CHAPTER - V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
5.1. SUMMARY

In the modern scientific age, sportsmen are being trained using highly sophisticated means for better achievement in their concerned sports. Sportsmen are being exposed to the exercises and training methods which have proved beneficial for achieving high standards. Functional, biochemical, morphological and other physiological changes are the results of systematic and sound training program.

A variety of training procedures are adopted to develop the physical fitness with emphasis on developing one or other factors more intensively through any method which will have some effect on all qualities to be developed. The training methods can be identified as speed training. Endurance schedules of stress loads undertaken by trainer and athletes. The modern trends in sports and games reflect advanced technological developments and scientific methods of training. So the training sessions should aim at the purpose to improve the performance of the sportsmen through systematic and scientifically constructed training methods.

The purpose of this study was to investigate the effects of varied intensities, frequencies and densities of bench step training on selected motor ability components, physiological variables and the performance of 400 metres run of College Men Students.

To facilitate the study, one hundred and sixty men students from scott christian college, Nagercoil were selected as subjects at random and their ages were between eighteen and twenty four years. They were divided into eight equal groups namely experimental group I, II, III, IV, V, VI, VII and VIII.

In this study, thirty five steps per minute intensity of bench step training was given to the experimental group I with two minutes rest (density) between the sets
for two days in a week for eight weeks. Thirty five steps per minute intensity of bench step training was given to the experimental group II with three minutes rest (density) between the sets for two days in a week for eight weeks. Thirty five steps per minute intensity of bench step training was given to the experimental group III with two minutes rest (density) between the sets for four days in a week for eight weeks. Thirty five steps per minute intensity of bench step training was given to the experimental group IV with three minutes rest (density) between the sets for four days in a week for eight weeks. Thirty steps per minute intensity of bench step training was given to the experimental group V with two minutes rest (density) between the sets for two days in a week for eight weeks. Thirty steps per minute intensity of bench step training was given to the experimental group VI with three minutes rest between the sets (density) for two days in a week for eight weeks. Thirty steps per minute intensity of bench step training was given to experimental group VII with two minutes rest between the sets (density) for four days in a week for eight weeks while thirty steps per minute intensity for bench step training was given to the experimental group VIII with three minutes rest (density) between the sets for four days in a week for eight weeks. The pre-tests were taken from the subjects before administering the bench step training. The subjects were involved with their respective intensity, frequency and density of bench step training for a period of eight weeks under the personal supervision of the research scholar. At the end of eight weeks of the training post-tests were taken.

The significant difference between the means of experimental groups I, II, III, IV, V, VI, VII and VIII for the pre-test and post-test scores were determined by F-ratio through analysis of variance. The F-ratio for the adjusted post-test means were computed by analysis of covariance. The level of significance was fixed at 0.05 level of confidence for the degrees of freedom 7 and 151.
5.2. CONCLUSIONS

Within the limitations of the present study, the following conclusions were drawn.

1. Leg Explosive Power and resting pulse rate were significantly improved due to the influence of 35 steps per minute intensity with 2 days frequency and 2 minutes density, 35 steps per minute intensity with 2 days frequency and 3 minutes density, 35 steps per minute intensity with 4 days frequency and 2 minutes density, 35 steps per minute intensity with 4 days frequency and 3 minutes density, 30 steps per minute intensity with 2 days frequency and 2 minutes density, 30 steps per minute intensity with 2 days frequency and 3 minutes density, 30 steps per minute intensity with 4 days frequency and 2 minutes density, 30 steps per minute intensity with 4 days frequency and 3 minutes density, 30 steps per minute intensity with 30 steps per minute intensity with 4 days frequency and 3 minutes density of bench step training among the college men students.

2. In Leg Explosive Power and Resting Pulse Rate, the experimental group III (35 steps per minute intensity with 4 days frequency and 2 minutes density) showed significantly greater improvement than experimental group IV (35 steps per minute intensity with 4 days frequency and 3 minutes density), experimental group I (35 steps per minute intensity with 2 days frequency and 2 minutes density), experimental group II (35 steps per minute intensity with 2 days frequency and 3 minutes density), experimental group VII (30 steps per minute intensity with 4 days frequency and 2 minutes density), experimental group VIII (30 steps per minute intensity with 4 days frequency and 3 minutes density), experimental group V (30 steps per minute intensity with 2 days frequency and 2 minutes density) and experimental group VI (30 steps per minute intensity with 2 days frequency and 3 minutes density) among college men students.

3. In Leg Explosive Power and Resting Pulse Rate, the experimental group IV showed greater improvement than experimental group I, experimental group II, experimental group VII, experimental group VIII, experimental group V and experimental group VI among college men students.
4. In Leg Explosive Power and Resting Pulse Rate, the experimental group I showed greater improvement than experimental group II, experimental group VII, experimental group VIII, experimental group V and experimental group VI among college men students.

5. In Resting Pulse Rate, the experimental group II showed greater improvement than experimental group VII, experimental group VIII, experimental group V and experimental group VI among college men students.

6. In Leg Explosive Power and Resting Pulse Rate, the experimental group VII showed greater improvement than experimental group VIII, experimental group V and experimental group VI among college men students.

7. In Leg Explosive Power and Resting Pulse Rate, the experimental group VIII showed greater improvement than experimental group V and experimental group VI among college men students.

8. In Leg Explosive Power and Resting Pulse Rate, the experimental group V showed greater improvement than experimental group VI among college men students.

9. There was no significant improvement in speed, anaerobic power and 400 metres running performance due to the influence of eight weeks of varied intensities, frequencies and densities of bench step training.

5.3. RECOMMENDATIONS

On the basis of the findings and conclusions of the present study, the following recommendations were made.
1. The present study showed that there was improvement in leg explosive power and resting pulse rate due to the influence of varied intensities frequencies and densities of bench step training. Hence, it was recommended that varied intensities, frequencies and densities of bench step training selected in this study could be included as one of the training methods for the improvement of physical fitness and sports performance.

2. Further it was recommended that bench step training assigned to experimental group III (35 steps per minute intensity with 4 days frequency and 2 minutes density) could be used as one of the training methods to improve resting pulse rate and leg explosive power, as it was significantly better than experimental groups I, II, IV, V, VI, VII and VIII.

3. It was recommended that Bench step training assigned to experimental group III (35 steps per minute intensity with 4 days frequency and 2 minutes density) could be given to the sprinters, jumpers and football players as their performances were mainly related to the leg explosive power.

5.4. SUGGESTIONS FOR FURTHER RESEARCH

The following suggestions are given for further research.

1. Similar study may be conducted separately for women of different age groups.

2. It is also suggested that similar study can be conducted by altering the intensity, frequency and density of Bench step training.

3. Similar studies can be conducted for various games like volleyball, football and basketball.

4. Similar study may be carried out with different types of training.