CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

Sports’ training is a conscious human activity; also it is a goal oriented activity. Sports’ training is the basic form of an athlete’s training. It is the preparation of athletes with the help of systematically organized exercise which in fact is based on pedagogic principles. Sports’ training again is a continuous and regular process. It is a mixture of general and specific means and methods of training. It aims to improve the performance of sports persons through physical fitness or conditions, technical skill, tactical efficiency and education. Physical fitness is the sum total of strength, speed endurance, flexibility and co-ordinative abilities. Each sport requires a different type and level of physical condition and as a result a different type of fitness training is required for different sports. Technical skills are also important for improving the sports performance through economy and efficiency of movement.
Science of sports training is a recent entrant to the field of sports science. Earlier only the theories and methods of individual sports existed. The reasons for the emergence of sports training as a separate sports science discipline are several. TMT by its very nature is limited to single sports. It cannot study the problems or areas of training common to a number of sports. Hence it is not in a position to investigate and formulate theories and principles of training applicable to all sports. Moreover, TMT is preoccupied with the specific technical aspects of a sport. Its cadre i.e., coaches/trainers have no time to study important fundamental aspects of training e.g., training and competition load, talent, motor development etc. To formulate valid theories and principles one has to study the training process in all sports i.e., from a general aspect.

As has already been stated, sports’ training is a conscious human activity. Besides being a goal oriented activity. Therefore, it is obligatory for Sports training to include in its subject matter the study of sports performance and performance capacity. Without an understanding of sports performance and performance capacity no effective and meaningful theories and methods of training are possible. As a consequence Sports training gives high weightage to studying the nature and genesis
of sports performance in training and competition. Similarly a large portion to Sports’ training is devoted to the study of performance capacity which further comprises of physical condition (physical fitness), technique and coordinative abilities, tactics, physique and psychic factors.

Training is a systematic scientific programme of conditioning exercise and physical activities designed to improve the physical fitness and skills of the players. Though many methods prevail to develop Selected Bio-Motor and Soccer Performance variables, the role of Hypoxic Training and Pranayama Practices is undisputed.

In this context, the investigator made an attempt to find out the Effect of Hypoxic Training and Pranayama Practices on selected Bio-Motor Variables and Soccer Performances among College Soccer Players.

For this study, forty five men students studying Under Graduate Degree course in Farook College, Calicut, Kerala, India, during the year 2007-2010 were selected at random as subjects and they were divided randomly into two Experimental groups of fifteen each, namely, Group I Hypoxic Training, Group II Pranayama Practice and Group III acted as Control.
The training period was limited to twelve weeks and for three days per week. The dependent variables selected for this study were Speed, Explosive Power, Cardio Respiratory Endurance, Agility, Dribbling, Passing and Shooting. All the subjects were tested prior to and immediately after the experimental period on the selected dependent variables.

Among the Bio-Motor and Soccer Performance related variables, the following variables were selected as criterion variables namely Speed, Explosive Power, Cardio Respiratory Endurance, Agility, Dribbling, Passing and Shooting. All the groups were tested on selected criterion variables prior to and immediately after the training periods. Speed was assessed by 50 Meters Run, Explosive Power was assessed by Standing Broad Jump, Cardio Respiratory Endurance was assessed by Cooper’s 12 Minutes Run/Walk Test, Agility was assessed by Shuttle Run Test, Soccer Performance Skill such as Dribbling, Passing and Shooting were assessed by Warner test for soccer skills and Mor-Christian soccer test respectively.
The collected data were analysed by using dependent 't'-test to find out significant improvements. Analysis of covariance (ANCOVA) was used to determine the differences, if any, among the adjusted post-test means. Whenever ‘F’-ratio for adjusted post-test mean was found to be significant, the Scheffe’s test was applied as post-hoc test to determine the paired mean differences. The level of significance was fixed at .05 level of confidence for all the cases.

**CONCLUSIONS**

From the analysis of the data, the following conclusions are drawn:

1. The Experimental groups namely, Hypoxic Training group and Pranayama Practices group had significantly improved in Speed, Explosive Power, Cardio Respiratory Endurance, Agility, Soccer Dribbling, Passing and Shooting.

2. Significant differences in achievement were found among Hypoxic Training group and Pranayama Practices group with regard to all the selected criterion variables such as Speed, Explosive Power, Cardio Respiratory Endurance, Agility, Soccer Dribbling, Passing and Shooting.
3. The Hypoxic Training group was found to be better than the Pranayama Practices Group and Control group in developing Speed, Explosive Power, Cardio Respiratory Endurance, Agility, Soccer Dribbling, Passing and Shooting.

**RECOMMENDATIONS**

1. In the present study, it was concluded that Bio-Motor and Soccer Performance variables were improved by Hypoxic Training group. Hence, it is recommended to the coaches, trainers and physical educators to adopt these findings to improve the Bio-Motor and Soccer Performance variables for their players.

2. A similar study may be conducted by selecting bio-chemical, and other physiological parameters as criterion variables.

3. A similar study may be attempted by selecting the school level soccer players as subjects.

4. A similar study may be conducted on female subjects from various college departments.

5. A similar study may be undertaken and its influences on psychological variables may be assessed.