ABSTRACT

A sport in the present world has become extremely competitive. It is not the mere participation or practice that brings victory to an individual. Therefore, sports life is affected by various factors like Physiology, Biomechanics, Sports Training, Sports Medicine, Sociology, and Psychology etcetera. Coaches, trainers, physical education personnel and doctors are doing their best to improve the performance of the players of their country. Athletes/players of all countries are also trying hard to win laurels/medals for their countries at International competitions.

The term training refers to the acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies.

Continuous training refers to aerobic activity performed at 60 to 90% VO$_{2\text{max}}$ for at least half an hour with a minimum of three training sessions per week. This training improves aerobic capacity. Examples of this are aerobics, gym circuit classes, cycling and swimming and running and jogging. When done at the lower end of this range, it is often referred to as long, slow distance (LSD) training. This level of training is ideal for those starting off an exercise programme, those wishing to maximize burning calories for weight loss and as an option for an active “rest” day in a weekly aerobic training programme.

Interval Training involves short bursts of intense activity interspersed with lighter activity or rest periods. For example, athletes may repeat 200 meter sprints with full recovery or specific rest intervals. Intervals are excellent for building speed endurance for sports, where intense activity is separated by brief recovery periods, such as soccer, basketball, and rugby.
In this context, the investigator has made an attempt to find out the acute effects of Continuous running and Intermittent training programmes on selected Bio-motor, Bio-chemical and athletic performance factors of professional college men athletes, such as Speed, Agility, Cardio Respiratory Endurance, High Density Lipoproteins Cholesterol (HDL), Low Density Lipoproteins Cholesterol (LDL), Very Low Density Lipoproteins Cholesterol (VLDL), 100 Meters Run, 800 Meters Run, and 1500 Meters Run.

For this purpose, Forty five men students, who participated in Anna University Zone-XIII inter collegiate athletic meets during the year 2012-2013, were selected randomly as subjects. They were divided into three equal groups of fifteen (n=15) namely experimental group-I (Continuous Running), group-II (Intermittent training) and group III (Control group) that did not involve in any training. The training period was limited to three days per week for twelve weeks. The dependent variables selected for this study were Speed, Agility, Cardio Respiratory Endurance, High Density Lipoproteins Cholesterol (HDL), Low Density Lipoproteins Cholesterol (LDL), Very Low Density Lipoproteins (VLDL), 100 Meters Run, 800 Meters Run and 1500 Meters Run. 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 analyzed with dependent ‘t’-test and Analysis of covariance (ANCOVA). Whenever the ‘F’ ratio for adjusted post test means was found to be significant, the Scheffe’s Post hoc test was applied to determine the paired mean differences. The level of confidence was fixed at 0.05 level for all the cases.
It is concluded that all the experimental groups namely, Continuous running and Intermittent training groups have shown significant improvement on Speed, Agility, Cardio Respiratory Endurance, High Density Lipoproteins Cholesterol(HDL), Low Density Lipoproteins Cholesterol(LDL), Very Low Density Lipoproteins (VLDL), 100 Meters Run, 800 Meters Run and 1500 Meters Run, further the results of study supported to Intermittent training group.