

Effect of Plyometric Training for the Development of Speed among Kho Kho Players of Hyderabad District

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Abstract:

The Purpose of the study is to find out the effect of Plyometric Training on the development of Speed among Men Kho Kho Players of Hyderabad District between the age group of 18 to 25 Years. The Sample for the Study consists of 30 Men Kho Kho Player of Hyderabad District which includes the 15 Men Kho Kho Players (Experimental Group I i.e. Plyometric Training Group) and 15 Men Kho Kho Players are Control Group. Plyometric Training Group is given training such as hopping, bounding, Single leg Jumps, Double Bounds, Tuck Jumps, Box jump etc. on alternate days for eight weeks along with the general training of Kho Kho. The Control group not given any treatment except the general training of Kho Kho. Pre and Post Test were used by using 30 M Run Test were used to find out the Speed among Kho Kho Players. It is found Experimental group has increased a lot compare to the Control group due to Plyometric Training. Key Words: Speed, Plyometric training, hopping, bounding etc.

Introduction

Plyometric training, SAQ (Speed, Agility, and Quickness) training, and Interval training are the most effective methods to develop speed, acceleration, and explosive movement in Kho Kho players. The ability to play khokho in a variety of game situations requires agility. The majority of sports and games require quick reflexes. It is especially crucial for performance related to neurophysiological activities. Response time is the amount of time it takes to react

to a stimuli. The interval between the stimulus's presentation and the movement of the body, body parts, or object is known as the grasped time. The properties of the stimuli and different nerve impulse circumstances affect reaction time. Athletes are valued for their ability to react quickly and with speed

Vasam Naveen Kumar, Prof. Sunil Kumar (2024) studied about the effect of Interval Training for the development of Speed among Kho Kho Players of Telangana. To achieve the purpose of this study, thirty Male Kho Kho players were randomly selected between the age group of 16 to 25 Years. The selected subjects were randomly assigned into two groups. Group I 15 Members acted as experimental group which Interval training (PT), group II did not participated in any special training and were strictly under control (CG). The Treatment is given to Kho Kho Players for twelve weeks. To assess the Speed 50 Yard Dash Run were used in the Pre Test and Post Test of the Study. This study shows that the Experiment Group of Interval training performed better than control group. It is concluded that due to Interval training there is a improvement of speed among Kho Kho Player

Dr. V. Vallimurugan , M. Gowtham , G Karthikeyan (2024) studied the effect of Interval training on skill related physical fitness variables among khokho Players. The purpose of this study was to find out the effect of interval training on skill related physical fitness variables among Kho-Kho players. To achieve the purpose of the present study, thirty Kho-Kho players were selected as subjects at random and their ages ranged from 21 to 25 years. The subjects were divided into two equal groups. The subjects (n=30) were randomly assigned to two equal groups of fifteen kho-kho players each. The interval training group participated the training for a period of eight weeks and the post-tests were conducted. The subjects were tested prior to and after the experimentation on Reaction Time, Cardio Vascular endurance and agility. Dependent 't' test was used to test the treatment effect of the training programmes on all the variables used in the study. It was observed that the eight weeks of

interval training have significantly improved the selected skill related physical variables of kho-kho players.

Rajesh Kumar and Erika Zemková (2022) studied the Effect of 12-Week Core Strengthening and Weight Training on Muscle Strength, Endurance and Flexibility in School-Aged Athletes. Ninety male athletes at the age of 12 were randomly divided into three equal groups (30 in each). Group 1 underwent core strengthening training, group 2 underwent weight training, and group 3 was the control. The training was for 12 weeks, with three sessions per week (one hour per session). Prior to and after the training, abdominal strength, endurance, and flexibility were evaluated using the sit-ups test, the Cooper 12 min run test and the sit and reach test. The analysis of variance was used to analyze pre- and post-intervention data. The results showed that both the core strength training group and the weight training group significantly ($p = 0.00$) improved in abdominal strength, represented by the number of sit-ups (from 18.70 3.20 to 22.21 3.50 and from 17.60 3.29 to 21.60 3.63, respectively); endurance, represented by distance covered in 12 min (from 1817 185.78 m to 2008.97 214.79 m and from 1806 237.25 m to 2002.59 83.32 m, respectively); and flexibility, represented by the sit and reach distance (from 23.48 2.75 cm to 25.96 2.38 cm and from 23.66 2.92 cm to 25.86 2.55 cm, respectively) when compared to the control group (from 17.20 3.20 to 16.39 2.69; from 1813 224.69 m to 1778.15 05.28 m; from 23.46 3.06 cm to 21.76 2.56 cm). More specifically, abdominal strength and endurance improved slightly more in the weight training group than in the core strength training group, whilst flexibility increased slightly more in the core strength training group than in the weight training group. These findings indicate that both core strengthening training and weight training are effective in improving physical fitness in school-aged athletes; however, the improvement is to differing extents regarding their endurance, flexibility, and abdominal strength.

