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Effect of Plyometric Exercises for development of Speed among Women Kho Kho players of Degree Colleges in Hyderabad District

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Abstract

The purpose of the present study is to find out the effect of plyometric exercises on development of Speed among Women Kho Kho Player studying in degree colleges in Hyderabad District. The sample for the present study consists of 20 Women Kho Kho Players studying in women degree colleges in Hyderabad District out of which 10 are experimental group and 10 are controlled group. Plyometric exercises such as hopping, bounding, depth jumps, tuck jumps, Pushups etc were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training for six weeks. Pre Test and Post Test were conducted in 30 M Run to measure the speed among experimental group and controlled group .This study shows that due to the plyometric training there is a improvement of experimental group in the Speed and controlled group is decreased in performance of speed. It is concluded that due to plyometric exercises there will be improvement in speed among Kho Kho Experimental group.

Key Words: Plyometric Exercises Speed, Hopping, bounding etc.

Introduction:

Sports in contemporary space have emerged as a competitive branch in the national and international area. It is not simply participation or practice that conveys triumph to a competitor. Numerous things like biomechanics, physiology, training methods, sociology, sports medicine etc., influence sports life. All trainers, coaches are doing to enhance the performance of competitors for their individual nation Sports individuals of the respective nations endeavour best efforts at their dimension to bring praise and medals to their nation in various dimensions of international level competitions.

Kho Kho is a traditional Indian sport that dates back to ancient India. It is the second-most popular traditional tag game in the Indian subcontinent after kabaddi. Kho kho is played on a rectangular court with a central lane connecting two poles which are at either end of the court. During the game, nine players from the chasing team (attacking team) are on the field, with eight of them sitting (crouched) in the central lane, while three runners from the defending team run around the court and try to avoid being touched. Each sitting player on the chasing team faces the opposite direction of their adjacent teammates.

Plyometrics, also known as "jump training" or "plyos", are exercises based around having muscles exert maximum force in short intervals of time, with the goal of increasing both speed and power. This training focuses on learning to move from a muscle extension to a contraction in a rapid or "explosive" manner, for example with specialized repeated jumping.

Dr. Shantanu Mistri (2019) studied the Effect of plyometric training on endurance of female Kho-Kho players For this purpose, thirty regular practicing female KhoKho players (age 19.41 ± 1.32 years; height 160.41 ± 3.53 cm and weight 53.18 ± 3.23 kg) randomly divided into two groups- Experimental and Control. Six weeks plyometric training with 2-day sessions per week was employed on Experimental group along with their regular Kho-Kho practice. Control group took part only in their regular Kho-Kho practice. Cardiovascular endurance was measured by 600 m Run-walk test prior to and after 6 weeks intervention period. Collected data were analyzed through Pair t-Test with level of significance fixed at 0.05 level. According to the result, improvement of cardiovascular endurance of experimental group was statistically significant; where as no significant improvement was observed in Control group.

Dr. SS Biju (2019) Effect of plyometric exercises on agility among the Kho-Kho players.The aim of the study was to determine the effect of plyometric training on agility. Sixty Kho-Kho (N=60 were randomly selected as subjects and their age ranged between 16 and 18 years. The selected subjects were randomly assigned into two equal groups with thirty subjects each (N=30). Group I experimental, Group II Control group the experimental groups underwent their respective experimental treatment for twelve weeks 3 days per week and a session on each day. Control group was not exposed to any specific training apart from their curriculum. Agility was taken as variable for this investigation. The pre and posttest were conducted one day before and after the experimental treatment. Analysis of covariance (ANCOVA) was used to analysis the collected data. Scheffe's test was used as a post hoc test to determine which of the paired mean differed significantly. The results revealed that There was also a significant difference between experimental groups on speed ($P \leq 0.05$) Further it related that the plyometric training and plyometric training produced significant improvement($P \leq 0.05$) on agility as compared to control group.

Purpose of the study:

The purpose of the present study is to find out the effect of plyometric exercises on development of Speed among Women Kho Kho Player studying in degree colleges in Hyderabad District

Methodology:

. The sample for the present study consists of 20 Women Kho Kho Players studying in women degree colleges in Hyderabad District out of which 10 are experimental group and 10 are controlled group.

Sl. NO	Colleges	Sample	Total number of subjects
1	Students from Womens Degree Colleges of Hyd District	Women Kho Players Experimental Group 10	20
		Women Kho Kho Players Control Group - 10	

Plyometric exercises such as hopping, bounding, depth jumps, tuck jumps, Pushups etc were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training for six weeks. Pre Test and Post Test were conducted in 30 M Run to measure the speed among experimental group and controlled group

Results:

This results of the study shows that due to the plyometric training there is a improvement of experimental group in Speed and controlled group is decreased the performance speed due to the general training.

Table I:Mean values of 30 M run test between experimental and control groups of Women Kho Kho Players

Variables	Group	Pre Test Mean	Post Test Mean	t	P - Value
30 M Run Test	Experimental	4.61	4.20	2.58	0.000
	Control	4.66	4.73		

The Experimental Group of 30 M Run Mean is 4.61 in Pre Test and Controlled Group mean is 4.66 in Pre Test . The Experimental Group Mean is 4.20 in Post Test and Controlled Group mean is 4.73, the Experimental Group mean in Post Test in 30 M Run is decreased from 4.51 to 4.20 there is a improvement of 0.31 from Pre Test to Post and Control Group Mean is post test is 4.73 there is a increase of 4.66 to 4.73 from Pre Test to Post, the performance is come down to 0.07 in the controlled group. Due to the Plyometric Training the Experimental group has improved a lot.

Conclusion:

It is concluded that due to the Plyometric training there is a increase of speed among the the Women Kho Kho Players. Plyometrics is a method of developing explosive power, an important component of most athletic performances. As coaches and athletes have recognized the potential improvements which Plyometrics can bring about in performance, they have integrated it into the overall training programme in many sports and made it a significant factor in planning the scope of athletic development.

Recommendations:

Similar Studies can be conducted on Men Kho Kho Players and other sports and games. The Coaches can prepare the program for development of speed and other motor qualities in sports and Games.

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