CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The purpose of the study was to find out the effect of plyometric training, weight training and combination of training on selected physical and physiological variables of volleyball players. For this study, sixty men college volleyball players were selected at random from the Kanyakumari District, Tamilnadu, India were selected as subjects and the age of the subjects ranged from 17 to 22 years. The selected subjects were divided into four groups of fifteen subjects each namely three experimental groups and a control group. The Group I underwent plyometric training and Group II underwent Weight training and Group III underwent combination of Plyometric training and Weight training for duration of twelve weeks with three days per week and Group IV acted as control group.

The criterion variables selected for this study were speed, explosive power, muscular strength, agility, resting heart rate and breath holding time. The selected variables were assessed prior to and immediately after the training period by using the standardized test items.
Speed was assessed by 50m run, explosive power was measured by vertical jump test, muscular strength was assessed by one minute bent knee sit-ups, agility was assessed by shuttle run, resting heart rate and breath holding time were assessed by radial pulse method and nostril clip method respectively.

The experimental design used in this study was pre and post test random group design involving 60 subjects who were divided at random into four groups of fifteen each. The data collected from the four groups before and after the experimental period were statistically examined for significant improvement by dependent ‘t’ test.

Sixty subjects were divided at random and assigned into four groups of fifteen 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, the 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.