

EFFECT OF SPECIFIC TRAINING METHODS ON SELECTED SPEED PERFORMANCE AMONG MEDIUM FAST BOWLERS IN CRICKET



Kumar Praveen*

* Assistant Professor, Department of Physical Education, CCS University Meerut (U.P)-INDIA.

E. Mail:praveenn008@gmail.com

Abstract:

The purpose of this study was to find out the effect of specific training methods on selected Speed performance among Medium Fast bowler in Cricket. For this purpose, forty five medium fast bowler cricket players selected from various colleges affiliated to Ch. Charan Singh University, Meerut during the academic year of 2010-2011 were selected as subjects. The age, were ranged between 18 to 21 years. Subjects were divided into three equal groups of fifteen namely Plyometric training group, Weight training group and Control group. Experimental group such as Polymeric training group, Weight training group underwent respective training for 12 weeks duration. The dependent variable selected for this study was Speed. Speed was assessed through 50 meters run test. All the subjects were tested prior to and immediately after the training period of twelve weeks for all the selected variables. The data collected data from the three groups prior to and immediately after the training programme on the selected criterion variables were statistically analyzed with Analysis of Covariance (ANCOVA). Whenever the „F“ ratio for adjusted post test means was found to be significant, Scheffe’s post hoc test was followed to determine which of the paired mean differences was significant. In all the cases 0.05 level of confidence was fixed to test the hypotheses. Speed showed significant difference among the groups. Plyometric training group showed better performance than other selected groups.

Keywords: Medium Fast bowler, Speed, Plyometric Training, Weight Training.

Introduction:

Sports and Games sports are accepted as a cultural phenomenon. There is a constant endeavour to achieve higher standard of performance. As a result, today’s sports and games demand optimum fitness and highest degree of performance. Fitness has become increasingly important part of cricket both physical and mental fitness are required in cricket. The physical fitness components such as 1) Endurance 2) Speed 3) Agility 4) Strength 5) Power 6) Flexibility 7) Muscular Strength etc. and the mental fitness components like concentration, mechanism, executing power skill are very essential for the medium fast bowlers. Bowlers required arm and shoulder strength to maintain the speed in bowling.

Training is good for the development of the cardiovascular system. “It enables athletes to recover from tough workouts and helps to develop the capacity to increase repetitions” (Singh, 1991). “Training improves the functioning of the circulatory, respiratory and the muscular systems, while practice is largely aimed at improving the control of muscular activity by the nervous systems” (Kenneth, 1976) . Systematic nature of the training process is reflected adequately by various means and methods and dynamic training tasks etcetera are all planned in order to achieve short or long term goals, keeping in view the interrelations of various elements, cyclic nature of performance, developments of long term goals of sports training.

Cricket is one of the most popular and richest in history of all ball games. There is no record available which shows when and by whom cricket was started in England. It is essentially an English game. Old work shows that it is as old as 13th Century. The game eventually developed in the 17th century with underarm bowling, curved bat and a wicket of two feet wide and one foot high with a whole in the ground between the stumps. Cricket is a game of intricate movements combined with great speed and accuracy. Great teams are developed by the meshing of fundamentally sound players weaving clever patterns of attack and defense tactics.

It must be remembered that surprise is a big element in bowling, and bowlers will often shun these common tactical approaches in the hope of simply confusing the batsman into playing the wrong shot. For example, bowling Fast bowling, sometimes known as pace bowling, is one of the two approaches to bowling in the sport of cricket. The other is spin bowling. Practitioners are usually known as fast bowlers or pace bowlers although sometimes the label used refers to the specific fast bowling technique the bowler prefers, such as swing bowler or seam bowler.

Methodology:

To purpose of this study was to effect of specific training methods on selected Speed performance among medium fast bowler in cricket. The study was conducted on forty five (N=45) medium fast bowler in cricket players who were randomly selected from various colleges affiliated to Ch. Charan Singh University, Meerut. All the Subjects selected for this study had represented Inter-Collegiate Cricket tournaments academic in the year 2010-2011 whose ages ranged between 18 to 21. The selected players was assigned in to three groups of fifteen each (n=15), Group –I underwent Plyometric training, Group –II underwent Weight training and Group III acted as Control. Speed was selected as dependent variable and it was assessed by 50 meters run test. All the subjects were tested prior to and immediately after the training period of twelve weeks for the entire selected variable. The data collected data from the three groups prior to and immediately after the training programme on the selected criterion variable were statistically analyzed with Analysis of Covariance (ANCOVA). Whenever the „F“ ratio for adjusted post test means was found to be significant, Scheffe’s post hoc test was followed to determine which of the paired mean differences was significant. In all the cases .05 level of confidence was fixed to test the hypotheses.

Results and Discussion:

The Analysis of covariance (ANCOVA) on Speed of Plyometric training, Weight training and Control group have been analyzed and presented in Table-I.

