CHAPTER V
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

Regular physical activity is vital for good physical and mental health. It helps improve people overall health and fitness, maintain a healthy weight, reduce their risk for many chronic diseases and promote good mental health. Reducing sedentary behaviours in adolescent girls is probably just as important for weight loss as vigorous exercise (Styne 2005). Many adolescents favour watching television, talking on the telephone, grooming and other sedentary behaviours over physical activity. The inactive habits compound the obesity problem. Besides adding structured exercise to girls and young women’s life style, we must discourage sedentary behaviours’ and promote life style physical activity. It has also been shown that decreasing sedentary behaviours’ in adolescents reduces calorie intake (Epstein et.al, 2005).

The purpose of the study was to find out the “Effects of interval training on treading and spinning on motor fitness variables of untrained college women.” The study was formulated as pre and post test random group design, in which forty five subjects were divided into three equal groups. To achieve this purpose of the study, forty five college untrained women from Smt VHD Central institute of Home Science Bangalore India were selected as subjects at random. Their age was between eighteen and twenty one. The experimental group one (n = 15, INT-TRD) underwent interval training on treading, the experimental group two (n = 15, INT- SPN) underwent interval training on spinning, and group three (n = 15, CG) served as control, who did not undergo any specific training.
The following motor fitness variables were selected as dependent variables. They were listed as follows: Speed, muscular strength, muscular endurance, cardio respiratory endurance, agility and explosive power, in the terms of vertical and horizontal ability. The speed performance was measured by 50 meters dash, the time taken recorded in seconds. The capacity of cardio respiratory endurance was tested by cooper 12 minutes run/walk test the covered distance recorded in meters. The power of muscular strength tested by push up test the performance recorded in numbers. The efficiency of muscular endurance was tested by modified bent knee-sit-ups, the performance recorded in numbers. The agility was measured by using shuttle run test the time taken recorded in seconds. The explosive power in the terms of vertical ability measured by sergeant jump test, the performance recorded in centimetres, and the horizontal ability measured by standing broad jump and the performance recorded in meters respectively. During the training period the following three groups were formed. Group 1 - for interval training on treading, Group 2 - for interval training on spinning, Group 3 - for control group. Two training groups underwent their respective training programmes on three alternative days each week, for twelve weeks. The subjects of group – 1 and 2 underwent their respective training programme as per schedule under the supervision of the researcher who provided motivation, advice and encouragement to the subjects. Each day the training schedule was conducted only in the morning session that lasted for sixty minutes. The pre and post-test random group design was used. Analysis of covariance (Ancova) was used to find out the overall significant differences among the groups with respect of each variable. The Scheffe’s post hoc test was used to find out pair-wise comparisons between groups with respect of each variable. The 0.05 level of significance was fixed to test the hypotheses in this study.
5.2 CONCLUSIONS

In the light of above findings of the present study the following conclusion have been drawn:

1. The interval training on treading and interval training on spinning have produced greater improvement on the performance of speed. However the improvements between the treatments group were similar on speed.

2. The muscular strength and muscular endurance were highly improved in the training groups rather than the control group, but no difference in-between the training interventions.

3. The agility and explosive power in horizontal ability would greater gained due to the two training intervention compare with control group.

4. The cardio respiratory endurance and explosive power in vertical ability more dominated in interval training on spinning treatments rather than the control group.

5. The control group did not show any improvement on the selected motor fitness variables.

5.3 RECOMMENDATIONS

Adolescence is the time between childhood and adulthood. For girls, complex changes occur in every aspect of their lives- physical, mental, emotional, and social. Each girl responds to the associated changes of adolescence in unique ways. Adolescent girls and young women also have distinct barriers to physical activity. These may include be short of daily physical education in middle and high schools at lack of after-school programs that promote physical activity for non athletes.
College or educational pursuits, part-time jobs, and job and career demands may make it hard for young women to find the time for normal physical activity. Many adolescents spend significant after-school time on their homework, typically a sedentary activity. In addition, some girls and young women may have a dislike of vigorous, sweaty activity and feel more interested in sedentary leisure activities such as watching television, using a computer, listening to music, talking on the phone, visiting with friends and grooming (hair, nails, clothes). Some girls and young women may experience barriers such as transportation that discourage walking or cycling and have concerns for personal safety. Others may feel at a loss due to lack of money for exercise equipment, clothing, or fitness centre memberships, or may feel a lack of support from family and friends who are not active, though many young women enjoy sport and competition, many do not, and others find that their lack of athletic skills and abilities prevent them from joining teams.

Health and fitness professionals who are promoting physical activity among adolescent girls and young women should also provide for individual differences, needs, talents, and preferences. Offer choices of types of physical activity, both individual and group activities, because being able to choose from an array of options increases feelings of control. Emphasize physical activity for function and creative expression. Self-discovery and skill mastery are more important than performance for many young women. Beliefs about what they can do are the foundation of self-efficacy. Also, explain how physical activity can help manage stress and anxiety. Help young women teach self-calming techniques and coping skills, such as deep breathing, progressive muscle relaxation, and visualisation, to deal with emotional upheavals and everyday stressors. Consider providing opportunities for girls to get involved in supportive networks.
Organise physical activities in small groups with peer leaders, and encourage activity with “buddies” to provide for socialization and improve adherence to a regular exercise routine. Because some girls and young women will need to change their behaviours, help them gain self awareness as a first step in readiness for change. Suggest wearing a pedometer to get a baseline of physical activity and to track improvements from there. Introduce walking as a lifestyle physical activity as well as for exercise. Maximise the opportunities for positive feelings associated with physical activity by making physical activity fun and avoiding emphasis on objective measurements, competition and aggressive actions. Instead, stress cooperation, social interaction, team work, and problem solving.

In addition to promoting physical activity and providing technical expertise related to program design, health and fitness professionals can serve as mentors and role models. They can provide emotional support and reliable advice for adolescent girls and young women while allowing a degree of autonomy from parents. Establishing a bond with a special adult friend, teacher, or jogging coach can be significant for an adolescent girl. Trusted adults may be able to steer those at risk away from negative peer friendships or environmental influences that encourage unhealthy behaviours. In the results of the present study were proved that the selected motor fitness variables very much gained owing to the training effects of interval training on treading and interval training spinning for the period of twelve weeks training interventions.

For gaining training effects, to avoid sedentary life style and escape from hypo-kinetic diseases the scholar strongly recommends these training approaches for the sample population and others.
5.4 SCOPE OF FUTURE RESEARCH

1. In the present study, the effect of both interval training on treading and interval training on spinning has significant improvement on the criterion variables among untrained college women. Thus both training will be useful in developing the selected variables.

2. In the present study interval training on spinning is highly favoured on cardio respiratory endurance. Hence the interval training on spinning recommends for the better developments of oxygen consumptions.

3. The same study may be done for untrained college men, with increasing the training volume and intensity of the training.

4. A similar study may be carried out by selecting national or state level participants as subjects.

5. A similar study may be conducted by selecting school boys and girls students, reducing the training volumes as subjects.

6. A similar study may be conducted with large number of samples.

7. A similar study may be conducted on to know the change at biochemical, anthropometrical, psychological and physiological variables of trained college women.