



## Analysis of Selected Motor Fitness Components Between Basketball and Kho-Kho Players

### KEYWORDS

speed, Agility, Basketball Players, Kho-Kho Players

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**ABSTRACT** The purpose of the present study was to analysis the selected motor fitness components namely speed and agility between basketball and Kho-Kho players. The study was conducted on thirty (N=30) university level male players [fifteen Kho-Kho Players and fifteen basketball players]. They were randomly selected from Visva-Bharati, Santiniketan, WB. The age of the subjects ranged between 20- 25 years. In the present study speed and agility were chosen as the parameters for the study. In this study agility were measured by Illinois Agility Test. and speed was measured by 20Meter Dash Test. Descriptive Statistics and independent t-test were used to calculate the data. The result of the study showed that there was significant difference in agility(2.105) between basketball and Kho-Kho players but no significant difference was found in speed between basketball and Kho-Kho players.

### Introduction:

Agility and speed are very important components in intermittent games and sports like basketball and Kho-Kho. Basketball is a very popular game in the world whereas Kho-Kho an Indian game has yet not been so popular around the world but it has a rapid increasing trend of popularity in the Asiatic countries and few western countries as well.

Sports are essentially that aspect of human activity which strengthen the body and mind. speed is highly essential in most of the game. Offensive and defensive players possess good speed and ability to change of direction though interchanges of positions are rare. Agility is the physical ability that enables a person to rapidly change body position and direction in a precise manner. Agility is the ability to change direction quickly and effectively, while moving as early as possible at full speed (Bosco and Williams,1983). Basketball and Kho-Kho game requiring high levels of physical fitness, in both games which demand not only speed but agility, strength, power and endurance. Thus both games are merely similar in nature from the stand point of speed and agility pattern like short sprint, zig-zag run etc. Now the question is that is Kho-Kho as a game, comparable to the most popular small area games like basketball? Is there any difference in fitness quality required to play Kho-Kho than basketball. The researcher were interested to investigate the above question. Among a group of fitness variable acceleration and agility was chosen with a view as these two is utmost requirement for performing best in both games. It was presumed that agility and Acceleration ability are the two most important factors required for all small area games though may be in varied amount. The investigators were interested to find out the amount of agility and speed possessed by the university level players in the above two games. Accordingly the present project was planned to gather information about agility and speed of university level Kho-Kho and basketball players. Possibly the result would be helpful to the coaches for selecting and constructing training programs for the future players.

**Objective:** To analysis the selected motor fitness components namely speed and agility between basketball and

Kho-Kho players

### Methodology:

**Subjects:** 30 university level male players were randomly selected from Visva-Bharati University, Santiniketan, WB, among them 15 were basketball players and fifteen were Kho-Kho players. The age of the players ranged between 20-25 years.

**Variables:** Motor fitness components namely speed and agility were selected as the parameters for the study

**Test and Criterion Measures:** Speed was measured by 20 meter Dash Test and the scores was recorded in meter/second. Agility was measured by Illinois Agility Test and was recorded in second.

**Statistics:** Descriptive Statistics and independent t-test were used to calculate the data. The level of significance was set at 0.05.

### Results:

Parameters	Group	Mean	SD	Maximum	Minimum
speed (Meter/Sec)	Kho-Kho	3.73	0.01	4.01	3.64
	Basketball	3.69	0.01	3.85	3.56
Agility (Sec)	Kho-Kho	17.01	0.4	18.00	15.92
	Basketball	17.47	0.32	18.11	16.73

Parameters	Group	Mean	Mean Difference	Std. Error	t-Ratio	Sig. Level
speed (Meter/Sec)	Kho-Kho	3.73	0.04	0.031	1.274	0.213
	Basketball	3.69				
Agility (Sec)	Kho-Kho	17.01	0.46	0.219	2.105	0.004
	Basketball	17.47				

