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## **Effect of Concurrent Training on Performance Related Component in Explosive Power of Football Players**

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### **ABSTRACT**

Concurrent training (CT) is the simultaneous physical preparation of two or more exercise modalities. Common combinations include strength and power, hypertrophy and strength, and power and power endurance. The present study is examined to the effect of concurrent training on performance related component in vital capacity. The research scholar reviewed the available literature pertaining to the concurrent training, from books, journals, periodicals, magazines and research papers. There were studies proved that the concurrent training had positive effects on certain game performance related component in vital capacity of school level Vital capacity. The age group 15 – 18 and selected Namakkal region, Tamilnadu, India school level Vital capacity. Statistically significant improvements in standard scores in vital capacity was comparable between the three groups of Vital capacity. Vital capacity improved by 2.16 in concurrent group, 2.06 in the control group. The research on short - duration intervention in establishment football players may help to organize the role of concurrent in conventional Vital capacity to maintain proper alignment and posture during movement for training.

**KEY WORDS:** Physical fitness, vital capacity, Concurrent training

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### **INTRODUCTION**

Concurrent training (CT) is the simultaneous physical preparation of two or more exercise modalities. Common combinations include strength and power, hypertrophy and strength, and power and power endurance

Concurrent training is a term used to describe performing both cardio and weights in your training regime. For example, doing 2-3 weight session and 1-2 cardio sessions in a single week is concurrent training. Concurrent training involves trying to improve multiple physical qualities at the same time.

Concurrent training is defined by using resistance and endurance training within the same training program. For example, if you do a skill practice, lift weights and go for a run, then repeat these efforts throughout the week, you are training concurrently.

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### **METHODOLOGY**

The Methodology for the present investigation is on the effect of concurrent training on performance related component in vital capacity of football players. The purpose of study 30 male football students selected from various schools in Namakkal district, TamilNadu. Their age ranges between 15 to 18 years .the subjects were randomly assigned into two groups, namely experimental group I (concurrent training) and control group. In order to make sure the full cooperation from the subjects, the scholar had a meeting with them and explained the purpose of the research. It was made clear by explanation in order to ascertain that there was no uncertainty among the players regarding the effort, which they had to put in for the successful completion of this study. Experimental group I participated for a period of eight weeks concurrent training and control group have no any specific training. The subjects were tested on selected criterion variable of vital capacity before the training and after 8 weeks of training.

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### **TRAINING PROCEDURE**

Experimental Group-I undertake concurrent training and the control group was un explored to any specific training programme. The experimental treatments namely concurrent training was administrated for duration of eight weeks and the number of session per week was confined to three alternative days and each session lasted 60 minutes.

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### **STATISTICAL TECHNIQUE**

The collected data from the two groups prior to and after the experimental treatments on selected variables was vital capacity were statistically analyzed by using the statistical technique of 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 as a post hoc test to determine which of the paired means difference was significant. In all the cases 0.05 level of confidence was fixed as a level of confidence to test the hypotheses.

## RESULTS AND ANALYSIS

The influence of independent variables on each of the criterion variables is analyzed and presented below.

The training period was limited to eight weeks. The dependent variables selected for this study was health related variable of vital capacity. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variables.

The data obtained from the experimental groups before and after the experimental period were statistically organized with dependent 't'-test and Analysis of covariance (ANCOVA). Whenever the 'F' ratio for adjusted post-test means was found to be outstanding performance study. The Scheffe's Post hoc test was organised to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases.

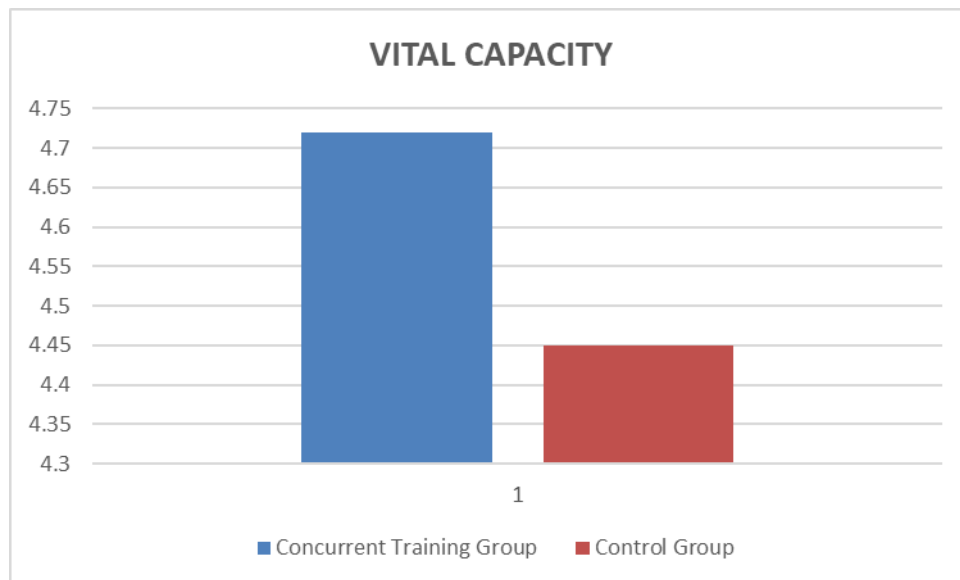
TABLE – 1

### ANALYSIS OF COVARIANCE AMONG CONCURRENT TRAINING GROUP I AND CONTROL GROUP ON VITAL CAPACITY

	Concurrent training Group	Control Group	Source of Variance	Sum of square	df	Mean square	F-value
Pre test Mean	4.46	4.43	Between	0.005	1	0.005	0.48
			Within	0.309	28	0.011	
Post test Mean	4.73	4.44	Between	0.616	1	0.616	33.79*
			Within	0.511	28	0.018	
Adjusted post mean	4.72	4.45	Between	0.519	1	0.519	44.66*
			Within	0.314	27	0.012	

FIGURE – 1

### THE ADJUSTED POST TEST MEAN VALUES OF CONCURRENT TRAINING GROUP I AND CONTROL GROUP ON VITAL CAPACITY



## CONCLUSION

The findings of the study showed that there was a statistically significant improvement in the health related variable of vital capacity as compared to control group.

1. The results of the study shows that the experimental group-I that had undergone concurrent training group, improved health related variable in vital capacity of football players.

**RECOMMENDATIONS**

It is recommended that coaches and physical educators in the game of football players should give due to include concurrent training in their training schedules.

In the physical exercise, while designing the training programme the effect of varied training modalities is explained on positively on physical fitness parameters of Vital capacity, the physical education teachers and coaches can prefer this type of training so as to achieve aim in time.

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