CHAPTER-V

SUMMARY AND CONCLUSION

5.1 SUMMARY

Modernity brought both advantages and disadvantages to humanity. Although we have many facilities of transport and communication, we have created other problems for ourselves without physical exercises. Many are suffering from stress related ailments which are the results of lack of physical activities. Students are not an exception to this fact. So a systematic study is need of the hour.

The study carried out on the college women of the Govt First Grade College, Haliyal provided comprehensive idea of working of human body at various situations. It study comprehensively to describes physical variables Bio-chemical variables and body composition in interval training aerobic dance. Particularly on college women who needed such an awareness at the early stage. The study not only helped us in understanding these various variable but also created interest among students about the importance of aerobic dance.

For some students fitness could mean a slim waist line. To others, it could be the ability to run up eighteen flights of stairs. And to some more it might mean a general feeling of well – being. Thus fitness is highly individualistic. Each person has a different combination of factors that makes
up his physical fitness. It cannot afford to neglect. It is a major factor that determines the output of a person’s life. Life will be miserable and unsuccessful without good health. The life without physical fitness is like “a ship without radar.” One who is physically fit enjoys robot health and has a fine physique and satisfactory levels of social and emotional adjustment.

Interval training, a form of endurance training, has existed for a number of years in one form or the other. With interval training, short to moderate periods of work are alternated with short to moderate in physiological principles.

Aerobic dance is also one form of training which causes physical and physiological changes. The word ‘aerobics’ simply means ‘with oxygen’ and can therefore be used to describe many forms of exercise or sport such as jogging, swimming, dancing and so on.

The study is assisted to avoid medicines to make college women not only fit but also to make use of one’s own physique to feel healthy. Physical educationist and sports scientist have been constantly examining sports performance in relation to the individual skill and fitness standards towards women. They try to discover those factors that contribute to high performance so that the findings could be utilized in practical aspects of coaching and training. The study creates significant health awareness among the college women. The study promotes further research and growth in applying choreography in the field of Interval running and Aerobic dance training. The
findings of this study may have greater value in designing suitable training program for the improvement of physiological, bio-chemical and body composition fitness of the college women.

The purpose of the present study was to find out the effects of interval running and aerobic dance on selected physiological such as on Resting pulse rate, Anaerobic power on selected Bio-chemical variables such as, Total cholesterol, High density lipoprotein, low density lipoprotein, Triglycerides, and body composition such as Body fat weight, Total fat percentage, lean body weight, Body mass index. To achieve this purpose ninety college women students were randomly selected from the volunteered ninety students of Government First Grade College, Haliyal. Their age ranges from eighteen to twenty-two years as the subjects were the residential inmates of the hostel. There was not much difference in the food habits or in the pattern of their life. The subjects were randomly divided into two experimental groups and one control group. One group was assigned interval running program and the other was given aerobic dance. The subjects of the control group were not allowed to participate in any of the training program except in their routine activity.

The experimental groups were treated with their respective training program for one session in the morning between 6.30AM to 7.30AM for three alternative days on a week and the same was continued for twelve weeks. The initial and final test score were recorded for three groups. In Physiological variables measured Resting pulse rate was Manual method was used to estimate the resting pulse rate in beats per minute (bpm), Anaerobic power...
measured in Margaria –Kalaman test. Bio-chemical variables Total cholesterol, High density lipoprotein, Low density lipoprotein ,Triglycerides Blood sample was taken under the supervision of a doctor and blood analysis was done in a clinical laboratory at Haliyal in district – Karwar. Body composition variables measured Skin fold caliper used for measuring Total body percentage, Lean body weight, Body fat weight, Durnin JVGA, Womersley J. Body fat assessed from total body method was used ,Standard BMI Chart used for Body Mass Index used weighing machine for Total Body Weight.

All the subjects of three groups were tested on selected variables before and after the training. The data pertaining to the variables in this study were estimated by using dependent t-test to find out significant improvement and analysis of co-variance (ANCOVA) was used to test the adjusted post-test mean differences among the experimental groups. If the adjusted post-test result was significant, the Scheffe’s Post-hoc Test was used to determine the significance of the paired mean difference.

