

## A comparative study on agility, orientation ability and kinesthetic sense between state hand ball and kho-kho player

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### Abstract

In case of sports today best performance can only be achieved through a meticulously planned, executed and controlled training system based on scientific knowledge, theoretical and methodical fundamental of sports training. The present study was conducted for the comparison on agility orientation ability and kinesthetic sense between state level hand ball player and state level kho-kho player. 20 male state level hand ball player were selected from Burdwan district and Hooghly district and 20 male state level kho-kho players were selected from North 24 pgs and Nadia district as the subjects for this study. The age of the subjects range between 18-22 years. Agility, Orientation ability and Kinesthetic sense were considered as the variables of the study. Student 't' test was applied to calculate the collected data at 0.05 level of significance. The result of the present study shows that there was significant difference between state level hand ball player and state level kho-kho player on Agility, Kinesthetic sense and also no significant was found in Orientation ability.

**Keywords:** agility, orientation ability, kinesthetic, hand ball, kho-kho

### Introduction

The world of games and sports has crossed many milestones, as a result of different achievements in general and their application in the field of sports in particular Scientific investigation into performance of sportsman has been playing an increasingly importance role to attain excellence of performance in different sports. Sports represents a 'window of opportunity' not merely for an immediate involvement in activity, but also for the development of skills, knowledge, understandings, values and attitudes that underpin children's ability to access and enjoy physical activity and sport in childhood and in later life. Games are identified as the increase in game tempo, body game and greater variability in techniques and tactics. An increased performance level can only be achieved by working and training of all major components i.e. technique, co-ordination, tactics, physical fitness.

Hand ball and kho-kho is an extremely popular game which is played all over the India. It is a sport involving short and intensive physical efforts during training and competitions. Hand ball players and kho-kho player mainly relies on agility, force, power, jumping ability, orientation ability, kinesthetic sense and co-ordination of muscles and organs. Agility is the ability to chaing the direction as much as possible. Kinesthetic perception abilities enable the sportsman to do a group of movements with better quality and effect. Along with kinesthetic sense orientation ability is of great importance in order to perform better in hand ball and kho-kho. Orientation ability helps the players to move fast to the desired direction accurately and perform without any hindrance.

Specificity of testing is revered when performance is to be evaluated. Sports specific assessments are useful in providing information concerning an athlete's ability to participate in sports and additional information can be gained on possible

ways to improve performance and prevent injuries. Assessments are also often used to optimize training and in the selection of teams for competition and also prepaid proper factor

Kho-Kho is a very versatile game that makes enormous physical, psychological, physiological, technical and tactical demands, but it is that physical fitness component that will directly determine the level of demand that can be put on the technical, tactical and psychological abilities of a player. Kho means 'go' in this sport where this word is used by a raider to give the authority to a team mate to commence chasing. When a raider who is on the 'prowl' says kho and taps a fellow member, who is seated, the person receiving authority to chase can get up and begin his chase. But what is important is that he cannot change the direction from where he began. The person who needs to protect himself however can move to any side of the diagonal line and can also change direction at any time.

As handball is popular in European countries and USA, the scientific research data is available mainly from European and USA handball players. Though good work has been done in western countries in this regard, still very few studies are available on Indian handball players. Hence this study was undertaken. Handball is a very versatile game that makes enormous physical, psychological, technical and tactical demands, but it is the physical fitness component that will directly determine the level of demand that can be put on the technical, tactical and psychological abilities of a player.

So researcher thinks that there is any difference or not on agility, orientation ability and kinesthetic sense between state level hand ball player and state level kho-kho player.

### Statement of the problem

The purpose of the study was to compare the differences on agility, orientation ability and kinesthetic sense between state

level hand ball player and state level kho-kho player.

**Methods**

The objective of the study was to investigate the difference on agility, orientation ability and kinesthetic sense between state level hand ball player and state level kho-kho player. 20 male state level hand ball player were selected from Burdwan district and Hooghly district and 20 male state level kho-kho players were selected from North 24 pgs and Nadia district as the subjects for this study. The age of the subject was 18-22 year

4x10yds shuttle run test were administered to measure agility and the results were recorder to the nearest 1/10<sup>th</sup> seconds,

For Orientation ability, on signal the subject turn around and run towards the marker and touch which called by the tester and back to stating position the result were recorded to the nearest in 1/10<sup>th</sup> seconds on best of two trials

To compare the kinesthetic sense subject were asked to jump with the help of blind fold subject jumps behind the starting line trying to land with the heels as close to the target as possible and the result were recorded to the nearest inch from the target line to the farthest heel.

To compute all the results Students ‘T’ test was employed at 0.05 level of significance.

