

Chapter – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The purpose of the study was to find out the effect of varied intensities of plyometric training on leg explosive power and on the selected skill of volley ball game among college men players. 60 male students from various degree colleges in and around Tirupati were selected as subjects at random.

Prior to the study subjects had experience of playing volley ball at college and intercollegiate level. The selected subjects were randomly divided into four groups and each group consisted of 15 subjects. Three experimental groups namely experimental group I (3 days training in a week), experimental group II – (3 days training in a week), experimental group III –(3 days training in a week) and IV group acted as control group.

The variable leg explosive power was measure using vertical jump for vertical height and standing broad jump for horizontal distance and spiking ability and jump serving ability were tested as skills of the volley ball game.

The experimental groups were trained in their respective training program mentioned in the methodology for twelve weeks. Experimental group I with 3 days training in a week with high intensity plyometric training, Experimental group II with 3 days in a week with medium intensity plyometric

training and experimental group III with 3 days in a week with low intensity plyometric training program by adapting over load principles and among IV group acted as a control group which underwent only the regular playing program.

Training is not a novelty or a recent discovery. It existed in ancient Egypt and later in Greece where people systematically trained for both military and Olympic endeavors. Today, through training, as in ancient times, the athletes prepare himself / herself for a definite goal. In order to elevate athletic performance, the main scope of training centers around increasing the athlete's working capacity and skill capabilities, as well as developing strong psychological traits.

Training is a systematic athletic activity of long duration progressively and individually graded aiming at modeling the human physiological, functions to meet demanding tasks.

Keeping the importance of training in view the present study was taken up by the scholar. The purpose of the study was to find out the effect of varied intensities of plyometric training on leg explosive power and on the selected skills of volleyball game among college men players. 120 male students from various degree colleges in and around Tirupati were selected as subjects at random.

Prior to the study subjects had experience of playing volleyball at college and inter collegiate level. The selected subjects were randomly divided

into four groups and each group consisted of 30 subjects. Three experimental groups – namely Experimental group I (with 3 days training in a week), Experimental group II (with 3 days training in week) and Experimental group III (with 3 days training in week) and fourth group acted as a control group.

The variable leg explosive power was measured using vertical jump for vertical height and standing broad jump for horizontal distance power of legs, and spiking ability and jump service ability were tested as skills of the volleyball game.

The experimental groups were trained in their respective training programme mentioned above for twelve weeks. Experimental group I with 3 days training in a week with high intensity, Experimental group II with 3 days in a week with medium intensity, Experimental group III with 3 days in a week with low intensity training schedules and 4th group acted as control group which underwent only conditioning exercises only.

Prior to and after the training program for 12 weeks the subjects were tested in vertical jump, standing broad jump, spiking ability and jump service ability. The pre-test and post-test data of four groups were statistically examined separately to find significant differences if any by applying analysis of covariance. Whenever the “F” ratio for the adjusted post test means was found to be significant, the Scheffe’s test was applied as a post-hoc test to find out the significant difference between the paired means. In all case 0.05 level of confidence was selected to test the hypothesis.

5.2 CONCLUSIONS

In the light of the study under taken certain limitations imposed by the experimental conditions, the following conclusions were arrived at.

1. Varied intensities of plyometric training improved leg explosive power – vertical and horizontal (vertical jump and standing broad jump) abilities and selected skills of volleyball game – spiking ability and jump serving ability among college men players.
2. The experimental group with 3 days training in week, having high intensity plyometric exercises for 12 weeks had improved significantly leg explosive power (vertical and horizontal) and in the performance of selected skills of volley ball game (spiking ability and jump serving ability) than the experimental group with low intensity plyometric training and control group. Whereas high intensity plyometric training group and medium intensity plyometric training group had not significantly improved in leg explosive power – vertical only.
3. The experimental group with 3 days training in week, having medium intensity plyometric training for 12 weeks had improved significantly leg explosive power (vertical and horizontal) and in the performance of selected skills of volley ball game (spiking ability and jump serving ability) than the low intensity plyometric training group and control group.

4. The experimental group with 3 days training in a week, with low intensity plyometric training for 12 weeks had improved significantly leg explosive power (vertical and horizontal) and in the performance of selected skills of volley ball game (spiking ability and jump serving ability) than the control group.
5. Finally it concluded that the high intensity plyometric training 3 days in a week for 12 weeks is having better influence on the selected dependent variables.

5.3 RECOMMENDATIONS

1. On the basis of findings of the study is recommended that gradual increase of load with high intensity plyometric training the desired benefits may be achieved.
2. Varied intensities of plyometric training can be used according to the status of the players to develop jumping ability of the players, especially volley ball and basket ball games where jumping for spiking, blocking, jump service, lay up shot, dunking esextra and also in jumping events like broad jump, high jump, triple jump and pole vault is needed.
3. In the present study groups which underwent high intensity of plyometric training, medium intensity of plyometric training and low intensity of plyometric training for 3 days in week had improved significantly. Hence it is recommended that depending

up on the need ,age, variables, game and status of the players the intensity can be fixed .

4. Plyometrics is the best training system adopted by many coaches and experts in physical education in modern coaching system for developing explosive power which is more essential in many of the skills in various sports. Hence it is recommended to utilize this training system at the age, 14 years of school level for gradual adaptation and improvement of the student's performance.
5. plyometric training can be given for developing elastic strength which is more essential for all explosive sports like sprinting, throws and jumps in athletics except middle and long distance runners (Aerobic endurance events).

5.4 SUGGESTIONS FOR FURTHER RESEARCH

1. The same study may be conducted for college female volley ball players.
2. This study may be followed up by having a mid test at the end of 6th week, so that its influence can be assessed and compared with final test.
3. This study may be conducted for Basket ball game by using college men and women players separately.
4. Similar study may be conducted on by using sprinters/jumpers/throwers.