5.2 FINDINGS OF THE STUDY

The adjusted post-test mean of resting pulse rate were 73.21 for control group, 71.54 for interval running, and 68.98 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 105.1685 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.
The adjusted post-test mean of anaerobic power were 149.94 for control group, 152.04 for interval running, and 158.54 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 38.6084 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test mean of cholesterol were 136.45 for control group, 131.08 for interval running, and 120.89 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 44.1085 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test means of high density lipoprotein were 48.32 for control group, 51.26 for interval running, and 52.66 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 73.2999 and the table value of F-ratio was 3.1090. Hence the adjust post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test means of low density lipoproteins were 94.21 for control group, 83.75 for interval running, 79.01 for Aerobic dance group. The obtained F – ratio of adjusted post-test was 5.6684 and the table value of F – ratio was 3.1090. Hence the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test means of triglycerides were 111.60 for control group, 105.17 for interval running, 89.80 for Aerobic dance group. The
obtained F – ratio of adjusted post-test was 47.3689 and the table value of F – ratio was 3.1090. Hence the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test mean of body fat weight were 13.55 for control group, 11.79 for interval running, and 10.28 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 5.4404 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test mean of body fat percentage were 24.86 for control group, 22.80 for interval running, and 20.50 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 43.1826 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test mean of Lean Body Weight were 36.40 for control group, 34.02 for interval running, 32.29 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 11.7348 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test mean of body mass index were 24.35 for control group, 21.29 for interval running, 20.53 for Aerobic dance group. The obtained F-ratio of adjusted post-test was 54.6288 and table F-ratio was 3.1090. Hence
the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

The adjusted post-test mean of body weight were 49.53 for control group, 46.22 for interval running, and 40.57 for Aerobic dance group. The obtained F ratio of adjusted post-test was 10.9063 and table F-ratio was 3.1090. Hence, the adjusted post-test was significant at 0.05 level of confidence for the degree of freedom 2 and 86.

5.3 CONCLUSION

1. Within the limitation and the on the basis of the findings, it was very clear that there was a significant improvement after 12 weeks of interval running training produced significant changes in the physiological variables (Resting pulse rate and Anaerobic power).

2. It was very clear that there was a significant improvement after 12 weeks of Aerobic dance training produced significant changes in the physiological variables (Resting pulse rate and Anaerobic power).

3. It was very clear that there was a significant improvement after 12 weeks of interval running training produced significant changes in the Bio-chemical variables (Total cholesterol, High density lipoprotein, low density lipoprotein, Triglycerides).
4. It was very clear that there was a significant improvement after 12 weeks of Aerobic dance training produced significant changes in the Bio-chemical variables (Total cholesterol, High density lipoprotein, low density lipoprotein, Triglycerides).

5. It was very clear that there was a significant improvement after 12 weeks of interval running training produced significant changes in the Body Composition variables (Body fat weight, Total fat percentage, lean body weight, Body mass index and total body weight).

6. It was very clear that there was a significant improvement after 12 weeks of Aerobic dance training produced significant changes in the Body Composition variables (Body fat weight, Total fat percentage, lean body weight, Body mass index and total body weight).

5.4 SUGGESTIONS FOR FURTHER RESEARCH

There is a wide scope for further studies in the days to come. Some such highly necessary studies are given below.

1. Effects of interval running and aerobic dance groups on selected physiological, Bio-chemical variables and body composition among the students of Secondary Schools can be conducted.
2. Effects of interval running and aerobic dance groups on selected physiological, Bio-chemical variables and body composition among the Heads of Higher vocational Higher Secondary Schools students can be conducted.

3. A study can be undertaken on the physiological factors of the students of the Secondary Schools in relation to the Bio-chemical variables.

4. A study on the training needs of the students of secondary Schools with special reference to the modern theories can be conducted.

5. A comparative study on the effects of interval running and aerobic dance groups on selected physiological, Bio-chemical variables and body composition of college women in other districts can be undertaken.