CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS
CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

Basketball is a game of complex skills that refers to wide range of playing abilities like, stance, ball holding, passing, catching, dribbling, shooting, rebounding, faking, screening, tackling, dodging, jumping, shifting, and shuffling. To develop the above complex playing skills the Basketball players need physical, physiological and psychological capacities like speed, strength, flexibility, agility, cardio respiratory endurance, and maximum oxygen consumption, the means and methods to achieve these physical, physiological, psychological capacities and skill is to have a scientific approach of training. Through literatures, resistance training, plyometric training and martial arts training was observed as easily adaptable and proven method to avoid risk factors such as injury, fatigue, soreness and stress fractures of the bone etc.

In both plyometric training and resistance training refers to specific methods of manipulating training methods to provide variation in volume and intensity. It permits balanced progression by ensuring the appropriate mix put together in a unified plan (Bompa, 1993). While the training variations itself may play an important role in physical fitness and physiological efficiency and their improvements, not all which include a variation component will provide similar results (Stone 1988). Such a nature of martial arts training based resistance training and own body resistance training has to be implicated as a part of their regular training schedule instead of progressive basketball skill training alone in developing the components. With this objective, the present study was carried out to determine the effect of complex training programmes of static stretching with resistance training, plyometric training with resistance
training, and combination of plyometric training, resistance training with Martial arts training on selected physical, physiological, psychological variables and skill performance of college male basketball players.

To achieve the purpose of the present study, totally 80 Inter collegiate Basketball players were randomly selected and divided into four groups namely experimental group I, Experimental group II, Experimental group III and control group IV. Each group consists of 20 subjects each. The subject’s age ranged from 19 to 24 years. Experimental group I (SSRTG) under went static stretching with resistance training, Experimental group II (PRTG) underwent plyometric training with resistance training, Experimental group III (CPRMATG) underwent combination of plyometric training ,resistance training with martial arts training and the control group (CG) underwent without any specified practices.

The subjects were tested on criterion measures of speed, flexibility, muscular strength and endurance, cardio respiratory endurance, agility explosive power (physical variables), systolic blood pressure, diastolic blood pressure, VO₂ max, resting pulse rate, (physiological variables) cognitive anxiety, somatic anxiety, self confidence (psychological variables), shooting, dribbling (skill performance variables) and overall playing ability, so as to identify their performance on the variables before impacted with their treatment. It was considered as pre test. On completion of the pre test, the subjects of the experimental groups were treated with the respective scheduled treatments for twelve weeks. In the present study, the subjects belonging to control group were asked to undergo their own training programme since they were also basically basketball players. After completion of the treatment period, all the subjects of four groups were tested on criterion measures as such in the case of pre test. It was considered as post test.
The collected data on pre test and post test were analyzed using appropriate statistical technique. For the present study analysis of covariance (ANACOVA) was applied to determine whether the four training programmes produced significantly different improvements among themselves in the selected variables after twelve weeks of training. Whenever the obtained ‘F’ ratio was found to be significant for adjusted post-test means, the Schefee’s post-hoc test was used to determine which of the paired mean difference was significant.

5.2 CONCLUSION

From the results of the study, the following conclusions have been made.

1. It was concluded that the comprehensive conditioning programmes of static stretching with resistance training, plyometric training with resistance training and plyometric training, resistance training as well as practice of martial arts training enhanced the performance of speed, flexibility, muscular strength and endurance, cardio respiratory endurance, agility explosive power (physical variables), systolic blood pressure, diastolic blood pressure, VO2 max, resting pulse rate, (physiological variables) cognitive anxiety, somatic anxiety, self confidence (psychological variables), shooting, dribbling (skill performance variables) and overall playing ability of Inter – collegiate basket ball players.

2. The complex training programme of plyometric training, resistance training with martial arts training enhanced the performance of speed, muscular strength and endurance, cardio respiratory endurance, explosive power (physical variables), systolic blood pressure, resting pulse rate, (physiological variables) cognitive anxiety, somatic anxiety, self confidence (psychological variables), shooting ability, dribbling ability (skill
performance variables) and overall playing ability of Inter-collegiate basketball players better than the combination of static stretching with resistance training programme. Whereas in the case of flexibility, agility, diastolic blood pressure, VO₂ max and somatic anxiety it did not show any significant differences.

3. The complex training programme of plyometric training, resistance training with martial arts training enhanced the performance of speed, flexibility, muscular strength and endurance, cardio respiratory endurance and agility (physical variables), VO₂ max (physiological variables) cognitive anxiety, somatic anxiety and self confidence (psychological variables), shooting ability and dribbling ability (skill performance variables) and overall playing ability of male Inter-collegiate basketball players better than the combination of plyometric training with resistance training programme. Whereas in the case of explosive power, systolic blood pressure, diastolic blood pressure and resting pulse rate it did not show any significant differences.

4. The combined training programmes of plyometric training with resistance training enhanced the performance of flexibility, cardio respiratory endurance, agility and explosive power (physical variables) VO₂ max and resting pulse rate (physiological variables) cognitive anxiety, somatic anxiety and self confidence (psychological variables) overall playing ability of male inter-collegiate basketball players better than the combination of static stretching with resistance training programme. Whereas in the case of speed, muscular strength and endurance, systolic blood pressure, diastolic blood pressure, shooting ability and dribbling ability it did not show any significant differences.
5.3 RECOMMENDATIONS:

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

1. As hypothesized by the researcher, that combination of static stretching with resistance training, resistance training with plyometric training and resistance training, plyometric training with martial arts training programmes had a higher magnitude of changes in speed, flexibility, muscular strength and endurance, cardio respiratory endurance, agility, explosive power (physical variables), systolic blood pressure, diastolic blood pressure, VO2 max, resting pulse rate (physiological variables), cognitive anxiety, somatic anxiety, self confidence (psychological variables), and skill performance variables namely shooting and dribbling and overall playing ability of inter-collegiate men Basketball players over the twelve week training period. Hence these training programmes could be performed weekly, bi-weekly or monthly depending upon the individuals’ needs for better benefit.

2. For a personal trainer, it is important to observe from the results of the study that how the volume of exercises and the training variations play a vital role in the modulation of exercises, stress and recovery pattern which ultimately leads to greater variation adaptations. Therefore the combination of static stretching with resistance training, resistance training with plyometric training and resistance training, plyometric training martial arts training programme is more suitable for conditioning the basketball players to improve their skills and playing ability.
5.4 FUTURE WORK

In the following areas the future work can be carried out.

1. The results observed on criterion measures positively confirm the treatment used in the present study. Therefore, the treatment used in the present study can be tested on games, which coincide in the nature of game of basketball players.

2. The present study is mainly concerned with the men players at intercollegiate level as samples. So the same study can be conducted on players at the university level.

3. Having the individual differences on physical, physiological, psychological and skill performance between the men and women, a study may be conducted using the treatment used in the present study on women basketball players too.

4. Since the present study is a yearlong one, it has a chance to develop the social qualities in a concomitant manner. Therefore the present study may be conducted by adding some socio-psychological variables with criterion measured as such.

5. The same study can be conducted by increasing in terms of number of participants as subjects.

6. The same study may be conducted with a change of intensity at adult level.

7. The same may be conducted at different age group for boys and girls.

8. The resistance training and plyometric training may be recommended for the improvement of explosive power in general.

9. A similar study may be conducted with a change of training protocol for other games like volleyball, football and etc.,