

Effect of aerobic and circuit training on explosive strength and cardio-respiratory endurance of football players

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■ **ABSTRACT**

The main aim of the study was to find out the comparative effects of aerobic and circuit training on explosive strength and cardio-respiratory endurance of football players. The study was conducted on thirty (30) male football players randomly selected from Dr. Babasaheb Nandurkar College of Physical Education, Yavatmal as subjects. The environmental conditions, daily routine work of the subjects were same. Ages of the subjects were ranging from 18 to 28 years. All the subjects are divided into three groups of 10 subjects in each group. One was treated as experimental group-I (Aerobic training group) and second one was experimental group-II (Circuit training group) and third one was control group-III. Attempt was made to maintain the homogeneity in grouping as far as possible. The aerobic and circuit training groups underwent their respective trainings for three days in a week for the period of nine weeks. A common weekly off day *i.e.*, Sunday was allowed them for rest. The intensity of the exercises was given according to their physical efficiency. The control group did not practice any specific training during the period of nine weeks apart from the physical education programme. The following variables namely, leg explosive strength and cardio-respiratory endurance were selected as criterion variables. The data were collected for all subjects on variables such as leg explosive strength and cardio-respiratory endurance by using vertical jump and 12 minute run and walk test. Data for the selected variables were taken at the beginning (pre- test) and the end of the experiment period (post- test). To find out the significance difference the ANCOVA was used. The level of significance chosen was 0 .05. The result indicated that aerobic and circuit training showed significant improvement on leg explosive strength and cardio-respiratory endurance of football players.

■ **Key Words** : Aerobic training, Circuit training, Football

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