**Table No-I
Analysis of Covariance on Speed of Plyometric Training, Weight Training and Control Group**

Certain Variables	Adjusted Post test Means			Source of Variance	Sum of Square s	df	Mea n Squar es	'F' Ratio
	Plyometric Training Group-(I)	Weight Training Group-(II)	Control Group (III)					
Speed	5.64	6.12	6.51	Between	5.12	2	2.56	10.25*
				With in	9.73	41	0.24	

*Significant at 0 .05 level of confidence

(The table value required for significance at .05 level with df 2 and 41 is 3.23)

Table I shows that the adjusted post test mean values of Speed for Plyometric training, Weight training and Control group are 5.64, 6.12 and 6.51 respectively. The obtained F-ratios was 10.25 is more than the table value 3.23 for df 2 and 41 required for significance at 0.05 level of confidence. The results of the study indicate that there is a significant difference exists among the adjusted post test means of experimental groups showing the decrease in Speed. To determine which of the paired means had significant differences, Scheffe’s test was applied as Post hoc test and the results are presented in Table II.

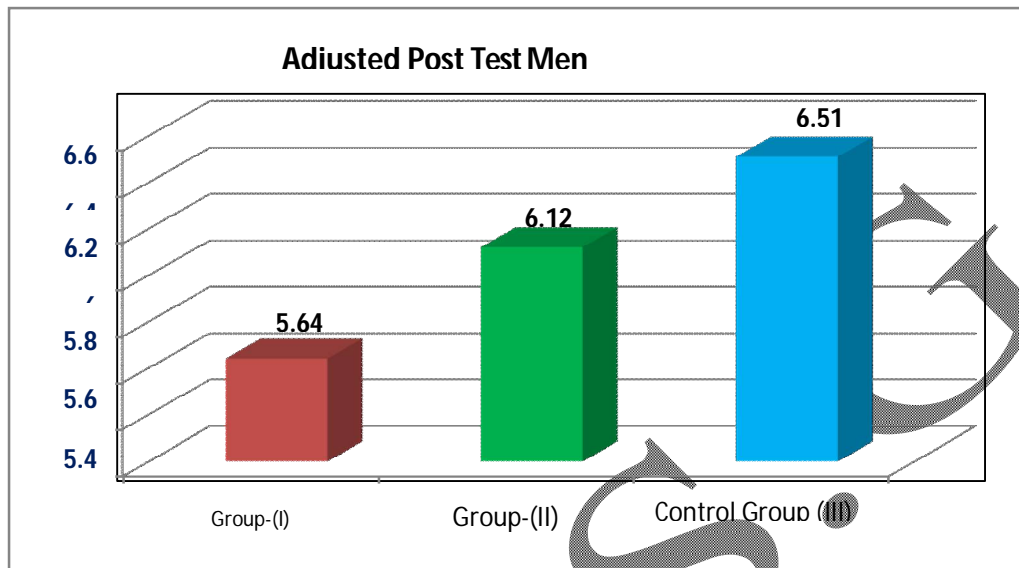
**Table- II
The scheffe’s test for the differences between the adjusted post tests paired means on speed**

Certain Variables	Adjusted Post test Means			Mean Differe nce	Confidence Interval
	Plyometric Training Group-(I)	Weight Training Group-(II)	Control Group (III)		
Speed	5.64	6.12		0.48*	0.44
	5.64		6.51	0.87*	0.44
		6.12	6.51	0.39*	0.44

* Significant at.05 level of confidence

Table-II shows that the adjusted post test mean for differences on speed between Plyometric training group and Weight training group, Plyometric training group and Control group, Weight training group and Control group are 0.48, 0.87 and 0.39. The values are greater than the confidence interval 0.44, which shows significant differences at 0.05 level of confidence.

Figure I. The adjusted post test means values of Plyometric Training group, Weight training group and Control group on Speed



Conclusion:

From the analysis of the data, the following conclusions were drawn.

- The Experimental groups had registered significant improvement on the selected criterion variables namely Speed.
- It may be concluded that the Plyometric training group is better than Weight training group and Control group in improving Speed.

References:

- Berdene Wyse, "Relationship Between Hand Arm Shoulder Strength, Height-Weight Ratio and Ability to Perform the Bent Arm Hang", Unpublished Master's Thesis, IOWA University of IOWA, M.A. in Physical Education, 1964, Completed Research in Health, Physical Education and Recreation, Vol.7 (1965).
- Chui, Edward F. "Effect of Isometric and Dynamic Weight Training Exercises Upon Strength and Speed of Movement", 1964.
- Daniel P. McNair, "Effect of Different Exercise Programme on the Development of Cardio-Vascular Fitness, Strength and Muscular Endurance", Completed Research in Health, Physical Education and Recreation, X (1968).
- Dave J. Rowlands, "The Effect of Weight Training Exercise Upon the Throwing Power and Strength of College Baseball Players", Unpublished Master's Thesis, Washington : University of Washington M.S. in Physical Education, 1962, Completed Research in Health Physical Education and Recreation, Vol.5, 1963.
- F.N.S. Creek, Cricket, (London: Warwick Lane St. Pauls House, 1973), P.15.
- Francis V. Schuermann, "A Study of the Overall Gains in Muscular Strengths Made by High School Boys Participated in an Isometric Exercise Program for Six Weeks", M.S. in Physical Education, 196.