerful athletes are not merely strong; they are able to use that strength quickly and efficiently.

Balance and reaction time are two other important parts of motor fitness. Balance is an athlete's ability to control his or her body's movements, while reaction time is how quickly the athlete can respond to a changing situation. Improving all five components of motor fitness is important for any athlete who wants to achieve his or her best.

volleyball, game played by two teams, usually of six players on a side, in which the players use their hands to bat a ball back and forth over a high net, trying to make the ball touch the court within the opponents' playing area before it can be returned. To prevent this a player on the opposing team bats the ball up and toward a teammate before it touches the court surface—that teammate may then volley it back across the net or bat it to a third teammate who volleys it across the net. A team is allowed only three touches of the ball before it must be returned over the net.

Kabaddi is basically a combative sport, with seven players on each side; played for a period of 40 minutes with a 5 minutes break (20-5-20). The core idea of the game is to score points by raiding into the opponent's court and touching as many defense players as possible without getting caught on a single breath.

One player, chanting Kabaddi!!! Kabaddi!!!! Kabaddi!!!! Charges into the opponent court and try to touch the opponent closest to him, while the seven opponents make maneuvers to catch the attacker. This is Kabaddi, the match of one against seven, known as the game of struggle.

The players on the defensive side are called "Antis" while the player of the offence is called the "Raider". The attack in Kabaddi is known as a 'Raid'. The antis touched by the raider during the attack are declared 'out' if they do not succeed in catching the raider before he returns to home court. These players can resume play only when their side scores points against the opposite side during their raiding turn or if the remaining players succeed in catching the opponent's raider.

#### Agility

"Agility can be defined as the ability of the individual to change the direction of his entire body or parts of his body accurately and rapidly."

# Methodology

Selection of Subjects Total twenty four subjects were randomly selected (12 Volleyball players and 12 Kabaddi players) from various Schools of Bagalkot, District of Karnataka State were taken as a sample. The age of subjects were ranged between 12-17 years.

#### **Selection of Variable**

For the present study the investigator selected Motor fitness variable.

• Agility

# **Criterion Measures**

Selected variables and their criterion measures

Variable	Test items	Unit measurement
Agility	10x4 meter shuttle run	In seconds

# **Statistical Analysis**

To find out the significance difference of Selected Motor Fitness Parameters between Boys Volleyball and Kabaddi Players from various schools of Bagalkot, District of Karnataka State in comparison to agility the data were analyzed by applying Descriptive statistics and Independent sample t-test. The level of significance was set at 0.05.

#### **Result of the study**

The scores were obtained by applying the 4x10 shuttle run test. All the individual 4x10 shuttle run test scores used to judge the level of agility.

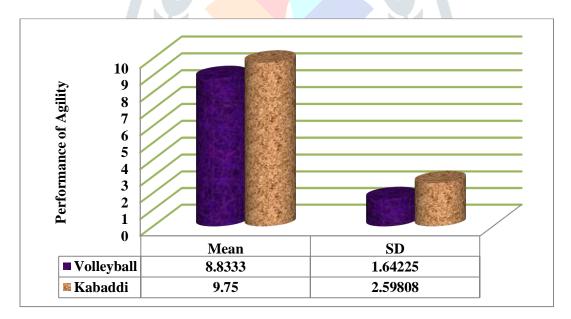
Table 1: Shows statistical	comparison	of Agility	between	Volleyball	and Kabaddi	Girls
players is as under						

Group	Ν	Mean	SD	T-ratio
Volleyball	12	8.8333	1.64225	1.894
Kabaddi	12	9.7500	2.59808	

\*\*The level of significant 0.05 =Table value 2.07

From the above table it is observed that the mean of Volleyball and Kabaddi group players is 8.8333 and 9.7500 respectively. After applying "t" test it is found that the t-ratio is 1.894 which was not significant at the 0.05 level of significance. So the hypothesis was rejected. The Table no.1 shows that the mean of Kabaddi girl players is more than mean of volleyball girl players. This proves that Kabaddi girl players Agility is merely more than volleyball girl Players.

Figure No.1: Mean and Standard values of Agility of Volleyball and Kabaddi players.



**Figure No. 1**: Showing Mean Difference of Agility among the Volleyball and Basketball players. Mean score of Volleyball players is 8.8333 and Basketball player is 9.7500; mean difference vale is 1.894 only. It shows that there is no significant difference between Volleyball and Basketball players.

#### Conclusion

The investigator analyzed the collected data as per the purpose of study. The statistical analysis of Motor fitness variable showed that in the parameter Agility there were no significant differences between volleyball and basketball players of Bagalkot, District of Karnataka State.

#### References

- Clarke HH. Relationships of Strength and Anthropometric measures to Physical Performance involving the trunk and legs. Research Quarterly, 1957; 28:223
- Datt V, Mane M. Comparative studies of speed, strengthand agility of inter collegiate basketball and volley ballplayers. Variorum Multi-Disciplinary e-Research Journal.2013; 4(2):1-5.
- Gearstick MA, Latin RW, Cuppett MM. Comparison of selected physical fitness and performance variables between NCAA Division I and II football players. J Strength Condi Res. 2004; 18(2):292-7.
- Geme Hook. Weight Training in Athletics and physical education (England Cliffs, N.T: Prentice Hall, Inc 1974), p.4 Gide, towards a better understanding of Muscular Strength physical fitness research digest, 1973, 1.
- Malakar B. A comparison of motor ability among women football, cricket and volleyball players. Academic Sports Scholar, 2014; 3(9):1
- Sen S, Sen K, Bhagat KR. Comparative study of selected physical fitness variables of U-19 boys of urban and rural area of Mandi district of Himachal Pradesh. Academic Sports Scholar, 2014; 3(10):1