



ISSN: 2456-0057  
IJPNPE 2018; 3(2): 355-356  
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www.journalofsports.com  
Received: 11-05-2018  
Accepted: 17-06-2018

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## Effect of interval training and skills performance on selected motor fitness variables among football players

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### Abstract

The purpose of the study was to find out the effects of interval training and skills performance on bio motor abilities such as speed, muscular endurance and cardio respiratory endurance. To achieve this purpose of the study, forty five men students in the various Department, The New College, Chennai, Tamil Nadu, were selected as subjects at random. The selected subjects were divided into three equal groups of fifteen subjects each, such as interval training and skills performance, and control group. The group I underwent interval training programme, Group-II underwent to skills performance for three days per week for twelve weeks. And Group III acted as control group who did not participate any special training programmes apart from their regular sports activities as per their curriculum. The following variable namely speed, muscular endurance and cardio respiratory endurance were selected as criterion variables and it was measured by using standard tests. All the subjects of three groups were tested on selected criterion variable at prior to and immediately after the training programme. The analysis of covariance was used to analyse the significant difference, if any between the groups. The level of significance to test the 'F' ratio obtained by the analysis of covariance was tested at .05 level of confidence, which was considered as an appropriate. The results of the study revealed that there was a significant difference between interval training and skills performance group and control group on speed, muscular endurance and cardio respiratory endurance. And also it was found that there was a significant improvement on selected variables speed, muscular endurance and cardio respiratory endurance due to interval and skills performance.

**Keywords:** Interval training, skills performance, speed, muscular endurance and cardio respiratory endurance

### Introduction

In this modern world, competition is the key factor in each and every field, particularly in the field of sports where yesterday's records are topped and the same may be lower performance of tomorrow.

Training in sports is essentially on education process. The athlete is instructed and educated by the trainers the physical education teachers and coaches. Training depends upon the various aspects and is a positive quality closely related to exercise and good health habits. It is an important and valuable pulse in modern society. For the last few decades, research has been conducted to develop a better training method to improve motor fitness components.

Interval Training Work should be done with sufficient speed and 30 minutes duration so that the heart rates go up to 140 beats/minutes. After this there should be a recovery period and when the heart rate comes down to 90 – 100 beats per minute, the work should be started again. Continuous Running, for the purpose of this study continuous running is defined as running at constant paces without any recovery pause in between keeping the heart rate between 100 – 120 beats per minute for a given period of 20 minutes

Sports is an athletic activity requiring skill or physical prowess and often of a competitive nature as racing. The sports of the modern day has become more competitive oriented and exhibition of high skill to achieve higher performance in any field of activity. The competition has led to the research and innovation apart from skill, coaching, training and execution of skill and techniques. The biological and anatomical chemistry of the sportsmen place a very important role.

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## Methodology

The purpose of the study was to find out the effects of interval training and skills performance on motor fitness abilities such as speed, muscular endurance and cardio respiratory endurance. To achieve this purpose of the study, forty five men students in the various Departments, The New College, Chennai, Tamil Nadu, were selected as subjects at random. The selected subjects were divided into three equal groups of fifteen subjects each, such as interval training and skills performance, and control group. The group I underwent interval training programme, Group-II underwent to skills performance for three days per week for twelve weeks. And Group III acted as control group who did not participate any special training programmes apart from their regular sports activities as per their curriculum. The following variable namely speed, muscular endurance and cardio respiratory endurance were selected as criterion variables and it was measured by using standard tests. All the subjects of three groups were tested on selected criterion variable at prior to and immediately after the training programme. The analysis of covariance was used to analyse the significant difference, if any between the groups. The level of significance to test the 'F' ratio obtained by the analysis of covariance was tested at .05 level of confidence, which was considered as an appropriate. The results of the study revealed that there was a significant difference between interval training and skills performance group and control group on speed, muscular endurance and cardio respiratory endurance. And also it was found that there was a significant improvement on selected variables speed, muscular endurance and cardio respiratory endurance due to interval and skills performance.

## Training Programme

### Interval Training

Work should be done with sufficient speed and 30 minutes duration so that the heart rates go up to 140 beats/minutes. After this there should be a recovery period and when the heart rate comes down to 90 – 100 beats per minute, the work should be started again.

### Skills Performance in football

For the purpose of this study skills performance is defined as skills at football without any recovery pause in between keeping the heart rate between 100 – 120 beats per minute for a given period of 20 minutes.

## Results and Statistical Technique

The analysis of covariance was used to analyse the significant difference, if any between the groups. The level of significance to test the 'F' ratio obtained by the analysis of covariance was tested at .05 level of confidence, which was considered as an appropriate.

## Conclusions

- The following are the findings of the study:
- The speed was significantly improved after the interval training and skills performance when compared with the control group.
- There was a significant improvement after the interval training and skills performance on muscular endurance when compared with the control group.
- There was a significant improvement in cardio-respiratory endurance after the skills performance when compared with the interval training and control groups.

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