CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Sports training is a conscious human activity. Also, it is 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 weight-age to study the nature and genesis of sports performance in training and competition. Similarly, a large portion of sports training is devoted to the study of performance capacity which further comprises of physical condition (physical fitness), technique and co-ordinative abilities, tactics, physique and psychic factors.

In all sports, speed and power are important qualities. Generally, they require in developing performance in sports and games. Speed is a magic work in sports. The person who can run faster, throw harder and more quickly is likely to be a better player and win more contests. Power is an essential
quality in many sports, for it represents the effective combination of strength and speed. Increase in strength or speed will increase power, and when power increases, more work can be done in less time.

Agility is an athlete’s ability to accelerate, decelerate and quickly change direction while maintaining balance, body control and speed. It’s very similar to balancing that it forces the athlete to regulate shifts in the body’s center of gravity while constantly changing posture. Circuit-training program, in addition to developing quickness of the hands and feet, enhances agility by improving body control and full control of feet. Greater agility also boosts speed and quickness of hands and feet and it enables the athlete to instantly assess situations and make accurate changes in direction while moving at high speed.

Hence, speed, power, agility and cardio respiratory endurance were selected as biomotor variables for this study, which played important role in determining the skill performance on hockey.

Hockey is a game of strength, speed, and skill. It is among the most difficult to master, the costliest to equip, the fastest to watch, and the most dangerous to play. It requires a
combination of power, endurance, and flexibility applied within a confined space over a cold, hard, and slippery surface.

The purpose of the study was to analyse the effects of yoga and physical exercises on the selected motor ability components and physiological variables of hockey players. For this purpose, ninety higher secondary school students who had represented inter school Hockey tournaments from Tirunelveli District, Tamilnadu, India were selected as subjects and the age of the subject was ranged from 16 to 19 years. The selected subjects were divided into three groups of thirty subjects each namely two experimental groups and a control group. The experimental group I underwent yoga training and experimental group II underwent physical exercise training for duration of twelve weeks with three days per week and group III acted as control group.

The criterion variables selected for this study were cardio respiratory endurance, flexibility, agility, resting pulse rate, anaerobic power, and respiratory rate. The selected variables were assessed prior to and immediately after the training period by using the standardized test items.

The experimental design used in this study was pre and post test random group design involving 90 subjects who
were divided at random into three groups of thirty each. The data collected from the two groups before and after the experimental period were statistically examined for significant improvement by dependent 't' test. Ninety subjects were divided at random and assigned into three groups of thirty each. No attempt was made to equate the groups in any manner. Hence, to make adjustments for difference in the initial means and to test the adjusted post test means for significant differences among the groups, the analysis of covariance (ANCOVA) was used. Whenever the 'F' ratio for adjusted post test means was found to be significant, scheffe's test was followed as a post hoc test to determine which of the paired means difference was significant. In all the cases 0.05 level was fixed as significant level to test the hypothesis.

**Conclusions**

From the analysis of the data the following conclusions were drawn.

1. Two experimental groups namely physical exercise and yoga training groups have achieved significant improvement on cardio respiratory endurance, flexibility and agility when compared to the control group.
2. A significant improvement was found in physical exercise and yoga training groups as compared to control group towards improvement of the selected criterion variables such as resting pulse rate, anaerobic power and respiratory rate.

3. It is concluded that yoga training group was found to be better than physical exercise training in improving cardio respiratory endurance, flexibility, agility, resting pulse rate, anaerobic power and respiratory rate.

**Recommendations**

1. In the present study, it was concluded that the selected motor ability and physiological variables were improved by physical exercise and yoga training. Hence it is recommended to the coaches, trainees and physical educators to adopt these finding to improve motor ability and physiological variables.

2. A similar study may be conducted by selecting psychological variables as criterion variables.

3. A similar study may be attempted by selecting the state or national level athletes or players as subjects.

4. A similar study may be conducted on female subjects.