Chapter V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Sprinting speed has varied application in the field of games and sports, particularly in short distance races and horizontal jumps. Even though in long distance, races endurance dominance yet speed is a vital factor in winning.

In the present study, the investigator felt the need to investigate the effectiveness of different training methods i.e. Sand running, Weight training, Uphill running and Harness running on sprinting speed performance.

The subjects were 75 female sprinters from Bundelkhand University, Jhansi selected on the basis of 100 meters sprint performance. The subjects were randomly divided into five groups namely - Group A (Sand running), Group B (Weight training), Group C (UP Hill running), Group D (Harness running), and Group E (Control group).

The subjects belonging to the four experimental groups under went training three times a week i.e. on Mondays, Wednesdays and Fridays for a period of 12 weeks. No specific training was imparted to the control Group E.
Test in 100 meters sprint performance was administered to the subjects of all the five groups before and after the experimental period of 12 weeks. Performance in the 100 meters was recorded to the nearest 1/100th of a second.

The data was analyzed with the help of ‘t’ ratio analysis of variance and co-variance. The level of significance was set at .05 level of confidence. The statistical analysis of data revealed that all the Four experimental groups improved significantly in sprinting speed performance (t = 3.24 for group A, t = 3.52 for group B, t = 3.63 for group C, t = 2.81 for group D and F = 44.10.

The analysis of co-variance for sprinting speed performance indicated that the resultant F-ratios in the case of pre-test means were insignificant but in case of post-test means were significant. The difference between the adjusted final means for the groups were also significant. The critical difference for adjusted means revealed that the mean gains made by all experimental groups showed statistically significant difference amongst them. Group D (Harness running) proved to be superior to Group A (Sand running), Group B (weight training) and Group C (Uphill running) in sprinting speed performance.

Conclusions

Within the limitations of the present study, the following conclusions may be drawn:

1. All the four training methods i.e. Sand running, Weight
training, UP Hill running and Harness running, are effective in improving sprinting speed of Bundelkhand University females.

2. Harness running, Sand running and weight training have been found to be more effective for developing sprinting speed as compared to Uphill running method.

3. Training loads dominated by Sand running, Weight training and Uphill running have been found to be equally effective in improving sprinting speed.

4. No improvement in the case of control group could be a reflection of inactivity.

Recommendations

In the light of conclusions drawn, the following recommendations can be made:

1. Teachers of physical education and coaches should use combined loads of training namely – Sand running, Weight training, UP Hill running and Harness running for the development of sprinting speed.

2. To gain maximum benefits in sprinting speed, the teachers of physical education and coaches must programme their training schedule with an emphasis on harness running.

3. A similar study may be perused by involving athletes of
different proficiency levels and using specific load and training methods, which could be favourable for their optimum adaptation to sprinting speed, and other physical and physiological variables.

4. A similar study may be undertaken by involving different training methods, which have not been employed in the present study.

5. A similar study may be replicated to study the effects of combined training on other sprinting events.

6. The present study may be repeated with subjects of age and sex other than those employed in this study.