



EFFECT OF DIFFERENT TRAINING METHODS ON FOOTBALL PLAYING ABILITY

Dr. Sakti Ranjan Mishra	Ph.D., Former Principal, (Corresponding Author) At- Water Woks Road, Puri- 752002, Odisha.
Sri Dhananjay Banerjee	Research Scholar
Sri Syama Sundar Pratihari	Research Scholar
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ABSTRACT The purpose of this study was to know effect of different training methods on football playing ability. One hundred twenty school going adolescent students, age ranging between 13 to 15 years acted as subjects and assigned to four groups (three experimental and one control group) with 30 students each. The three experimental groups were Circuit Training, Plyometric Training and Interval Training groups. Football playing ability was measured by McDonald Soccer Test. The analysis of data revealed that the three experimental groups, showed significant gains in performance of football playing ability after administration of training for duration of 12 weeks. The control group did not show any significant increase in the performance.

INTRODUCTION:

A fit body is an asset to any game. The present era stresses upon sports and games involving high skill and expertise. Super performances not only depends upon skill and expertise but also requires a high degree of physical fitness of the players. Thus, fitness is the key factor and base of the super performances. Preparing a skilled player depends upon the provision of type of training to the player. Sports training refer to specialized strategies and methods of exercise used in various sports to develop players and athletes and prepare them for performing in sporting events. *The purpose of this study was to know effect of different training methods on playing ability in football.*

METHODOLOGY:

One hundred twenty school going adolescent students, age ranging between 13 to 15 years and studying in VIII, IX AND X classes of High School. All subjects were, then, randomly assigned to four groups i.e., three experimental groups (A, B and C) and one control group (D), consisting of 30 students each. The experimental treatments were also assigned to the groups at random. The groups A, B and C Were treated as Experimental Groups and were given Circuit Training, Plyometric Training and Interval Training respectively. The group – D served as control group and being kept away from the training schedule and continued in performing normal programme of the school. Considering the capabilities and existing facilities the above stated training methods were selected for the study. To measure Football Playing Ability for the subjects McDonald Soccer Test was being chosen. All the experimental Groups (Circuit training, Plyometric training and Interval training) was administered with the selected exercises, thrice in a week for a duration of 12 weeks under direct supervision

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FINDINGS:

The statistical analysis of data on Football Playing Ability of subjects belonging to three experimental groups and one control group, each comprising of thirty subjects, is presented below.

Table- 1 (SIGNIFICANCE OF DIFFERENCE BETWEEN PRE-TEST AND POST-TEST MEANS OF THE THREE EXPERIMENTAL GROUPS AND THE CONTROL GROUP IN FOOTBALL PLAYING ABILITY)

Groups	Pre-test mean±SE	Post-test mean±SE	Difference between means	SE	't' ratio
Circuit training	5.100±0.199	6.900±0.169	1.800	0.176	10.256*
Plyometric training	4.767±0.184	6.800±0.169	2.033	0.256	7.946*
Interval training	4.767±0.196	5.533±0.266	0.766	0.364	2.105*
Control	4.667±0.194	4.900±0.188	0.233	0.202	1.157

* Significant at 0.05 level of confidence, 't'_{0.05} (29) = 2.045. Table 1 reveals that all the experimental groups improved significantly yielding 't' value of 10.256, 7.946 and 2.105 with regard to circuit training, plyometric training and interval training, respectively, where as the control group did not show any significant improvement in football playing ability of subjects indicating 't' values of 1.157. The needed 't' value for significance at 0.05 level of confidence with 29 degrees of freedom

TABLE – 2 (ANALYSIS OF VARIANCE AND COVARIANCE OF THE MEANS OF THREE EXPERIMENTAL GROUPS AND THE CONTROL GROUP IN FOOTBALL PLAYING ABILITY)

	Circuit training	Plyometric training	Interval training	Control	Sum of squares	df	Mean square	F ratio
Pre-test means	5.100 ±0.199	4.767 ±0.184	4.767 ±0.196	4.667 ±0.194	B 3.225 W 130.100	3 116	1.075 1.122	0.958

Post-test means	6.900 ±0.169	6.800 ±0.169	5.533 ±0.266	4.900 ±0.188	B 86.200 W 141.667	3 116	28.733 1.221	23.528*
Adjusted post-test means	6.861 ±0.202	6.808 ±0.201	5.542 ±0.201	4.923 ±0.201	B 81.800 W 138.998	3 115	27.267 1.209	22.559*

* Significant at 0.05 level of confidence, N = 120, B = Between group variance, W = Within group variance. The analysis of variance for football playing ability showed that the resultant 'F' ratio of 0.958 was not significant in case of pre test means. The post test means yielded 'F' ratio of 23.528, which was found to be significant. The adjusted final means yielded the 'F' ratio of 22.559 and was found significant. The 'F' ratio, needed for significance at 0.05 level of confidence (df 3, 116) was 2.680.

TABLE – 3 (PAIRED ADJUSTED FINAL MEANS AND DIFFERENCES BETWEEN MEANS FOR THE THREE EXPERIMENTAL GROUPS AND THE CONTROL GROUP IN FOOTBALL PLAYING ABILITY)

Circuit training	Plyometric training	Interval training	Control	Diff. between means	Critical diff. for adjusted mean
6.861	6.808			0.053	0.202
6.861		5.542		1.319*	0.202
6.861			4.923	1.938*	0.202
	6.808	5.542		1.266*	0.202
	6.808		4.923	1.885*	0.202
		5.542	4.923	0.639*	0.202

* Significance at 0.05 level. It is evident from the Table 3 that the mean differences with respect to football playing ability of all the experimental groups were found to be significantly greater than that of control group. Further, significant difference between interval training group and other two experimental groups was observed making interval group significantly inferior to other two experimental groups. However, no significant difference was found between circuit and plyometric training group with respect to football playing ability.

CONCLUSION:

The analysis of data revealed that the three experimental groups, administered with circuit training, plyometric training and interval training showed significant gains in performance of the football playing ability after administration of training for duration of 12 weeks. The control group did not show any significant increase in the performance. The circuit training exercise exclusively showed significant gain in performance of subjects in football playing ability, better than interval training. However, no significant difference with regard to football playing ability was observed between circuit training and plyometric training.

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