CHAPTER - V
SUMMARY, CONCLUSIONS AND
RECOMMENDATIONS
5.1 SUMMARY

Performance in sports and games depends on both physical and mental abilities. Physical and mind have an equal contribution in human success. Performance of Indians at international sports and games is a dismal show. Other than the games like hockey, tennis, volleyball and cricket Indians could not find a place in the international sports map. The reason for such pitfall could be accounted to the lack of infrastructure, narrow base of sports population, improper system in selection of players and training, lack of awareness towards sports and financial constraints. Among these major issues, the top most is improper system in training. The present system of training in India is highly concentrated towards the physical aspects and very least accounted on psychological aspects that too only during the camp. The salient aspect of the psychological influence in human beings is execution of every physical movement. Though mind is exerting such a significant influence in human physical activity, no training schedule comprising the system to develop mind related aspects. Earlier studies in sports also confirm that body and mind are functioning for high-level performance in an equal distance.

The persons in the field of Indian sports are now beginning to realize the importance and impacts of mind in success of sports. Two years before, the Sports Authority of India had sent the Indian hockey team to one-week yogic training camp with the aim to develop the concentration, relaxation and strengthening of the mind related aspects. At the end of the yoga training
camp, the players opined with highly positively that yogic training was highly helpful in developing the concentration, relaxing the all physical and physiological systems helps to free the mind from distractions. These effects were practically realized by the Indian hockey players by their experience gained from the crucial matches. Here very specifically the players realized such a valuable effect only at the age of nearly above twenty. But if the Government of India takes steps to inculcate the yogic exercises at an early age i.e. at school level, the rate of benefit would be very high. By such a yearlong programme for the sports participants strengthening the physical and mind related aspects the individual can increase the consistency in performance. It helps the sports participants to enhance the rate of success, it appears as the viable source to find the permanent place in international sports map. With this basic assumption, the investigator was impelled to design the training programme consisting of physical and yogic exercises and to test its impacts on performance and performance related factors of sports.

To achieve this purpose, the investigator has chosen the game of basketball as a sport. The reason behind the selection of basketball particularly that it is a game of complex nature of movement. High-level performance in basketball demands timely application of mind during dribbling, passing the ball and coping mechanism in stressful situations.

The purpose of the present study was to find out the effect of physical and combination of physical and yogic exercises training on performance and performance related factors of basketball players.
The formulated hypotheses in the present study were

1. Physical training group significantly develops the performance and performance related factors of basketball players as compared to control group.

2. The combined effect of physical and yogic exercises training significantly develops the performance and performance related factors of basketball players as compared to physical training group and control group.

The methodology adopted in the present study is as follows:

To achieve the purpose of the present study 90 basketball players studying in high schools and higher secondary schools were selected as subjects. They were in the age group of 14.5 to 15. The selected subjects were divided into three equal groups namely: Physical Training Group, Combined Physical and Yogic Exercise Training Group and Control Group. Each group was consisting 30 subjects. Using standardized tests and procedures they were tested on performance (overall playing ability) and performance related factors (speed, flexibility, arm strength, abdominal muscular strength, cardio-respiratory endurance, arm explosive power, leg explosive power, hand-eye coordination and competition anxiety).

With the guidance of supervisor and experts in the field of physical education and coaching, the investigator had designed two training
programmes namely combined physical and yogic exercise training and physical training. The subjects belong to combined physical and yogic exercise training and physical training was treated on them for about 12 weeks in their respective training programme. The subjects belonging to control group were not treated with any training program. After completion of the treatment the subjects belong to all the three groups were again tested on criterion measures as measured during the initial test. The collected data on criterion measures were treated by analysis of covariance to test the significance of mean difference among the three groups on performance and performance related factors. Further if its significance was observed, as post-hoc test, Schefee test was applied, to test the source of variation.

Findings

The findings of the present study were as follows:

1. Mean difference between the physical training group and combined physical and yogic exercises training group on speed, flexibility, arm strength, abdominal muscular strength, cardio-respiratory endurance, arm explosive power and leg explosive power was not statistically significant.

2. Mean difference between the physical training group and combined physical and yogic exercises training group on flexibility, agility, coordination, and competition anxiety and overall playing ability was statistically significant.
3. Mean difference between physical training and control group on speed, flexibility, arm strength, abdominal muscular strength, cardio-respiratory endurance, arm explosive power, leg explosive power, hand-eye coordination and competition anxiety was statistically significant.

4. Mean difference between combined physical and yogic exercise group and control group on criterion measures such as speed, flexibility, arm strength, abdominal muscular strength, cardio-respiratory endurance, arm explosive power, leg explosive power, hand-eye coordination, competition anxiety and overall playing ability was statistically significant.

Testing hypotheses

Physical training group is significantly different from combination of physical and yogic exercise group on some of the performance related factors namely flexibility, abdominal muscular strength, agility, hand eye coordination, competition anxiety and performance of overall playing ability. Hence the formulated hypothesis No 1 related to these factors partially accepted. Further no significant mean difference observed between combination of physical and yogic exercise group on explosive power, speed, arm strength and cardio respiratory endurance. The formulated hypothesis No 2 was partially rejected.
Likewise, while comparing significance of mean difference between combination of physical and yogic exercise groups on performance and performance related factors since the observed mean difference of combination of physical and yogic exercise group, the formulated hypothesis related to this was accepted.

In testing hypothesis No 2, since physical training group has significantly developed performance and performance related factors, the formulated hypothesis was accepted.

5.2 CONCLUSIONS

The following conclusions have been made in the light of the findings of the present study

1. Findings on performance related factors (speed, arm explosive power, leg explosive power, arm strength, and cardio respiratory endurance) both combined physical and yogic exercise training group and physical training group influences in an equal distance. From this it was concluded that due to resemblances in physical training of these two groups both are having chances to develop the physical factors.

2. Findings on performance (overall playing ability) and performance related factors (abdominal muscular strength, flexibility, agility, hand-eye coordination and competition anxiety) positively confirm
the influence of combined physical and yogic exercise training more than that of physical and control group. Since the factors of these above are having significant influences of mind related aspects, it is concluded that the incorporation of yogic exercises with the physical training is the prime source for such significant mean difference.

5.3 RECOMMENDATIONS

The following recommendations have been made from the results of the study.

1. The same study may be conducted in sports and games other than the basketball.

2. The same study may be extended to other performance related factors and fundamental skills.

3. The present study is mainly focused on boys only. The same study may be done on girls.

4. By conducting the same study at different age levels, a micro analytical study can be conducted to find out the rate of variation on influences between the levels.

5. To find out the improvement on criterion measures periodically, the same study may be designed with repetitive measures.