

GENERAL AND SPECIFIC AEROBIC TRAINING INFLUENCES ON SELECTED PERFORMANCE VARIABLES AMONG UNIVERSITY MEN FOOTBALL PLAYERS

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ABSTRACT

The purpose of the study was to find out the general and specific aerobic training influence on selected skill performance among university men football players. For the purpose of the study, sixty men football players studying Bachelors degree in the Department of physical Education and sports sciences, Annamalai University, Tamil Nadu, India were selected as subjects and they were divided into three equal groups of twenty subjects each at random namely general aerobic training group, specific aerobic training group and control group. The age of the selected subjects were ranged from 18 to 21years. Group I underwent general aerobic training and group II underwent specific aerobic training (small sided games (7X7 football area) respectively for three days per week for twelve weeks group III acted as control who did not undergo any special training programme apart from their regular physical education programme of their curriculum. The following performance variables namely dribbling ability and passing ability were any selected as criterion variables. The data were collected on selected criterion variables at prior and immediately after the experimental period as pre and posttests respectively. Dribbling. Ability and passing ability were tested by using F-MARC test battery the analysis of covariance (ANCOVA) was used to find out the isgnificant difference among the group. If any separately for each criterion variable. Since, three group were compared, whenever the obtained F ratio for adjusted post test was found to be significant, the Scheffes test was used to find out the paired mean differences. if any 0.5 level of confidence was fixed to test the level of significance which was considered as an appropriate. The results of the study showed that specific aerobic training group has significantly differed on selected performance variables namely dribbling ability and passing ability when compared to aerobic training and control group. General aerobic training group also significantly differed on performance variables namely dribbling ability and passing ability when compared to control group.

KEY WORDS; General Aerobic and specific Aerobic training.

INTRODUCTION

Aerobic training implies that the training programme is designed to improve the oxygen transport system. It is imperative during soccer match -play and training sessions that there is a good supply of oxygen to the active muscle and that these tissues have the capability to use the oxygen that is provided by the circulatory system. Aerobic training therefore has central and peripheral aspects, an effect on the cardiac output and circulation of blood on one hand and an increased ability of the muscle to take up and utilize the oxygen that is offered.

METHODOLOGY

The purpose of the study was to find out the general and specific aerobic training influence on selected skill performance among university men football players. For the

purpose of the study, sixty men football players studding Bachelor's degree in the Department of physical education and sports sciences, Animalia University, Animalia Nagger, Tamil Nadu, India were selected as subjects and they were divided into three equal groups of twenty subjects each at random namely general aerobic training group, specific aerobic training group and control group. The age Of the selected subjected were ranged from 18, to 21 years. group lunderwent general aerobic training and group 11 underwent specific aerobic training (small sided games (7x7) football area) respectively for three days per week for twelve weeks . Group 111acted as control who did not undergo any special training programme apart from their regular physical education programme of their curriculum . the following training programmers namely general aerobic training and specific aerobic training (small sided games (7x7football area) were selected as independent variables . the following performance variables namely dribbling ability passing ability were only selected as criterion variables . the data were collected on selected criterion variable at prior and immediately after the experimental period as pre and posttests respectively . dribbling ability and passing ability were tested by using F- MARC test battery the analysis of covariance (ANCOVA) was used to find out the significant difference among the groups. If any separately for each criterion variable. since, three group were compared whenever the obtained 'F' ratio for adjusted posttests was found to be significant , the Scheffe's test was used to find out the paired mean differences, if any . The. 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate

ANALYSIS OF THE DATA

The influence of general aerobic training and specific aerobic training on each criterion variable was analyzed separately and presented below.

PASSING ABILITY

The analysis of covariance of the data obtained for pre and post test scores on passing ability of general aerobic training, specific aerobic training and control group have been presented in Table II.

TABLE II
ANALYSIS OF COVARIANCE FOR THE PRE AND POST TEST ON
PASSING ABILITY OF GENERAL AEROBI TRAINING,
SPECIFIC AEROBIC TRAINING AND CONTROL
GROUP (INPOINTS)

TEST	General Aerobic Training Group	Specific Aerobic Training Group	Control Group	Source of variance	Sum of squares	df	Mean Squares	Obtained 'ratio
Pre – Test								
Mean	5.45	5.55	5.35	Between	0.400	2	0.2	0.79
S.D	0.51	0.51	0.49	Within	14.50	57	0.254	
Post Test								
Mean	6.40	7.25	5.55	Between	28.900	2	14.45	60.97
S.D	0.50	0.44	0.51	Within	13.500	57	0.237	

Adjusted Post /Test								
Mean	6.46	7.28	5.51	Between	29.120	2	14.56	61.44*
			Within	13.279	56	0.237		

(The table values required for significance at .05 level of confidence for 2 and 57 and 56 are 3.159 and 3.162 respectively)

Table II shows that the adjusted posttest mean values on passing ability of general aerobic training, specific aerobic training and control group are 6.46, 7.28, and 5.51 respectively. The obtained 'F' ratio value of 61.44 for adjusted post test scores is greater than the table value of 3.162 for df 2 and 56 required for significance at .05. Level of confidence on passing ability. The results of the study indicated that there was a significant among the adjusted posttest means of general aerobic training, specific aerobic training and control groups on passing ability To determine the significance among the three paired means, the Scheffe's test was applied as post hoc test and then results are presented in table II-A.

TABLE II-A
THE SCHEFFE'S TEST FOR THE DIFFERENCE BETWEEN
PAIRED MEANS ON PASSING ABILITY

General Aerobic Training Group	Specific Aerobic Training Group	Control Group	Mean Differences	Confidence Interval value
6.46	7.28	-	0.82*	0.39
6.46	-	5.51	0.95*	0.39
-	7.28	5.51	1.77*	0.39

*significance at .05 level of confidence.

The table II A shows that the mean difference values between general aerobic training group and specific aerobic training groups, general aerobic training group and control group specific aerobic training group and control group 0.82, 0.95 and 1.77 respectively on passing ability which were greater than the required confidence interval value 0.39 at .05 level of confidence.

The results of this study showed that specific aerobic training group has significant difference on passing ability when compared to general aerobic training group and control group general aerobic training group also significantly differed on passing ability when compared control group.

RESULTS AND DISCUSSIONS

There was a significant difference among general aerobic training, specific aerobic training and control groups on selected performance variables namely dribbling ability and passing ability among men football players. In addition, it was inferred that there was a significant improvement on selected performance variables namely dribbling ability and passing ability among men football players due to general aerobic training and specific aerobic training. The results of the present study were in correlated with the following studies.

Impellizzeri FM ET. Al. compared the effects of specific (small – sided games) vs. Generic (running) aerobic interval training on physical fitness and objective measures of match performance in soccer. In addition, found the significant improvement on match performance due to specific and generic aerobic interval training. Hill – Hass SV ET. al., compared 7 weeks of soccer – specific small – sided game (SSG) and mixed generic fitness training, on selected physiological, perceptual and performance variable Mc Mahon et al., investigated; improved oxygen uptake improve soccer pen performance regards distance covered, involvements with the ball, and number of sprints. Large improvements in oxygen uptake have been shown using interval running. Haltered J.et al. Studied the effects of aerobic training on performance during soccer match and soccer specific tests. In addition, found the improvement on the soccer performance due to to aerobic training. The results of the study were in correlation with the results of the present stud. Impellizzeris, F.M et al., have examined the effects of aerobic interval training on the decline in short – passing ability caused by a short bout of high-intensity intermittent activities.

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