Effect of Core Training on Speed among College Men Kho–Kho Players

P. Kayalvizhi[1*], C. Ramesh[2] and V. Amutha[3]

[1]*Sports Trainer, Department of Physical Education Madurai Kamaraj University*

[2]*Assistant Professor and Head, Department of Physical Education Madurai Kamaraj University*

[3]*Principal – Cum-Syndicate Member, Cheran College of Physical Education, Karur.*

[*]*Corresponding Author Email: pkayalabi@gmail.com*

Introduction

The word Training has been a part of human language since ancient times. It denotes the process of preparation for some task. This process invariably extends to a number of days and even months and years. The term Training is widely used in sports. There is, however, some disagreement among sports coaches and also among sports scientists regarding the exact meaning of this word. Some experts, especially belonging to sports medicine, understand sports training as basically doing physical exercises.

Core Training

Cores is defined as the exercises that enable a muscle to reach maximum force in a short period of time. Core training is a series of explosive body weight resistance exercises using the stretch-shortening cycle (SSC) of the muscle fibre to enhance physical capacity such as increasing musculotendinous stiffness and power. It is a quick, powerful movement involving pre-stretching the muscle tendon unit followed by a subsequent stronger concentric contraction. This process of muscle lengthening followed by rapid shortening during the SSC is integral to core exercise. The SSC process significantly enhances the ability of the muscle-tendon unit to produce maximal force in the shortest amount of time. These benefits have prompted the use of core exercise as a bridge between pure strength and sport-related power and speed. Core exercise is a popular form of training used to improve athletic performance.

Speed

Speed is a key component of a physical fitness definition because of its wide application to many human activities It is the maximal velocity that can be reached by part or all of the body. The speed of a sprinter is greater than that of a distance runner, although the distance

runner can sustain his speed much longer. In some sports, the body as a whole does not move fast, but a part of the body does. In baseball pitching, for example, the hand and ball accelerate to great speed while the body as a whole barely changes its location.

Purpose of the Study

The purpose of the study was to find out effect of core training on speed among college men kho-kho players

Methodology

The purpose of the study was to find out the effect of core training on speed among college men kho-kho players. To achieve the purpose of the present study, thirty kho-kho players from various colleges at Madurai were selected as subject at random and their ages ranged from 18 to 21 years. The subjects were divided into two equal groups of fifteen kho-kho players each. The study was formulated as true random group design, consisting of a pre-test and post-test. The subjects (N=30) were randomly assigned to two equal groups of fifteen kho-kho players each. The groups were assigned core training and control group in an equivalent manner. The groups 1 underwent core training, group II acted as a control group. The experimental groups were participated the training for a period of six weeks to find out the outcome of the training packages and the control group did not participate in any training programme. 't' ratio was applied. To test the obtained result on variable, level of significance 0.05 was chosen and considered as sufficient for the study.

Table – 1

Analysis of 't' Ratio for the Pre and Post tests of Control and Experimental group on Speed

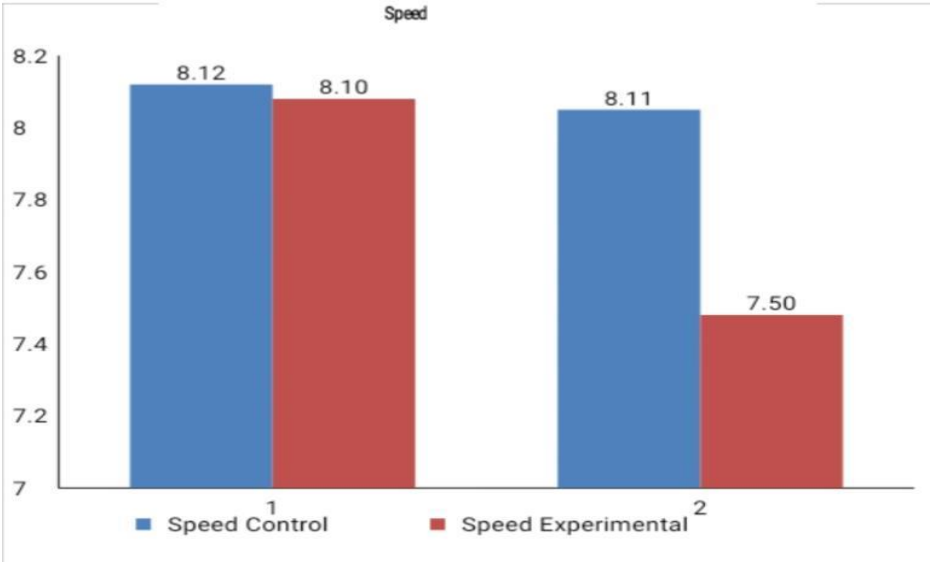
Variables	Group	Mean		SD		Sd Error	Df	't' Ratio
		Pre	Post	Pre	Post			
SPEED	Control	8.12	8.11	0.41	0.42	0.023	14	2.07
	Experimental	8.10	7.50	0.40	0.035	0.14		4.07*

Significance at 0.05level of confidence 2.15

The table shows that the mean values of pre-test and post-test of control group on speed were 8.12 and 8.11 respectively. The obtained 't' ratio was 2.07. since the obtained 't' ratio was less than the required table value of 2.15 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of experimental groups on speed were 8.10 and 7.50 respectively. The obtained 't' ratio was 4.07 since the obtained 't' ratio was greater than the required table value of 2.15 for significance at 0.05 level with 14 degrees of freedom it was found to be statistically significant.

Fig – 1

Bar Diagram shows the mean values of Pre and Post-tests of Control and Experimental Group on Speed



Discussion on the Findings

The result of the study indicates that the experimental group, namely core training group had significantly improved the selected dependent variable, namely speed group. It is also found that the improvement caused by Core Training when compared to the control group.

Conclusion

On the basis of findings of the study, the following conclusions may be drawn:

1. *There was significant improvement on speed due to the effect of core training among college men kho-kho player*
2. *There was significant difference between experimental and control group on speed among college men kho-kho players.*