Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Our increased reliance on technology has substantially lessened work-related physical activity, as well as the energy expenditure required for activities of daily living like cleaning the house, washing clothes and dishes, mowing the lawn and traveling to work. As a result, more time is available to pursue leisure activities. The unfortunate fact, however, are that many individuals do not engage in physical exercise during their leisure time. Although the human body is designed for movement and strenuous physical activity, exercise is not a part of the average lifestyle. Exercise scientists and health/fitness professionals have mentioned that regular physical activity is the best defense against the development of many diseases, disorders and illnesses. The importance of regular physical activity is to prevent diseases and premature death and to maintain a high quality of life.

Primary goal of the physical exercise program is to develop and maintain cardio-respiratory fitness. Aerobic activity is useful to involve large muscle groups in a continuous, rhythmical fashion. In the initial and improvement stages of the aerobic training program, it is important to closely monitor the exercise intensity. In addition to walking, jogging and cycling, there are other exercise modalities that provide a sufficient cardio-respiratory demand for improving aerobic fitness. Indian philosophy of yoga also claims the role of
such non-exercising technique in improving the inner self and positive effects on various body functions. However, a comparative study of aerobic training with yoga is meager and therefore, the present study was planned to see the effects of respective techniques on selected variables.

The purpose of the present study was to find out the impact of aerobic training and yogic practices on health related physical fitness, basal metabolic rate, and blood lipid profiles of the obese college men. To achieve the purpose of this study, a qualified physician examined 968 male students studying different graduation courses from four degree colleges namely – Government Degree College for Men, Sree Sai Baba National Degree College, PVKK Degree College and Sai Degree College in Anantapurmau town, Andhra Pradesh, India, and found out 174 obese college men. Out of 174 obese college men 45 obese college men were selected at random as subjects. Their age ranged from 18 to 22 years as per the college records. The selected subjects were divided into two experimental groups and a control group with fifteen subjects in each (n=15). Experimental Group I underwent aerobic training (ATG), Group II underwent yogic practices (YPG) and Group III served as control group (CG) for the training period of 12 weeks.

Subjects of the three groups (aerobic training group (ATG), yogic practices group (YPG) and control group (CG)) were tested on selected criterion measures, namely, health related physical fitness variables, basal metabolic rate (BMR) and blood lipid profiles prior to and after the 12 weeks of a training period.
The data collected from the three groups before and after the experimental period was statistically examined to find out the significant improvement using the analysis of covariance (ANCOVA). Whenever the F ratio was found to be significant, Scheffe’s test was used as post hoc test to determine which of the paired means differed significantly. In all cases, the criteria for statistical significance were set at 0.05 level of confidence (P<0.05).

CONCLUSIONS

In the present investigation, as a result of two training programmes, namely, aerobic training and yogic practices the following improvements occurred on health related physical fitness variables, basal metabolic rate, and blood lipid profiles of obese college men.

1. It was concluded from the results of the study that the aerobic training and yoga practices groups showed significant improvement in muscular strength and endurance, flexibility, and cardio respiratory endurance when compared with a control group as well as pre test.

2. Regular practice of aerobic training and yoga practices significantly reduced the level of body mass index, body fat percentage and fat free mass.

3. 12 weeks of aerobic training and yoga practices significantly reduced the basal metabolic rate.
4. Systematic and well planned aerobic training and yoga practice programs significantly reduced the total cholesterol, low density lipoprotein (LDL) cholesterol, triglycerides in obese college men.

5. Due to the influence of aerobic training and yogic practices, the level of high density lipoprotein (HDL) cholesterol significantly increased when compared with a control group as well as pre test.

6. The aerobic training has differed significantly in all the dependent variables when compared to the yogic practices training system.

7. Aerobic training was a suitable training system to improve the health related physical fitness parameters, basal metabolic rate (BMR) and improve the lipid level in blood among the obese college men.
RECOMMENDATIONS

The following recommendations are made on the basis of the study.

1. Similar studies may be conducted on other physical, physiological and psychological variables.
2. Similar studies may be conducted on diabetic patients.
3. Similar studies may be conducted on people suffering from degenerative disease like hypertension.
4. Similar studies may be undertaken for different age groups in both sexes at different levels.
5. Similar research is necessary to explore the effects of different exercise programmes for the obese students.
6. Similar studies can be conducted with the same variables by selecting the subjects from other environmental aspects.
7. Need for high levels of physical activity to maintain good health and weight loss. 45-60 minutes per day of moderate intensity aerobic physical activity is required to maintain a significant weight loss.
8. Recommended that there is a need for more research in this field.
9. Obesity tests may be conducted periodically at college and school levels so as to estimate the level of obesity every individual student and to recommend the remedial measures if any.
10. Obesity testing centre may be established for measuring the level of obesity, equipped with infrastructure facilities and qualified personal for every District of Andhra Pradesh.

11. Obesity awareness week may be conducted annually throughout the State in order to have fit citizens.

12. This study may be useful for the people to explore more about yogic practices.