CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary

The word “Training” has been a part of human language since ancient times. It denotes the process of preparation for some task. This process invariably extends to a number of days and even months and years. The term “Training” is widely used in sports. There is, however, some disagreement among sport coaches and also among sports scientists regarding the exact meaning of this word. Some experts, especially belonging to sports medicine, understand sports training as basically doing physical exercise. Several terms used in training example strength training, interval training, technical and tactical training reflect this line of thinking.

Sports training aims at improving sports performance through physical, physiological, social, intellectual and moral aspects thus contributing to development of all round personality of the sportsperson. In other words the performance of a sports person improves as a result of development of total personality. Therefore, sports training directly or indirectly focuses attention on development of all round personality of a sportsperson. Sports’ training is an educational (pedagogical) process.

Training with resistance bands is a great way to build muscular strength while improving balance. Because it can be used in a variety of ways, it can increase the strength and improve the muscle tone progressively. Resistance band training provides a linear form of resistance which allows getting a larger range of motion than other strength training methods. Before starting resistance band training, it’s important to inspect the band and
prepare it for use. Resistance band exercises with a longer band and as progress the performance through move to shorter bands, which will increase the resistance.

Core training will also tone your torso and abdominal muscles and improve your posture – if your core is strong, the your lower abdominal muscle will be drawn in toward the spine and help you sit up straight. Your balance and coordination will be improved, and most important of all, core stability will help you to keep your spine healthy and flexible throughout life.

Core stability is the effective use of the core muscles to help stabilize the spine, allowing your limbs to move more freely. Good core stability means you can keep your midsection rigid without forces such as gravity affecting you movements. The positive effects of this include reducing livelihood of injury, better posture, increased agility and flexibility, and improved coordination. Core training also help to improve your proprioception – the way your body reacts and recovers from being unbalanced. (Sara, 2006)

The “core” of the body is simply what’s between the shoulder and hip – basically the trunk and pelvis. Draw an imaginary line around the center of your body, starting at your navel, and most of the muscles bordering that line are your core muscles.

Speed is a critical component of the complex requirement for achievement in competitive sport. Speed may be determining factor directly, as in, for example, reacting to be the starter’s pistol, or indirectly, as, for example, in the development of kinetic energy in jumping. The difference between direct and indirect is that, with the former, optimal speed is close to maximum whereas with the latter, optimal speed is a critical percentage of maximum which allows maximum expression of relevant strength. It is therefore important
to bear in mind that speed increases may not necessarily lead to improved performance. The pattern of speed and acceleration of relative movements must be synchronized so that each part of the lever system can make an optimal force contribution.

The purpose of the study was to compare the effect of resistance band training, core training associated with speed training on selected physical, hematological and biochemical variables among college students. To achieve the purpose of the study, from the population of 100 college students only thirty six (36) students those who have participated in the inter collegiate tournament for Dr. Sivanthi Aditanar College of Physical Education, Tiruchendur, Tamil Nadu, India affiliated to Tamil Nadu Physical Education and Sports University, Chennai, Tamil Nadu, India during the year 2011 – 12 were selected as participants. The age of the subjects ranged from 21 to 28 years.

In which, thirty six (36) college students were randomly selected and they randomly assigned into three groups of twelve (12) participants each (n = 12). Group I underwent Resistance Band Training Associated with Speed Training (RBTST), group II underwent Core Training Associated with Speed Training (CTST), and group III acted as Control Group (CG), they were not assigned any specific training, but they were done their regular curricular activities.

The experimental groups namely Resistance Band Training associated with Speed Training (RBTST) and Core Training Associated with Speed Training (CTST) underwent their respective training programmes for the duration of 12 weeks of 36 morning sessions in addition to their regular programme in their curriculum design. While the participants were novice to the particular specialized training, to make aware of them two to three classes were taken on the need and importance of research work, the nature of the training
procedure, pro and concussion of the training programme were detailed explained to the participants. Several doubts were raised by the participants and it was clearly explained by the researcher, and also informed to the participants if they feel any discomfort during training and testing period, they are free to withdraw from the participation in the training programme, but there were no dropouts in the training programme. They were also given adequate rest/relief on and before their training sessions. Both the training groups are insisted to underwent their respective training programmes resistance band training associated with speed training and core training associated with speed training for alternative three days. The duration of experiment lasted for twelve weeks and the number sessions per week was confined to three alternative days, in addition to the regular academic programmes as per the curriculum. The practice session was fixed for 45 minutes with added of 10 minutes of warming – up for both experimental groups. The following criterion variables were selected as dependent variables such as, agility, flexibility, horizontal explosive power, vertical explosive power, speed, hemoglobin, high density lipoprotein (HDL) and low density lipoprotein (LDL). The pre and post data were collected from the subjects before and after the experimentation respectively on the selected dependent variables such agility, flexibility, horizontal explosive power, vertical explosive power, speed, hemoglobin, high density lipoprotein (HDL) and low density lipoprotein (LDL). The obtained data from the experimental groups before and after experimental period were statistically analyzed with dependent “t” test and Analysis of Covariance (ANCOVA). In all the cases, 0.05 level was fixed as level of confidence to test the hypothesis.
5.2. Conclusions

The following conclusions were drawn from the present study.

1. There were significant improvements on agility, flexibility, horizontal explosive power, vertical explosive power, speed, high density lipoprotein (HDL), low density lipoprotein (LDL) due to the effect of resistance band training associated with core training.

2. There were significant improvements on agility, flexibility, horizontal explosive power, vertical explosive power, speed, high density lipoprotein (HDL), low density lipoprotein (LDL), due to the effect of core training associated with speed training.

3. There were no significant improvements on agility, flexibility, horizontal explosive power, vertical explosive power, speed, high density lipoprotein (HDL), and low density lipoprotein (LDL) among control groups.

4. Core training associated with speed training groups (CTASTG) had significant difference when compared with resistance band training associated with speed training group (RBTASTG) on the development of agility, flexibility, horizontal explosive power, vertical explosive power, speed, hemoglobin, high density lipoprotein (HDL) and low density lipoprotein (LDL) among the college students.

5. Core training associated with speed training group (CTASTG) was found to be significantly better method in improving the agility, flexibility, horizontal explosive power, vertical explosive power, speed, hemoglobin, high density lipoprotein (HDL) and low density lipoprotein (LDL) among the college students.
5.3. Recommendations

Based on the results of the study, the following recommendations were drawn.

1. The same study may be conducted in other variables anthropometrical, psychological, biomechanical and so forth.

2. A parallel study may be conducted to find out the effectiveness of two method of training at the high school and higher secondary level.

3. It is recommended that further research be designed to investigate the effects of training programmes based on gender.

4. It is recommended that further research be designed to investigate the effects of training in an elite subject population.

5. It is recommended that further research be designed to investigate the effects of training on both previously resistance and plyometrics trained participants.

6. It is recommended that further research be conducted using more strenuous training programs.