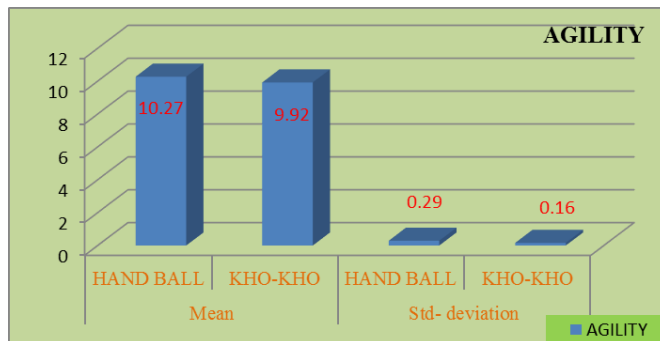
**Finding**

**Table 1** Mean Standard deviation and ‘t’ test in agility, orientation ability and kinesthetic sense between state level hand ball player and state level kho-kho player.

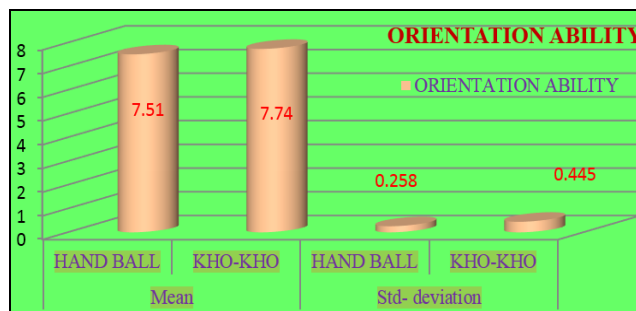
Variables	Mean		Std- deviation		t-Ratio
	Hand Ball	Kho-Kho	Hand Ball	Kho-Kho	
Agility	10.27	9.92	.29	.16	2.89*
Orientation Ability	7.51	7.74	.258	.445	1.43NS
Kinesthetic Sense	1.22	1.90	.69	.83	3.30*

Table value-  $t_{0.05}(38) = 2.021$ , \* = Significant, NS = Not Significant

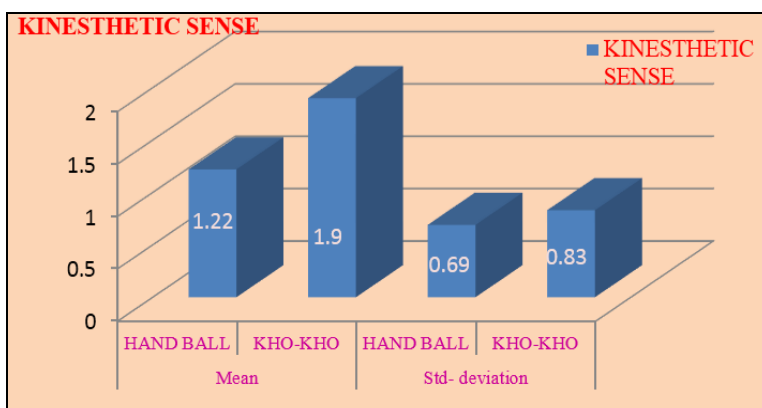
It is evident from Table 1 shows that the mean, standard deviation and ‘t’-ratio of state level hand ball player and state level kho-kho player on Agility has been found  $10.27 \pm .29$  and  $9.92 \pm .16$ , the mean and standard deviation of Orientation ability has been found  $7.51 \pm .258$  and  $7.74 \pm .445$  the mean and standard deviation of Kinesthetic sense has been found  $1.22 \pm .69$  and  $1.90 \pm .83$ . The ‘t’ value of Agility of 2.89\* this is significant. The ‘t’ value of Orientation ability 1.43 which is not significant. The ‘t’ value of Kinesthetic sense is 3.30\* which is also significant.



**Fig 1:** Comparison of Mean, Stander deviation between Agility of Hand ball and Kho-Kho player



**Fig 2:** Comparison of Mean, Stander deviation between Orientation ability of Hand ball and Kho-Kho player



**Fig 3:** Comparison of Mean, Stander deviation between kinesthetic sense of Hand ball and Kho-Kho player

**Discussion of Finding**

From the above Table it is clearly shown that no significance difference were found in case of orientation ability between state level hand ball player and state level kho-kho player.

In case of orientation ability Hand ball player had shown superior than the Kho-Kho player due to their demand of skill develop in their training schedule and also during the play

which effect in the result or may be the good orientation ability person may engage themselves in Hand ball.

In case of agility shown that significance difference were found between state level hand ball player and state level kho-kho player. Kho-Kho player shows greater performance than the Hand ball player. Because the nature of their game Kho-Kho demand much more agile movement and also demand

faster speed than the Hand ball player which effects on the performance relate to agility, for this Kho-Kho player shows greater performance.

The significant difference was found in kinesthetic sense between state level hand ball player and state level kho-kho player. Hand ball player had shows superior than the Kho-Kho player due to the nature of game and also training schedule and also during the play.

### Conclusion

- Significant difference was not found in case of orientation ability between state level hand ball player and state level kho-kho player
- Significant difference was found in case of agility between state level hand ball player and state level kho-kho player
- Significant difference was found in case of kinesthetic sense between state level hand ball player and state level kho-kho player

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