CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The best way to keep physical activity and exercises a permanent part of one’s life is to make it fun and enjoyable. If people are given different options of what they can do and have easy access to those options, they are more likely to participate in physical activity and exercises. This allows people to have a positive attitude towards physical fitness. It’s also helpful if people are knowledgeable about the rewards of physical activity and exercises.

The challenge facing the fitness professional is how to best manipulate, progressively overload and inter mix intensity, duration and frequency with a variety of modes of activity to help the clients reach their goals. Fortunately a number of different training programs are available to the fitness professional including yogic training and aerobic training. Detraining refers to the cessation of regular physical training, the effect of stop training are quite minor compared with those from immobilization. In general, the greater the gains during training, the greater the decrease during detraining simply because, the well trained person has more to lose than the untrained person. Detraining causes muscle atrophy, which is accompanied by loss in muscular strength. However muscles require only minimal stimulation to retain these qualities during periods of reduced activity. Muscular endurance, cardio respiratory endurance, flexibility and body composition effects are significantly reduces during detraining but significantly maintained up to three cessation periods.

The purpose of the study is to find out the effects of yogic training aerobic training and detraining on health related physical fitness of college male students. Forty five healthy, untrained students were selected from Dr.R.K.Shanmugam College of Arts & Science, Indili, Kallakurichi T.K, Villupuram Dt, Tamil Nadu, during the academic year 2009 – 2010 for this study. The subject’s age ranged from 18 to 21 years.

The selected subjects were divided into three groups with fifteen subjects in each group selected randomly, with two experimental groups and one control group.
Experimental Group I underwent the yogic training in selected asanas and pranayama. Experimental Group II underwent the selected aerobic dance with music’s programme. The training periods of experimental groups were twelve weeks, five days per week with duration of 45 minutes. Control group did not undergo any training programme other than their routine work.

The data were collected on health related physical fitness variables namely muscular strength, muscular endurance, cardio respiratory endurance, flexibility and body composition for all the three groups before the experimental period (pre test), after six weeks of training (mid test) and after twelve weeks of the training period (post test) respectively. After training period data collection the detraining period data were collected on all the variables once in ten days for three times. During this period the subjects were not allowed to participate in any training programme.

In order to test the effect of training, the collected data from all the three groups before, during and after experimentation on health related physical fitness variables were statistically analyzed by using two-way (3x3) factorial analysis of variance with last factor repeated measures.

The data collected from the three groups at post experimentation and detraining (three cessation) on health related physical fitness variables were statistically analyzed by using two way (3x4) factorial ANOVA with last factor repeated measures.

Whenever, two-way factorial ANOVA with last factor repeated the obtained ‘F’ ratio interaction values are found to be significant, the simple effect test is used. When the obtained ‘F’ ratio value in the simple effect is found significant, the Scheffe’s test is applied as post hoc test to determine which of the paired mean had significant differences. In all the cases the level of confidence is fixed at 0.05 to test the significance.
CONCLUSIONS

From the analysis of the data the following conclusions are drawn

- Yogic training and aerobic training reveals significant improvement during mid test and post test period on health related physical fitness variables when compared to the control group.

- Muscular strength, muscular endurance, cardio respiratory endurance and body composition of aerobic training group is better than the yogic training group.

- In flexibility the yogic training group is found to be significantly better than the aerobic training group.

- During the testing periods namely pre to mid test and mid to post test. The pre to mid test results reveal to be better than mid to post test period.

- Yogic training and aerobic training groups shows that there is gradual reduction on health related physical fitness variables during training cessation periods.

- The effect on muscular strength for both the training groups has gradually decreased up to second cessation period. But the training effect on the other variables namely muscular endurance, cardio respiratory endurance, flexibility and body composition has gradually decreased up to third cessation period.

- During the detraining period, the effect of muscular strength, muscular endurance, cardio respiratory endurance and body composition of aerobic training group has decreased faster when compare to the yogic training group. But flexibility of the yogic training group has rapidly decreased when compare with the aerobic training group.
RECOMMENDATIONS

From the results of the study the following recommendations are drawn

- The present study is recommended to the coaches, trainers and physical educators to adopt this training to improve health related physical fitness.
- The similar study may be conducted on sports players.
- The similar study may be conducted for women students.
- The similar study may be conducted for school boys at different age groups.
- Similar research work may be attempted by using skill related physical fitness, physiological and biochemical variables.