#### **CHAPTER - V**

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 **SUMMARY**

The purpose of the study was to find out the effect of aerobic and anaerobic training on selected physiological and body composition profiles among middle aged obese women. To achieve the purpose of this study Forty five middle aged obese women were randomly selected in and around from Namakkal district, Tamil Nadu, India and their age ranged between 35 to 45 years.

The study was formulated as a pre and post test random group design, in which forty five obese women were randomly assigned into three equal groups and each group consisting of 15 subjects. Group I underwent Aerobic training and Group III underwent Anaerobic training and Group III act as a control group; they did not undergo any above mentioned special training programme. After assessing the subjects to treatment and control groups, they were tested on selected criterion variables. It was considered as pre – test. After assessing the pre – test performance on criterion variables, the subjects were treated with their respective training programme for twelve weeks. After twelve weeks of their training programme, again the subjects were tested (Post-test) on selected criterion variables as such in the pre – test.

The group means gains recorded by the various groups during the experimental period of twelve weeks to the criterion measures were tested for significance by applying paired 't' test. The present study pays attention mainly on testing the means of three treatment groups and secondarily deals with the increase of means in each group from base line to post treatment for various measures. The statistical tool used for these are described here. Analysis of co variance (ANCOVA) was applied to determine whether the training programmes produced significantly different improvements in selected variables after 12 weeks of training. Since the initial means were not matched, comparisons between actual could not be made, all means were adjusted by regression to a common mean. The significance of difference of pairs of adjusted final group means was tested for significance by applying Scheffe's post hoc test. In all the cases 0.05 level of confidence was utilized.

### 5.2 CONCLUSIONS

Based on the results of the study the following conclusions were drawn.

- 1. The aerobic training was a better tool to improve the selected physiological variables and body composition profiles of middle aged obese women.
- 2. The anaerobic training group was a better tool to improve the selected physiological variables and the body composition profiles of middle aged obese women.
- 3. The control group did not exhibit any significant changes in the selected physiological variables and selected body composition profiles of middle aged obese women.

# 5.3 **RECOMMENDATIONS**

On the basis of the findings and conclusions of the present study, the following recommendations were made.

## 5.3.1 Recommendations for implication

- 1. The aerobic training may be recommended to the middle aged obese women to develop the physiological variables of breath holding time, systolic blood pressure, diastolic blood pressure, resting pulse rate, aerobic power, anaerobic power, body composition profiles of body weight, lean body mass, fat mass and body mass index.
- 2. The anaerobic training may be recommended to the middle aged obese women to develop the physiological variables of breath holding time, systolic blood pressure, diastolic blood pressure, resting pulse rate, aerobic power, anaerobic power, body composition profiles of body weight, lean body mass, fat mass and body mass index.

### 5.3.2 Recommendations for future research

- 1. A similar study may be conducted on physical education students and other sports persons to assess their level in the selected variables.
- 2. A similar study may be conducted on childhood and middle aged men.
- 3. A similar study may be conducted in greater detail to assess changes on biochemical, psychological and physical fitness variables.
- 4. To find out the improvement on criterion measures periodically, the same study may be designed with repeated measures.