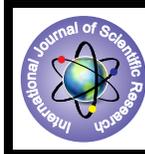


A Comparative Study on Agility and Flexibility Between University Level Female Kabaddi and Kho-Kho Players



Physical Education

KEYWORDS : Kabaddi , Kho-Kho, Agility, Flexibility

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ABSTRACT

Fitness is the most important factor for any type of performance. The purpose of the study was to find out the significant difference between University level female Kabaddi and Kho-Kho players in Agility and flexibility. The subjects of present study were university level female Kabaddi and Kho-Kho players selected from Calicut University. Total thirty (30) female subjects were selected for this study, among them, fifteen (15) Kabaddi and fifteen (15) Kho-Kho players. The age level of the subject was between 18-25 years. All the subjects were assessed for age, height, weight, Agility and Flexibility. Analyzing the data it was found that – 1. The agility of Kho-Kho players was significantly better than agility of Kabaddi players. 2. There was no significant difference of flexibility among Kabaddi and Kho-Kho players.

INTRODUCTION

History of Kabaddi

The origin of the game dates back to pre-historic times. The game was played all over the country in various forms. It was known as HU-TU-TU in Western India, HA-DO-DO in Eastern India and Bangladesh, Chedugudu in Southern India, Kaunbada and various other names in Northern India. Kabaddi may have been derived from the term 'Kaunbada' which means a challenge to the opponent. Some of the major forms of the game are Amar, Gemini, Sanjeevini and the game was played as per the situation with flexible rules. All India Kabaddi Federation came into existence during 1950. The Amateur Kabaddi Federation of India, a new body, came into existence in the year 1972 with the prime motive of organizing competitions at the National level and popularizing the game in the neighboring countries. Junior and Sub- Junior sections were also included in the national competitions.

2. History of Kho-Kho

Kho-Kho is traditional Indian sport, a form of tag, which is one of the oldest forms of outdoor sport, dating back to prehistoric India. The kho-kho playing field which can be placed on any suitable indoor or outdoor surface is a rectangle 29 meters (32 yards) long and 16 meters (17 yards) wide with a vertical wooden post at either end of the field. Each kho-kho team consists of 12 players, but during a contest only 9 players from each team take the field. The first kho-kho tournaments were organized in 1914, and the first national championship was held in 1959 at Vijayawada under the auspices of the Kho-kho Federation of India (KKFI), which was formed in 1955.

3. Agility

At present, there is no consensus among the sports science community for a clear definition of agility. Agility has classically been defined as simply the ability to change direction rapidly (Bloomfield, Ackland, & Elliot, 1994; Clarke, 1959; Mathews, 1973), but also the ability to change direction rapidly and accurately (Barrow & McGee, 1971; Johnson & Nelson, 1969). In more recent publications, some authors have defined agility to include whole-body change of direction as well as rapid movement and direction change of limbs (Baechle, 1994; Draper & Lancaster, 1985).

4. Flexibility

Flexibility or limberness refers to the absolute range of motion in a joint or series of joint, and length in muscles that cross the joint. Flexibility is variable between individuals, particularly in terms of differences in muscle length of multi-joint muscles. There are two kinds of flexibility, static and dynamic flexibility; **Static flexibility**-The range of mo-

tion about a joint is defining static flexibility. **Dynamic flexibility**-This type of flexibility is defined as the opposition or resistance of a joint to motion. The structure limits to flexibility are bone, muscles, ligaments, other structures associated with joint capsule, tendons and other connective tissues and skin. Flexibility is improved by type of exercise and stretching.

METHODOLOGY

1 The subject

The subjects of present study were university level female Kabaddi and Kho-Kho players selected from Calicut University. Total thirty (30) female subject were selected for this study. Among them, fifteen (15) Kabaddi and fifteen (15) Kho-Kho players. The age level of the subject was between 18-25 years.

2 Criterion measures

To conduct the present study the following measurement were taken –

Age, Height, Weight, Agility and Flexibility.

3 Tools and Equipments used

To collect relevant information for the project work following tools were used–

Measuring tape, b. Steadiometer, c. Weighing Machine, d. Stopwatch e. Flexomeasure case with yardstick and tape.

4 Procedures for collection data

a. Age:

b. Height:

c. Weight:

d. Shuttle run:

Purpose: To measure the agility of the subjects.

Procedure: Wooden block placed 10m. away from the starting line. The subjects stood behind at one of the starting line. With the two wooden block at the other line. On the signal to start, the subject ran to the wooden block looked one and returned to starting line, placed it behind that line. She then retrieved the second wooden block and sprinted back across the starting line. There were two stop watches and two subjects were completed against each other. Three trials were given and the best performance was taken.

Score: The score was the elapsed time recorded in seconds.

Flexibility :

Purpose: To measure the hip and back flexion and extension of the hamstring muscles of leg.

Procedure:

Line up the 15 inch mark of the yardstick with a line on the floor and tape the ends of the stick to the floor so that the flexomeasure case (windows side) is face down.

Sit down and line up the heels with the near edge of the 15-inch mark and slide the seat back beyond the zero end of the yardstick.

A partner stands and braces the toes against the heels. Also an assistant on each side to hold the knees in a locked position as the prepared to stretch.

With heels not more than 5 inches apart, slowly stretched forward, pushed the flexomeasure case as far down the stick as possible with the finger tips of both hands. Take the reading at the near edge of the flexomeasure case.

Score: The best of three trials measured to the nearest quarter of an inch was the test score.

Results & Discussion**Table-1: Means of Age, Height and Weight of the groups.**

VARIABLES	KABADDI		KHO-KHO	
	Mean	Sd	Mean	Sd
AGE (Yrs)	21.13	2.26	20.53	2.26
HEIGHT (Cm)	154.8	5.85	153.26	4.92
WEIGHT (Kg)	51.4	5.57	46.66	3.43

Table-I represents the personal data related of age, height and weight of the subjects. It shows that the mean height (154.8cm) of Kabaddi players was more than the mean height (153.26cm) of Kho-Kho players and the mean weight (51.4kg) of Kabaddi players was more than the weight (46.66kg) of Kho-Kho players.

Table-2 Comparison of agility between University level female Kabaddi and Kho-Kho players.

GROUP	AGILITY		't'
	Mean	Sd	
KABADDI	11.25	0.56	4.1
KHO-KHO	10.58	0.27	95*

*Significant of 0.05 level of confidence.

Table-no1 shows that the two means of agility of Kabaddi and Kho-Kho players were different. However to ascertain the degree of difference t' test was conducted and obtained t' values was 4.19 to be significant at 0.05 level the t' value should be greater than 2.05 to 2.70.

Table-3 Comparison of flexibility between University level female Kabaddi and Kho -Kho players.

GROUP	FLEXIBILITY		't'
	Mean	Sd	
KABADDI	43.4	4.95	1.8
KHO-KHO	36.2	6.47	4*

*Not significant at 0.05 level of confidence.

The above table shows the mean value of flexibility of female Kabaddi and Kho-Kho players. It shows that the two means of flexibility of kabaddi and Kho-Kho players are different. However the degrees of different t' test was conducted and obtained t' value was 1.84 to be not significant at 0.05 levels. The t' value should be less than 2.05 and 2.76.

CONCLUSION

On the basis of the results obtained in the present study following conclusion were drawn.

The agility of Kho-Kho players was significantly better than agility of Kabaddi players.

There was no significant difference of flexibility among Kabaddi and Kho-Kho players. .

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