Summary, Conclusions and Recommendations
CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Physical activity and youngsters seem natural partners. Various features of the late 20th century civilization such as television spectator sports, cars, labour-saving gadgets and urban overcrowding have conspired to create a generation of inactive children. It is an uncharted life style and may carry serious hazards for both the physical and the intellectual development of the youngsters.

Although there is recognition of the need for physical activities throughout life, studies continue to report a relatively inactive life-style for youngsters and adolescents. Hence, fitness has become a national concern. Health problems are increasing to epidemic proportions. In addition to early deaths, temporary and chronic illnesses and disabilities sap the strength and vitality of our nation. Crores and crores of rupees are spent in hospitals and medical care. Much of the tragic draining of our human and economic resources is the result of factors that require a broader look at physical fitness and methods for achieving it. Since activity habits are established early in life, physical education has an important role in teaching youngsters about fitness and the effects of exercise on the human body.

The development of physical fitness by scheduled exercises does promote and maintain performance in sports and games. Human performance during exercise and sports is a composition of physiological, psychological, biomechanical, neurological and social factors.
In the present study, the investigator has been quite enthusiastic to know the changes brought about by circuit training and parcours training on selected physical and physiological variables which may enable the physical educationists to adhere to training, to lead them towards the development of physical fitness and thereby towards better performance in sports.

Since the purpose of the study was to find out the effect of circuit training and parcours training on physical and physiological variables on college men, it was decided to select untrained men students who were not participating in any of the games or sports or in any special training or coaching programme. However, they were allowed to participate in their routine physical education classes in the college. Since, during the period of training the subjects were susceptible for changes due to growth, it was decided to have one control group for the study. For this purpose, thirty men students, free from deformities and ailments, were selected at random by lots from His Highness The Rajah’s College, Pudukottai. The age of the subjects ranged from seventeen to nineteen.

The subjects were randomly assigned equally to one of the three groups in which group I acted as control (n=10), group II underwent circuit training (n=10), and group III underwent parcours training (n=10).

Measurement for the selected physical and physiological variables such as leg explosive power, speed, agility, strength endurance, flexibility, resting heart rate, cardiorespiratory endurance and maximum oxygen consumption were recorded at the beginning (Pre-test), after six weeks
(Mid-test) and at the end of the training, that is after twelve weeks (Post-test).

The selection of subjects and assignment of treatment were at random. The subjects were not equated in relation to the factors in which they have been examined. Hence, the differences among the means of pre-test have to be taken into account during the analysis of the post-test differences among the means. This was achieved by the application of analysis of covariance, wherein the final means were adjusted for the differences in the initial means and the adjusted means were tested for significance.

**CONCLUSIONS**

1. The results of the study clearly indicate that both circuit training and parcours training for a period of 12 weeks had significantly increased leg explosive power, speed, agility, strength endurance, flexibility, cardiorespiratory endurance and maximum oxygen consumption and decreased the resting heart rate.

2. First six weeks of circuit training and parcours training had significantly influenced the factors with an increase in leg explosive power, speed, strength endurance, flexibility and maximum oxygen consumption and decrease in resting heart rate.

3. However, the second six weeks of circuit training and parcours training significantly influenced with an increase in leg explosive power, agility and strength endurance and decrease in resting heart rate.
4. The study indicated that circuit training had improved leg explosive power, speed, agility and strength endurance to a greater degree than parcours training.

5. The study indicated that parcours training had improved flexibility, cardiorespiratory endurance and maximum oxygen consumption and decreased resting heart rate to a greater degree than circuit training.

RECOMMENDATIONS

To develop and maintain a desirable level of health and fitness, one must participate regularly in a well designed exercise programme. The sedentary way of life has had a negative effect on the human body and has associated with many health problems like cardiovascular disease, overweight or obese, low back pain, elevated blood pressure etcetera. As it is well established that habits established early in life have carryover value during middle-age and old-age stages of life, it is preferable for youth to participate in a well-designed exercise programme, like the one prescribed in the present study. By way of participating in an exercise programme, certain risk factors associated with the cardiovascular systems get reduced and a desirable level of health and fitness is maintained.
RECOMMENDATIONS FOR IMPLICATION

In the light of the results of the study, it is recommended that

1. As the findings of the study showed that the circuit and parcours training significantly improved leg explosive power, speed, agility, strength endurance, flexibility, resting heart rate, cardiorespiratory endurance and maximum oxygen consumption, both training processes could well be recommended by trainers and coaches to their team players and athletes.

2. As the results of the study indicate that circuit training has improved strength endurance specifically in comparison with the effect of parcours training, circuit training programme could well be recommended for players of specific games which require that component.

3. As the results of the study indicate that parcours training has improved cardiorespiratory endurance specifically in comparison with the effect of circuit training, parcours training programme could well be recommended for players of specific games which require that component.

4. Circuit training and Parcours training could well be practised by students, players and coaches for a period of 12 weeks.

5. If a prolonged duration of 12 weeks with the above two types of training could not be accommodated in a school or college curriculum, a six weeks schedule could well be observed.
6. Parcours training, a new concept of training could be implemented in coaching programmes for various games and athletics, where there is a need for improvement in fitness component related to endurance.

RECOMMENDATIONS FOR FURTHER STUDY

1. A similar study may be conducted on subjects chosen specifically from games and track and field events.

2. A similar study may be conducted on subjects selected from college women.

3. A study may be conducted to find out the influences of the above packages of training on other physical and physiological variables.