A comparative study of agility between kabaddi and kho-kho women’s players

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Abstract
Since from the evolution of man “physical Fitness” is playing very crucial role in the all-round development of man and mankind. Irrespective of the time be it ancient times, medieval times, or modern times, physical component of human life. The importance of physical fitness was well known to our ancestors. In 360 B. C. Plato amply described the importance of physical fitness in the following words “Lack of activity destroys the good condition of every human being while movement and methodical physical exercise save it and preserve it.

Keywords: Kabaddi women’s players, kho-kho women’s players, physical fitness

Introduction
The need of primitive man were quite simple and basic but not of very complex. He was supposed to have certain amount of physical fitness to indulge in some activities like hunting animals and fish and fighting the animal was essential for his survival. The learning of such important skill was his basic and first education and development of conditioning of body through vigorous physical activity. This process of strengthening body and skill continued through but the centuries serving is a vital skill for the effective living of men. Though it is a matter of fact that primitive man recognized the physical fitness is necessary to his survival. But it does not mean that the importance of physical fitness has been diminished to the modern man. The modern man cannot afford to complacent and forget its importance is it not only maintains his efficiency and happiness but also it is the way o his survival in a highly competitive environment. The right kind and right amount of physical exercise develops organic and muscle power, stamina, vigor and the activity skills related to his development. There is a direct relationship between physical exercise and physical fitness.

“Agility is the ability of the body or parts of the body to chance direction rapidly and accurately”

Motor fitness is generally judged by the performance and his performance is based on composite of many factors. The following factor has generally been conceded is being most commonly mentioned components of Motor fitness. Higher level of physical fitness and Motor fitness is fundamental to success in all type of games and sports. To become a top level performer in any games of sports, it is essential then he should have a sound and fit body. It is considered is a matter of fact that when all other contributing factor are considered the level of physical fitness or Motor fitness shall definitely lead to improvement in the performance level of the sportsman participating in a variety of games and sports. The activities such is running, jumping, leaping are considered is fundamental human movement but at the same time are considered basis to all types of games and sports. There is no such game, which does not involve activities like running walking, jumping and leaping. Thus, it automatically becomes clear that the degree to a particular game of sport depends on given on the fitness because high level of fitness would be more helpful in emergency conditions. Physical fitness is a positive and dynamic quality, which extends from birth and death. Since an individual is indivisible and full of totality his all – discrete parts will be affected by the all phases of human existence. It is vital for whole person to have total effectiveness in the physical fitness, which includes,
sound neuro – muscular, cardiovascular and other organic system by the physical exercise.

**Agility**
The ability to change the position of the body in a pace rapidly and accurately without loss of balance. Agility is important the sports were the obstacles or opponents have to be avoided it is recognized as a basic component of motor performance but exact nature has not been determined. Agility as often presented by the terms memory ability, mobility etc., it is the ability to change the directions of the body and its parts rapidly. Agility is the capacity of the individual to measure by the rate of chance his position in pace.

**Significance of the study**
The result of this study will help physical education teachers, coaches and trainers to use the fitness activities to develop the physical fitness of the Kabaddi and Kho-Kho players.

**Statement of the problem**
The purpose of the study is to assess the Agility level of the Kabaddi and Kho-Kho women’s players of Nagpur District team.

**Methodology**
The purpose of investigator is of compare the agility performance of Nagpur District Kabaddi and Kho-Kho women’s players. To execute the investigation of the investigator selected 50 Kabaddi and 50 Kho-Kho women’s players.

The age of the subjects was 16 to 22 years. Shuttle run test was selected for measuring the agility of Kabaddi and Kho-Kho women’s players. Prior to star of the experiments the subjects were properly the researcher gave instruction that is how to run, and how to touch the line. The investigator through demonstration and explanation gave the training.

**Scoring**
The score for each performer is the length of time required to the nearest 10th of second of complete course. Recorded only the best trails.

**Statistical Technique**
To investigate the performance of the agility between the Kabaddi and Kho-Kho women’s players the mean, standard deviation and ‘t’ test were used.

Mean was calculated by the following formula

\[ \bar{x} = \frac{\sum x}{N} \]

Where \( \bar{x} \) = mean  
\( \sum x \) = sum of score  
N = Number of subjects

Standard Deviation was calculated by the following formula.

\[ SD = \frac{\sum (x-x)^2}{\sqrt{N}} \]

Where  
SD = Standard Deviation  
\( x-x \) = Sum of Deviation  
N = Number of Subject

The significance between the Means of independent samples was established by putting the null hypothesis to test by t- test method as recommended by the John E. Frend.

\[ t = \frac{x_1-x_2}{\sqrt{\frac{S_1^2(N_1-1)+S_2^2(N_2-1)}{N_1+N_2-2}}} \]

Where  
X1 = Mean of Kabaddi women’s players  
X2 = Mean of Kho-Kho women’s players  
S1 = Standard Deviation of Kabaddi women’s players  
S2 = Standard Deviation of Kho-Kho women’s players  
N1 = Number of Subject in Kabaddi women’s players  
N2 = Number of subject in Kho-Kho women’s players

**Table 1**: The Significant difference between the Performance of agility of Kabaddi and Kho-Kho women’s players

<table>
<thead>
<tr>
<th>Team</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kabaddi women’s players</td>
<td>54.51</td>
<td>3.74</td>
<td>23.88</td>
</tr>
<tr>
<td>Kho-Kho women’s players</td>
<td>40.16</td>
<td>6.01</td>
<td></td>
</tr>
</tbody>
</table>

Table reveals that the mean scores of Kabaddi women’s players is 54.51 and standard deviation is 3.74 standard and the Kho-Kho women’s players mean scores is 40.16 and standard deviation is 6.01 The t ratio is 23.88 which is significant at 0.01 level.
Discussions of findings
That is the mean score of performance of agility of Kabaddi women’s players is the higher than that of Kho-Kho women’s players performance. The reason is that agility is important in all activities involving quick changes in positions at the body and the parts. Fast starts and stops and quick changes in direction are fundamental to good performance in practically all court, and field games such as Basketball, Badminton and Volleyball. The especially in Kabaddi make players light bodied, agility, ready witted, supple, supple and daring. The game of Kabaddi based on natural principals of physical development. It is vigorous health competitive among youth. Agility is foremost pre-requisite for Kabaddi players. The Raider has to raid fast and suddenly break to escape from the defender. The raider cannot raid in a deep straight – line. Otherwise the defender can catch the reader easily. So agility is very essential for Kabaddi players. It gives very good exercises to both the team simultaneously. Never allow the defender to take rest. Due to above said reason the Kabaddi women’s players agility’s mean score lesser than Kho-Kho women’s players.

Result
The result of the study was shown insignificant. Because there are so many reasons are there. Due to number of sample is smaller and only one agility test was used to compare their agility performance and another important reason that both game movements are not same. Due to these above said reason the study may shown not significant.

References
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