Purpose of the Study:

The Purpose of the study is to find out the effect of Plyometric Training on the development of Speed among Men Kho Kho Players of Hyderabad District between the age group of 18 to 25 Years

Methodology:

The Sample for the Study consists of 30 Male Kho Kho Player of Hyderabad District which includes the 15 Men Kho Kho Players (Experimental Group I i.e. Plyometric Training Group) and 15 Men Kho Kho Players are Control Group. Plyometric Training Group is given training such as hopping, bounding, Single leg Jumps, Double Bounds, Tuck Jumps, Box jump etc. on alternate days for eight weeks along with the general training of Kho Kho. The Control group not given any treatment except the general training of Kho Kho. Pre and Post Test were used by using 30 M Run Test were used to find out the Speed among Kho Kho Players.

Results and Discussion:

The Results of the Study shows due to Plyometric Training experimental group improved a lot in the Speed compare to control group.

Table I: Mean values of 30 M Run Test between experimental and control groups of Kho Kho Players

Variables	Group	Pre Test Mean $\pm$ SD	Post Test Mean $\pm$ SD	T	P - Value
30 M Run	Experimental	4.39 $\pm$ 0.084	4.10 $\pm$ 0.068	17.014	0.000*
	Control	4.45 $\pm$ 0.056	4.50 $\pm$ 0.049	-4.067	0.001*

*Significant at 0.05 level

In Table –I the Mean Values in 30 M Run of Experimental Group is 4.39 and Control Group is 4.45 in Pre-Test and Post Test is Experimental Group is 4.10 and Control Group is 4.50. The Experimental Group has decreased from 4.39 to 4.10 in mean values due to Physical Exercises Training in Speed compare the Control group mean is 4.50 in post test due to general training.

Conclusions:

The Results of the Study shows due to Plyometric Training experimental group improved a lot in the Speed compare to control group. It is concluded that due to Plyometric Training there will be increased in speed among khokho players of Hyderabad. It was concluded that individualized Plyometric training group showed a statistically significant positive sign over the course of the treatment period on 30 M Run of kho-kho players.

Recommendations:

It is recommended that similar studies can be conducted on other events in other events and also female khokho players. This type of study is useful to coaches to give proper coaching for development of motor qualities for improvement of performance Sports and Games

References:

Vasam Naveen Kumar, Prof. Sunil Kumar (2024) studied about the effect of Interval Training for the development of Speed among Kho Kho Players of Telangana. International Research Journal of Education and Technology, ISSN 2581-7795 Volume 6, Issue 12, December 2024,. Page 1863-1866

Dr. V. Vallimurugan , M. Gowtham², G Karthikeyan (2024) EFFECT OF INTERVAL TRAINING ON SKILL RELATED PHYSICAL FITNESS VARIABLES AMONG KHOKHO PLAYERS, SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/Epra2016 ISSN: 2455-7838(Online) EPRA International Journal Of Research And Development (IJRD) Volume: 9 | Issue: 5 | May 2024- Peer Reviewed Journal

Prof. Rajesh Kumar and Prof. Erika Zemkova, Appl. Sci. 2022, The Effect of 12 Week Core Strengthening and Weight Training on Muscle Strength, Endurance and Flexibility in

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