CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 **SUMMARY**

Modern world is the outcome of many scientific inventions through centuries. These instruments and machineries have helped to lead the daily life with ease and comfort due to which the human being has become less vigorous and less active. As man is a physical, mental and spiritual being, yoga helps to promote a balanced development of all the qualities. In daily life, yoga helps the person to attain a relaxed state of mind besides providing vitality, vigor and zest to carry out a healthy life.

Aerobic exercise is a relatively low intensity physical exercise which depends primarily on aerobic energy-generating process. Literally "aerobic" means "living in air" and refers to the use of oxygen to meet energy demands during the course of exercises via aerobic metabolism. Aerobic exercises also keep the body fit, increases blood circulation and prepares even for hard physical work.

Every basketball player desires to perform better at their highest possible level. A well-planned yogic practice promotes dynamic flexibility, core stabilization, muscular endurance, proper breathing and balance work apart from improving range of motion at joints which helps the players to stay on the court longer and move more confidently. Breathing and relaxation boosts mental energy, and concentration.

The basketball players need speed to run up and down in the court, leaping ability to take jump shots sky high to grab rebounds, and the strength to battle for position and corral those rebounds in traffic. To become an all-round player who also need an all-encompassing workout routine to succeed

on the court. The best suitable aerobic exercises that can be included in the training programme of basketballers are walking, jogging, running and jumping rope.

The purpose of the study was to find out the isolated and combined effect of yogic practices and aerobic exercises on selected physical fitness, physiological, psychological and skill performance variables of women basketball players. To achieve this purpose the Inter-Collegiate level women basketball players served as the sources of subjects. Sixty women basketball players among the basketball players who had represented from various affiliated colleges of University of Madras at the 'B' zone Inter-Collegiate basketball tournament, Chennai, Tamil Nadu, India were randomly selected during the year 2012-2013. Their age ranged between 18 to 21 years. They were assigned in to four equal groups each consisting of fifteen subjects (n=15). Group I acted as yogic practices group, Group II acted as aerobic exercises group, Group III acted as combined (yogic practices and aerobic exercises) group and Group IV acted as control group. Pre test was conducted for all sixty subjects on selected physical fitness variables namely speed, muscular strength and flexibility, physiological variables namely VO₂ max, vital capacity and respiratory rate, psychological variables namely anxiety and aggression and skill performance variables namely dribbling, passing and shooting. This initial test scores formed as pre test scores of the subjects. Group I was exposed to yogic practices, Group II was subjected to aerobic exercises, Group III underwent combined programme of yogic practices and aerobic exercises and the control group was not exposed to any experimental training other than their regular daily physical activities. After the experimental treatment, all the sixty subjects were measureed on the selected physical fitness, physiological, psychological and skill performance variables. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean

differences, whenever F ratio for adjusted test was found to be significant Scheffe's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypothesis.

5.2 CONCLUSIONS

The following conclusions were drawn within the limitations and delimitations of the study:

- 1. The combined effect of yogic practices and aerobic exercises was found to be superior on selected physical variables viz: speed, muscular strength and flexibility than other experimental and control groups. The comparison of isolated effects of yogic practices and aerobic exercises revealed that the yogic practices had better impact on flexibility whereas the aerobic exercises found to have greater influence on speed and muscular strength of women basketball players.
- 2. The combined effect of yogic practices and aerobic exercises was found to be superior on selected physiological variables viz: VO₂ max, vital capacity and respiratory rate than other experimental (Isolated groups) and control group. The comparison of isolated effect of yogic practices and aerobic exercises revealed that the yogic practices had better impact on selected physiological variables.
- 3. The combined effect of yogic practices and aerobic exercises was found to be superior on selected psychological variables viz: anxiety and aggression than other experimental (Isolated groups) and control group. The comparison of isolated effect of yogic practices and aerobic exercises revealed that the yogic practices had better impact on selected psychological variables.

4. The combined effect of yogic practices and aerobic exercises was found to be superior on selected skill performance variables namely dribbling, passing and shooting than other experimental (Isolated groups) and control group, whereas the isolated effects of aerobic exercises was found to be better in improving the selected skill performance variables than yogic practices group.

5.3 **RECOMMENDATIONS**

The following recommendations were made based on the results of the investigation:

- 1. In view of the benefits of the varied yogic practices and aerobic exercises, educational authorities may consider inclusion of these exercises as part of the physical education programme.
- 2. In view of the fact that yogic practices and aerobic exercises do not require any sophisticated equipments. Students may be encouraged to undergo these types of training as part of their regular fitness programme.
- 3. Efforts may be initiated to popularize the benefits of yogic practices and aerobic exercises among student community, which, in turn would make the society healthy.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

The investigator suggested the following recommendations for further research:

1. The same study may be conducted with varied yogic packages and aerobic exercises of different intensities on selected fitness, physiological and biochemical variables of elite players.

- 2. The same study may be conducted on obese women.
- 3. The same study may be conducted on different age groups.
- 4. A similar study may be conducted for longer durations with both morning and evening sessions.
- 5. A similar study could be attempted by manipulating independent variables, gender and mode of training.
- 6. A similar study may be undertaken on other physiological, psychological and haematological variables.
- 7. A similar study may be conducted among men inter-collegiate players.