

A Study Of Effect On Explosive Force Of Legs On Kho-Kho Players By Yog And Circuit Training

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Abstract : A Study of Effect on Speed on Kho-Kho Players by Yog and Circuit Training. Male players of Kho-kho selected at school level in Surat District were selected in the present study. Total 90 male players were selected as subjects for the sample of the present study, in which 30 players were included in the yog training group, 30 in circuit training group and 30 players were included in the control group. The male players of 13 to 17 years age group were included in the present study. The criterion measure used for the measurement of Explosive force of legs was Standing broad jump cm. After Collection of data, the difference between three group's mean was measured by one way Least Significant Difference Post Hoc Test. The significant level was 0.05 significant effects of yoga training was seen in the training group with comparatively to controlled group.

Introduction :

Yoga emerged before thousands of years or it was emerged well before the emergence of beliefs and rituals. As per the Yoga Shiva is seen as the initial yogi, first Guru or ancient guru. The ancient yogi gave their deep knowledge to the legendary saptarushies (Seven Rushes-saints) on the banks of Kanti River. These saptarushies gave the powerful sponce to the different parts of the world like Asia, Middle East, North Africa and South Africa. Interesting factor is that the modern scholars have noted close similarity between the cultures of entire world. Although, the complete expression of Yoga could be possible only in India. Saptarush Maharshi Agastya has constructed this culture around path based on yoga by travelling in various parts of Indian Continent.

Yoga is considered comprehensively as an immortal culture result of Sindhu -Valley culture and it is proved to be the best for the provision of materialistic and spiritual progress of humanity. The available specimen of fossils and the yoga remains of Sindhu Saraswati culture and the statues showing Yoga practice shows the existence of Yoga in ancient India. The coins and statues of Goddess signify the existence of Tantra. The existence of Yoga is seen in the folk rituals, Veda, Upanishads heritage, Buddha and Jain rituals, epics like Mahabharata including Geeta and Ramayana and Tantric Processes. Yoga was practiced before the Vedic period. However, Maharshi systematized the prevailing Yoga methods and process through "Yoga Sutra".

To form the structure of the circuit training, the coach measures characteristics of physical fitness of layers by giving a physical fitness test and decides which competencies they lack. Then, the coach constructs the training programme for development of lacking competencies. For example, if the coach sees less strength of shoulder muscles, he will include the exercise helpful to increase the strength of shoulder muscles in the circuit training. If the coach finds less speed, one or two exercises for increasing speed will be selected. In the same way, if developing the muscles of thigh or abdomen, some exercises for development of muscles of thigh or abdomen can be selected. Thus, one or two exercises for muscular power, flexibility, endurance etc are to be included in the circuit training and the structure of the training programme is prepared. Selections of exercises, exercise cycles, duration of training, density of exercise etc are to be determined while preparing structure for the circuit training.

Objective of Study :

A Study of Effect on Explosive force of legs on Kho-Kho Players by Yog and Circuit Training

Selection of Subject :

Male players of Kho-kho selected at school level in Surat District were selected in the present study. Total 90 male players were selected as subjects for the sample of the present study, in which 30 players were included in the yog training group, 30 in circuit training group and 30 players were included in the control group. The male players of 13 to 17 years age group were included in the present study.

Criterion Measure :

No.	Variable	Test	Measurement
1	Explosive force of legs	Standing broad jump	cm

Design of the study :

Total 30 subjects were selected randomly for each group in the present study. The pretest of aspects of physical fitness was conducted on each group. Then, Group A was provided 1yog training and group – B, circuit training for 12 weeks. Group – C was accepted as the control group. Finally, the posttest was executed on all three groups.

Statistical Procedure :

Statistical technique such as one-way analysis of variance was applied to know the effects on yog training group and circuit training group. Mean difference was examined at 0.05 levels by using Least Significant Difference Post Hoc Test.

Result of the study :**Table-1**

Analysis of covariance of mean scores of explosive force of legs of two experimental groups and a control group

Test	Groups			Analysis of variance				
	Yog	Circuit	Control	Sum of classes (SS)	df	MSS	'F'	
Pretest mean	1.566	1.422	1.506	A	0.050	2	0.025	0.722
				W	4.188	87	0.048	
Post-test mean	1.566	1.640	1.489	A	0.342	2	0.171	4.526*
				W	4.344	87	0.050	
Adjusted mean	1.588	1.625	1.485	A	0.316	2	0.158	6.514*
				W	2.510	86	0.029	

***Significance criterion at 0.05 levels 'F' = 0.05 (2,87) = 3.101 & (2,86) = 3.103**

In table – 1 detail of mean scores of pretest and post test, analysis of covariance and all statistical data of 'F' is mentioned. The mean scores on explosive force of legs pretest of yog group, circuit group and control group was found 1.466, 1.422 and 1.506 respectively. 'F'- ratio was found 0.722, which was not significance with the tabular value (3.101) at 0.05 levels. The mean scores on explosive force of legs final test of yog group, circuit group and control group was found 1.566, 1.640 and 1.489 respectively. 'F'- ratio was found 4.526, which was significance with the tabular value (3.103) at 0.05 levels. It proved that performance of subjects was improved at significant level by the training given to them. Moreover, adjusted mean of yog group, circuit group and control group was found 1.588, 1.625 and 1.485 respectively. 'F'- ratio was found 6.514, which was significance with the tabular value (3.103) at 0.05 levels. Significance between adjusted means of all three groups was found significance. Effectiveness of experimental treatments on yog training group and circuit group and adjusted mean difference were examined with critical difference. The detail is presented in table – 2.

Table – 2

Critical difference of mean scores of explosive force of legs of two experimental groups and a control group

Mean			Mean difference	Critical difference
Yog Training	Circuit Training	Control Group		
1.588	1.625		0.037	0.088
1.588		1.485	0.103*	
	1.625	1.485	0.140*	

* Significance at 0.05 levels

Difference between adjusted mean scores of explosive force of legs of two experimental groups and a control group is seen clearly in table – 2. The difference is found out between yog group and circuit group, yog group and control group and circuit group and control group and it was compared with critical difference. It is observed in table – 2 that higher significant improvement (0.140) was found in circuit group with compared to the control group. Then, higher significant improvement (0.103) was found in yog group with compared to the control group. Significant effect of experimental treatment was found higher in yog training group and circuit training group with compared to control group, whereas no significant effect of experimental treatment was found between yog group and circuit group.

Conclusion :

Remarkable higher improvement was found in performance of explosive force of legs of subjects of yog training group and circuit training group because of yog training and circuit training.

Reference :

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