CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The collected data pertaining to the study was analyzed and presented in this chapter. The purpose of the study was to find out the effect of aerobic skill, and combined aerobic and skill training on the selected dependent variables such as speed, agility, cardio respiratory endurance as physical variables, resting pulse rate and respiratory rate as physiological variables and shooting, passing and dribbling as playing ability variables. The three trainings namely aerobic training, skill training and combined training were considered as independent variables. To achieve this purpose, sixty basketball players from Bharathidasan University, Tiruchirappalli, Tamil Nadu were selected randomly as subjects. Their ages ranged from eighteen to twenty three years. Selected Subjects were randomly divided in to three experimental groups and one control group of 15 basketball players each namely Aerobic Training (AET), Skill Training (SKT), Combined Aerobic and Skill Training (CAESKT) and Control Training (CNT). Of the three experimental groups, AET (15) group was assigned in aerobic training programs, the SKT (15) group was assigned in the skill training programs, the CAESKT (15) group was given combined aerobic and basketball skill training.
All the subjects of four groups were tested on selected dependent variables before and after the treatment. The data pertaining to the variables in this study were examined by using dependent t-test to find out significant improvement and analysis of covariance (ANCOVA) for each variables separately in order to determine the differences if any among the adjusted post test means. Whenever ‘F’ ratio for adjusted post test was found to be significant, the Scheffe’s test was used as post-hoc test to determine the three paired mean differences. In all the cases 0.05 level was fixed as significant level to test the hypothesis.

**CONCLUSIONS**

🌟 The results show that the pre-test mean values on speed of aerobic training, skill training, combined training and control groups are reveals that aerobic training, skill training, combined training have significantly improved the performance. From the ANCOVA analysis it is implied that there is significant difference between the post test mean scores of experimental and control groups. It is also found that the six paired means had a significant difference. From the Scheffe’s post-hoc test was applied and the results showed that the mean difference values were higher than the confidence interval value 0.46 which shows significant differences at 0.05 level of confidence.
The analysis on agility indicates that the pre-test mean values of aerobic training, skill training, combined training and control groups. The ANCOVA results show that aerobic have significantly improved on the performance. Training, skill training, combined training have significantly improved the performance. And also the result implies that there is significant difference between the post test mean scores of experimental and control groups. And also the result shows that there is no significant difference between aerobic training and skill training on agility.

The analysis on cardio respiratory endurance implies that aerobic training, skill training, combined training have significantly improved. The result implies that there is significant difference between the post test mean scores of experimental and control groups. The result also indicates that the mean differences between, aerobic training and control groups; skill training and control groups; combined training and control groups are significant.

The analysis made on physiological variables on resting pulse rate indicates that there is no significant difference between the post test mean scores of experimental and control groups.

The result on respiratory rates reveals that the pre and post test means of aerobic training, skill training, combined training and control groups are not significant.
The analysis on shooting implies that aerobic training, skill training, combined training have significantly improved the performance. The study also shows that there is no significant difference between the pre test mean scores of experimental and control groups. The result implies that there is significant difference between the post test mean scores of experimental and control group. It also indicates that there are significant differences among the adjusted post-test means of aerobic training, skill training, combined training and control groups. The result of the study indicates that the experimental groups are significantly differed when compared to control group and the experimental groups namely aerobic training, skill training and combined training improved when compared to the control group. It also reveals that combined training group is performing better than the other groups namely, aerobic training, skill training and control groups; skill training group is performing better than aerobic training and control groups; and aerobic training group is performing better than control group.

The research on passing indicates that aerobic training, skill training, combined training have significantly improved the performance. The analysis of covariance of aerobic training, skill training, combined training and control groups have been analysed and the result shows that there is no significant difference between the pre test mean scores of experimental and control groups it implies that there is significant difference between the post test mean scores of experimental and control groups. It also indicates that there is no significant difference between aerobic training and skill training groups.
The analysis on dribbling implies that aerobic training, skill training, combined training have significantly improved the performance. The analysis of covariance implies that there is no significant difference between the pre test mean scores of experimental and control groups. It also indicates that there are significant differences among the adjusted post-test means of aerobic training, skill training, combined training and control groups.

RECOMMENDATIONS

- A similar study may be conducted on players on national level Basketball team to assess speed, agility, cardio respiratory endurance, resting pulse rate, respiratory rate and skill performance (shooting, passing and dribbling).
- A similar study may be conducted among women Basketball players.
- A similar study may be conducted on Basketball players as it is also a speed and endurance dominated game.
- A similar study may be conducted on players of various games.
- Comparative effects may be studied to assess the efficiency of various methods like aerobic training, interval running, polymeric and combination of training on the development of aerobic, skill and combined related variables.
- A similar study may be conducted in greater details to assess changes on physiological and bio motor variables.
A similar study may be conducted into different kind of motivation level.

A similar study may be conducted into particular reference to time (i.e. morning/evening)

A similar study may be conducted for various age groups.