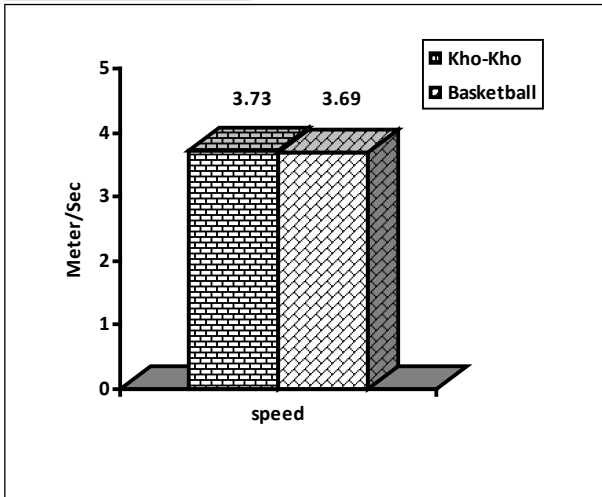


Figure1: Graphical representation of speed of Two Groups

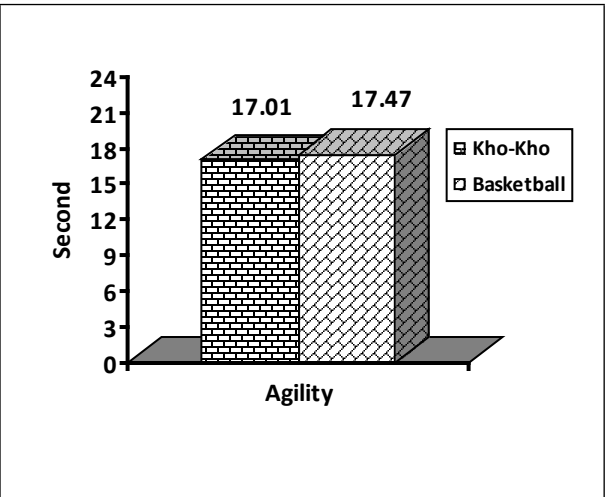


Figure2: Graphical representation of Agility of Two Groups

**Findings and Discussion:**

The result of the study showed that the kho-kho players were significantly better (2.105) than the basketball players in agility but in speed the basketball players were better than the kho-kho players but not significantly (1.274). Agility and speed are basically the result of applying force to mass and both running speed and speed of movement are dependent on muscular strength. Hence, if a person possesses good running speed he is likely to have higher speed of movement and vice versa. The game demands that the player should be able to change places quickly so as to contribute their best. This may be due to the fact that both the games are played in such a court that is almost equal in area and considered as small area games and both the games are played with high speed and intensity required quicker change of position and direction.

Though both the games are merely similar in nature from the stand point of speed and movement pattern like short sprint, zig-zag run, jump, etc. but the schedule time is 36 minutes for kho-kho game and 40 minutes for basketball game and the kho-kho players change direction more often (by playing chain play, ring play exchange of sitting position etc ) than the basketball players that may be the cause of significant difference in agility.

**Conclusion:** On the basis of the result it may be concluded that the kho-kho players are significantly better than the basketball players in agility and in respect to the speed basketball players are better than the kho-kho players but not significantly.

**REFERENCE**

Barry L. Johnson and Jack K. Nelson (1988) Practical Measurement for Evaluation in Physical Education (New Delhi: Surjeet Publication. | Clake HH and Clarke DH (1987). Application of Measurement to Physical Education. Printice Hall, Inc., Englewood Cliffs, New Jersey | Verma, J .P., A (2000) Text Book on Sports Statistics, Venus Publication , Gwalior, India | <http://www.topendsports.com/testing/tests/sprint-20meters.htm> | Ghosh SS and Mazumder C (2013) A study on Agility and Dynamic Balance of Kho-Kho Handball and Basketball Players. International Journal of Scientific Research.2(7): 442-444 | Babu PM and Reddy MSS (2014), Comparative Analysis Of Speed And Agility Among University Players Of Different Disciplines. International Journal of Health, Physical Education and Computer Science in Sports.13(1): 8-10 |