CHAPTER V

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The purpose of the study was to find out the effect of varied packages of strength training on motor ability components, body composition and physiological variables of female athletes. To achieve the purpose of this study, seventy five female athletes were randomly selected from St. Joseph Southern Railway sports club athletes, Trichy, Tamil Nadu, The age of the subjects ranged from 18 to 22 years. Group-I underwent plyometric training, Group-II underwent barbell training, Group-III underwent uphill training, Group-IV underwent circuit training and group-V acted as control who does not participate in any training programme. The data collected from the five groups prior to and post experimentation were statistically analyzed by analysis of covariance (ANCOVA). Since five different groups were involved whenever, the “F” ratio for adjusted post mean was found to be significant, the Scheffé’s test followed as a post hoc test to determine the paired means difference if any.

5.2. RESULTS

Within the limitations of this study, the following results were drawn:

5.2.1 Speed

The result of the study found that significant differences exist among experimental and control groups on speed. However uphill training had better impact to increase speed performance of the women athletes when compare the other experimental group’s subjects.
5.2.2. Explosive Power

The result of the study found that significant differences exist among experimental and control groups on explosive power. However plyometric training had better impact to increase explosive power performance of the women athletes when compare the other experimental group’s subjects.

5.2.3. Speed Endurance

The result of the study found that significant differences exist among experimental and control groups on speed endurance. However uphill training had better impact to increase speed endurance performance of the women athletes when compare the other experimental group’s subjects.

5.2.4. Percent Body Fat

The result of the study found that significant differences exist among experimental and control groups on percent body fat. However uphill training had better impact to decrease percent body fat of the women athletes when compare the other experimental group’s subjects.

5.2.5. Body Mass Index

The result of the study found that significant differences exist among experimental and control groups on body mass index. However uphill training had better impact to decrease body mass index of the women athletes when compare the other experimental group’s subjects.

5.2.6. Lean Body Mass

The result of the study found that significant differences exist among experimental and control groups on lean body mass. However barbell training had better
impact to increased lean body mass of the women athletes when compare the other experimental group’s subjects.

5.2.7. Anaerobic Power

The result of the study found that significant differences exist among experimental and control groups on anaerobic power. However plyometric training had better impact to increase anaerobic power of the women athletes when compare the other experimental group’s subjects.

5.2.8. VO₂ Max

The result of the study found that significant differences exist among experimental and control groups on VO₂ Max. However plyometric training had better impact to increase VO₂ Max of the women athletes when compare the other experimental group’s subjects.

5.2.9. Resting Pulse Rate

The result of the study found that significant differences exist among experimental and control groups on resting pulse rate. However circuit training had better impact to decrease resting pulse rate of the women athletes when compare the other experimental group’s subjects.

5.3 CONCLUSIONS

Within the limitations of this study, the following conclusions were drawn:

1. Plyometric training is better than the barbell, uphill and circuit training to increase on explosive power, anaerobic power and VO₂ Max of women athletes.
2. Barbell training is better than the plyometric, uphill and circuit training to increase lean body mass of women athletes.

3. Uphill training is better than the plyometric, barbell and circuit training to increase speed, speed endurance and decrease percent body fat and body mass index of women athletes.

4. Circuit training is better than the plyometric, barbell and uphill training to decrease resting pulse rate of women athletes.

6. Plyometric, barbell, uphill and circuit training are better influenced to change on selected motor ability components, body composition and physiological parameters of women athletes when compared to the control group.

5.4 RECOMMENDATIONS

The following recommendations have been made based on the results of the study.

1. To reduce risk factors varied package of strength training can be executed. Based on the outcome of the study, the investigator recommended that the varied package of strength training can be given to players and women people, in order to decrease their body fat.

2. The study also recommends that the changes on the selected body composition and physiological parameters of women athletes due to varied package of strength training. Therefore, this type of information is helpful for the coaches to draw individualized training programme to improve their performance.

3. To assess the training impact on lipids and lipoprotein parameters different type of varied package of strength training may be given.
4. The impact of different mode of varied package of strength training may be compared with other training methods.

5. Research may also be conducted to explore the detraining impact of varied package of strength training.

6. It is recommended that further research be designed to investigate the effects of different intensities of package of strength training in an elite population.

7. Future studies can be conducted to evaluate any biochemical and psychological changes that might result from similar different intensities of package of strength training.

8. Future studies are needed to determine the optimal levels for the amount, type and frequency of individual training sessions and duration of prolonged different intensities of aerobic training to improve metabolic health in obese individuals or in individuals with metabolic syndrome.