

Investigation of level of speed among national, state and district kabaddi players

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Abstract

Introduction: Speed is easily defined as the rate of motion or the velocity of the body, or any one of its parts. Speed as the rate at which a person can propel his body or part of his body through space.

Objectives of the study: (1) First objective of the study was to characterize the level of Speed among Kabaddi players in relation to level of achievement. (2) Second objective of the study was to compare the Speed among Kabaddi players in relation to level of achievement.

Materials and Methods: 90 male Kabaddi players, 30 from each level of achievement i.e. National, State and District were selected as subjects in 2014 from different clubs in Indore. To assess the Speed of the subjects 30 meters Sprint was used to measure the Speed.

Results: Mean and SD of National (4.497333±.1156372), State (4.527667±.0771780), District (4.606667±.1328295) level Kabaddi Players in relation to Speed and obtained F- ratio was 7.755, which was higher value than the value 3.09, required for F ratio to be significant at .05 level with (2, 87) degree of freedom.

Conclusions: (1) National Level Players were having greater Speed (4.49 sec.) in comparison to State level (4.52 sec.) and Districts level (4.62sec.). (2) Significant difference was found in National, State and District Kabaddi Players in relation to Speed.

Keywords: Speed, District, Kabaddi, National, State

1. Introduction

Kabaddi is basically an outdoor and indoor game, played in the tropical countries of Asia. This indigenous game of India was adopted by other countries in Asia viz. Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, Maldives, Malaysia and more recently by Japan and China. Speed is easily defined as the rate of motion or the velocity of the body, or any one of its parts. Speed as the rate at which a person can propel his body or part of his body through space. By the term speed one generally gets the impression that we are talking about speed in running activities but speed also concerns many body parts and varies from one part to another. Speed refers to quickness of actions and one's ability to perform rapidly successive movement in a single direction over a short duration. According to Barrow and McGee (1971), speed is defined as "one's ability to perform successive movement of the same pattern at a fast rate".

Speed of muscle contraction is an inherited quality but it can be greatly improved through training by proper techniques and by practicing speedy movements and their proper coordination. Speed is greatly affected by one's age, height, weight, muscle viscosity, mechanical and structural features like length of limbs and flexibility of joint. It is an important motor performance factors in majority of physical activities and sports, more so in basketball, football, swimming, track & field events and volleyball etc.

2. Objectives of the study

- 1) First objective of the study was to characterize the level of Speed among Kabaddi players in relation to level of achievement.
- 2) Second objective of the study was to compare the Speed

among Kabaddi players in relation to level of achievement.

3. Material and Methods

For the present study, total 90 male Kabaddi players, 30 from each level of achievement i.e. National, State and District were selected as subjects in 2014 from different clubs in Indore. To assess the Speed of the subjects 30 meters Sprint was used to measure the Speed. Data was collected through the purposive technique. The data was collected during morning time.

4. Results

The statistical analysis of data has been presented in this chapter. The Speed data was collected on total 90 male Kabaddi players of different level achievement i.e. National, State and District in the year 2014. To characterize and compare the Speed of male Kabaddi players among different level of achievement, Descriptive and One way Analysis of Variance was used. Data pertaining to that have been presented in Table -1-2.

Table 1: Mean and Standard Deviation of Agility of Male Kabaddi players of Different level of Achievement (N=90)

Agility		Mean	Std. Deviation
	National	4.497333	.1156372
State	4.527667	.0771780	
District	4.606667	.1328295	
Total	4.543889	.1191420	

Speed, National (4.497 ±.11563), State (4.527±.07717), District (4.60 ±.1328), Total (4.5438 ±.11914); National

players were having lesser mean in comparison to state and District level in relation to speed. (Fig. 1)

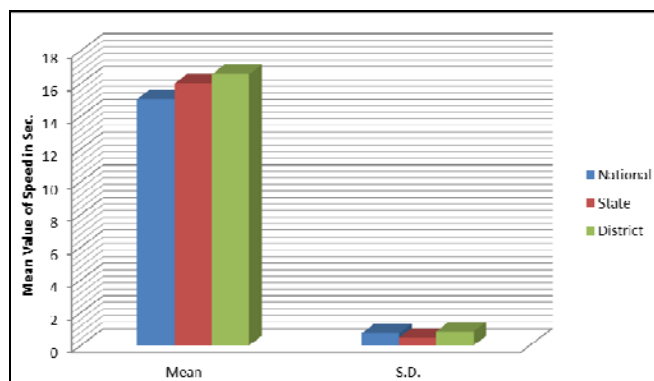


Fig 1: Mean of Kabaddi players of different level of achievement in relation to Speed

Table 2: Analysis of Variance of National, State and District Kabaddi Players in relation to Speed

Source of Variance	Sum of squares	d.f.	Mean Square	F
Between Groups	.191	2	.096	7.755*
Within Groups	1.072	87	.012	
Total	1.263	89		

*Significant at .05 level of significance, F.05 (2, 87) = 3.09

Table-2 revealed that there was significant difference in National, State and District Kabaddi Players in relation to Speed, as obtained F- ratio was 7.755, which was higher value than the value 3.09, required for F ratio to be significant at .05 level with (2, 87) degree of freedom.

Since the one way analysis of variance was found significant in relation to Speed, the least significant difference test (LSD) was applied to find out the difference of the means amongst the National, State and District Kabaddi Players were statistically significant.

Table 3: Least Significant Difference (LSD) post hoc test for the means of National, State and District Kabaddi Players in relation to Speed

Speed of Kabaddi Players	National	state	-.0303333	.293
		District	-.1093333*	.000
	state	National	.0303333	.293
		District	-.0790000*	.007

It is evident from table-3 that there is significant difference between the means of National and state, National and District, State and District in relation to Speed because p value is less than the .05.

5. Discussion of Findings

The present study reveals that significant difference was found among kabaddi players of different level of achievement this might be due to the same reason which are in speed because speed is positively correlated to the agility Thomas (1968). Another reason may be physiological function of national Kabaddi players could be better in comparison to state and district level kabaddi players, In physiological function neuromuscular co-ordination would be fast so they perform the different type of action in different direction very effectively. Dey SK, Khanna GL, Batra (1993) [2] has

conducted study on physiological responses during match play in Indian national kabaddi players and concluded that Kabaddi is an intermittent sport. The rest pause during the game is sufficient for recovery. During raiding the main source of energy is anaerobic.

6. Conclusions

- National Level Players were having greater Speed (4.49 sec.) in comparison to State level (4.52 sec.) and Districts level (4.62sec.)
- Significant difference was found in National, State and District Kabaddi Players in relation to Speed.
- The observed sequence was found in case of Speed, National Players>State Players>District Players.

7. References

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