Chapter  $\mathcal{V}$ 

Summary Conclusions and Recommendations

#### **CHAPTER V**

# SUMMARY CONCLUSIONS AND RECOMMENDATIONS 5.1 SUMMARY

Specific sports training is simply fitness and performance training designed specifically for sports performance enhancement. Training programmes for sports performance enhancement could include the areas such as endurance, mobility, strength, power, speed, flexibility, mental preparedness (including goal setting), nutrition, sleep, recovery, pre-habilitation, injury risk reduction, regeneration techniques, strategies and rehabilitation. A general programme should include all of these components and a more specific programme may only include a few, depending upon the athlete's specific needs (based on strengths, weaknesses and/or imbalances) and the demands of the sport they participate.

To execute the present study the research investigator selected hundred male tennis players from pro serve tennis academy Coimbatore – Tamil Nadu state. The chosen subjects were the participants of tennis tournaments organized by Coimbatore District Tennis association. The age group of the subjects were ranged between eleven and fourteen years. The selected subjects (N=100) were randomly divided into four equal groups consisting of twenty five (n = 25) each. Experimental group I named as Plyometric Training combined with Skill Training Group (PTSTG). Experimental group II named as Resistance Training combined with Skill Training Group (RTSTG), Experimental group III named as Plyometric and Resistance Training combined with Skill Training Group (PRTSTG) and Group IV acted as Control Group (CG). All the three experimental groups underwent experimental trainings for a period of twelve weeks and the control group did not involve any specific training. On the consideration of feasibility criteria the following performance related fitness variables namely right hand grip strength, right leg hamstring flexibility, left leg hamstring flexibility, right shoulder flexibility-internal rotation, right shoulder flexibility-external rotation, trunk flexibility, mobility, abdominal muscular endurance, speed and leg explosive power and the skill performance variables namely service, rally, volley depth, groundstroke depth and groundstroke accuracy were selected. The collected data were analysed with application of paired 't' test to find out the individual effect from pre to post test if any. Further Analysis of Covariance (ANCOVA) was applied to determine the significant difference among the experimental and control groups. Whenever the 'F' ratios was got significant, pair wise comparison was applied to test the significant difference between the paired means. 0.05 level of confidence was fixed for all the variables to test the level of significance.

## **5.2 CONCLUSIONS**

Within the limitations imposed by the experimental conditions the following conclusions were drawn.

1. It was concluded that there were significant improvement on the selected performance related fitness variables namely right hand grip strength, right leg hamstring flexibility, left leg hamstring flexibility, right shoulder flexibility-internal rotation, right shoulder flexibility-external rotation, trunk flexibility, mobility, abdominal muscular endurance, speed and leg explosive power and skill performance variables namely service, rally, volley depth, groundstroke depth and groundstroke accuracy between pre and post tests of experimental groups as a

result of 12 weeks of plyometric training combined with skill training where as control group showed insignificant improvement hence, the improvement was due to the specific training alone.

- 2. It was concluded that there were significant improvement on the selected performance related fitness variables namely right hand grip strength, right leg hamstring flexibility, left leg hamstring flexibility, right shoulder flexibility-internal rotation, right shoulder flexibility-external rotation, trunk flexibility, mobility, abdominal muscular endurance, speed and leg explosive power and skill performance variables namely service, rally, volley depth, groundstroke depth and groundstroke accuracy between pre and post tests of experimental groups as a result of 12 weeks of resistance training combined with skill training where as control group showed insignificant improvement hence, the improvement was due to the specific training alone.
- 3. It was concluded that there were significant improvement on the selected performance related fitness variables namely right hand grip strength, right leg hamstring flexibility, left leg hamstring flexibility, right shoulder flexibility-internal rotation, right shoulder flexibility-external rotation , trunk flexibility, mobility, abdominal muscular endurance, speed and leg explosive power and skill performance variables namely service, rally, volley depth, groundstroke depth and groundstroke accuracy between pre and post tests of experimental groups as a result of 12 weeks of plyometric and resistance training combined with skill training where as control group showed insignificant improvement hence, the improvement was due to the specific training alone.

4. It was concluded that there were Plyometric Training combined with Skill Training Group (PTSTG), Resistance Training combined with Skill Training Group (RTSTG), and Plyometric and Resistance Training combined with Skill Training Group (PRTSTG) differ significantly on their performance related fitness and skill performance variables due to 12 weeks of respective training.

#### **5.3 RECOMMENDATIONS**

On the basis of results obtained, the following recommendations were made.

- The results found in this study may be used by physical education teachers and tennis coaches in their training programme to enhance the performance related fitness variables of tennis players.
- 2. The results found in this study may be used by physical education teachers and tennis coaches in their training programme to enhance the skill performance variables of tennis players.
- 3. The combination of Plyometric and Resistance Training combined with Skill Trainingcan be utilized to enhance the performance of tennis players.
- 4. Based on the conclusions from this study it is suggested that Plyometric training combined with skill training, resistance training combined with skill training and plyometric and resistance training combined with skill training can be given for college level men and women tennis players.

## 5.3.1 Suggestions for Further Research

- It is suggested that further studies to explore the effect of Plyometric training combined with skill training, resistance training combined with skill training and plyometric and resistance training combined with skill training after considering the diet as one of the control variables.
- 2. Further same type of studies may be conducted on the effect of these trainings on motor fitness components, physiological and psychological variables also.
- Same kind of studies may be conducted on other performance related and skill performance variables and also with different training programmes.
- 4. Similar study may be conducted on different age category and female tennis players.
- 5. The similar study may be conducted with more number of performance related fitness and skill performance variables.
- 6. Similar study may be conducted with the inclusion of psychological variables to enhance the performance.