Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

The purpose of the present study was to find out the comparative effects of different training menus for speed development of 15 to 17 year old boys in Kerala school. To achieve this purpose Sports Authority of India (SAI) Kollam regional centre, S.T. John’s school Anchal, and S.N. School Chathanoor, boys served as subjects.

All these subjects were of fairly well developed physique as well as all of them had participated in sprint events regularly for four years preceding the period of experiment. The subjects were randomly divided into three groups (n=15) namely Group A (stick drills with Resistance training drills), Group B (Stick drills with Running A.B.C.) and Group C (Stick drills with specific resistance training with barbells)

The subjects belonging to the three experimental groups underwent a training programme three times a week i.e. on Mondays, Wednesdays, Fridays for a period of 10 weeks.

The pre-test data were collected in all the selected variables on the subjects belonging to all the three groups before and after an experimental period of ten weeks.
The pre-test and post-test data of all the three groups were collected and statistically examined separately for significance, if any, applying analysis of covariance, the process by which the post adjusted test means are tested for significance, Scheffe's test was applied as a post hoc test to find out the significance differences between the paired test means. In all the cases .05 level of confidence was selected to test the hypothesis.

The three training programmes showed positive improvement in the performance by the different training groups on selected variables, whereas in some cases the training programmes did not bring any significant changes.

In 30 m speed test, the different training programmes were not enough to bring a significant change in speed performance. The F-ratio obtained was 1.83 which was found to be insignificant at .05 level of confidence. However, in 50 m. and 80 m. speed test, all the three training groups were improved significantly. Since, the F-value obtained in 50 m. and 80 m. were 8.181 and 3.863 respectively and found to be significant at .05 level.

All the three training groups made significant improvement in power as the F-ratio obtained 14.56 was found to be significant at .05 level.
Average Stride Frequency at acceleration phase on different training groups were not found significant at .05 level. The obtained F-ratio 0.84 was found to be lower the value required for significant. However, the average stride frequency at maintenance phase and deceleration phase were found significant at .05 level as they obtained F-ratio of 4.302 and 11.374 respectively were found to be greater than the calculated values.

As far as the average stride length is concerned all the three training groups were significantly improved the performance because the F-ratio obtained in acceleration, maintenance and deceleration phase i.e. 27.81, 6.70 and 3.430 were found to be significant at .05 level.

It is found that all the three training groups were ineffective in improving acceleration speed because the F-ratio 2.963 was found to be insignificant at .05 level of confidence.

The sit and reach flexibility test scores showed a significant difference in different training groups because F-ratio obtained 5.694 was found to be significant at .05 level.

In all the cases table value for significance at .05 level was set to 3.225.

CONCLUSIONS

Recognising the limitations of the present study the following conclusions were drawn.
1. All the three training programs were found to be ineffective in improving 30 meters sprinting speed performance.

2. All the three training programmes were found to be effective in improving 50 meters and 80 meters sprinting speed performance. Stick drills with Resistance training drills was found more effective for developing speed as compared to other two training programmes i.e. Stick drills with Running A, B, C and Stick drills with Specific resistance training with barbells.

3. All the three training programs improved power, Group B (Stick drills with running A, B, C) and Group C (Stick drills with Specific resistance training with barbells) were found more effective for developing power as compared to Group A (Stick drills with Resistance training drills).

4. In average stride frequency, all the three training programmes were found ineffective in improving average stride frequency at acceleration phase.

5. All the three training programmes were found to be effective in improving average stride frequency at maintenance phase and deceleration phase. The Stick drills with Resistant training drills (Group A) and Stick drills with Running A, B, C (Group B) were found more effective for developing average stride frequency as
compared to Group C, training with Stick drills with Specific resistant training with barbells.

Stick drills programme proved as the best programme for developing average stride frequency.

6. As far as average stride length is concerned, all the training programmes were found to be effective in improving average stride length at different phases of 100 meters sprint i.e. acceleration phase, maintenance phase and deceleration phase. Stick drills with Resistant training drills (Group A) and Stick drills with Running A, B, C (Group B) were found more effective for developing average stride length as compared to Group C, training with stick drills with Specific resistant training drills with barbells.

Stick drills programme proved as the best programme for developing average stride length.

7. All the three training programmes were found to be ineffective in improving acceleration speed.

8. All the three training groups improved flexibility, Group A (Stick drills with Resistant training drills) and Group C (Stick drills with Specific resistance training drills with barbells) were found more effective for developing flexibility as compared to Group B (Stick drills with Running A, B, C).
RECOMMENDATIONS

The breakdown of sprint performance into two fundamental parameters allows the coach to accentuate either stride length or stride frequency, thus making training for the sprints, hurdles, and middle distance more flexible and adjustable to individual requirements.

In the light of the conclusion drawn, the following recommendation are made:

1. While preparing training programme for sprinters, the Physical education teachers and Coaches may be given due emphasis to the selected abilities which contributed significantly to stride length, stride frequency and ultimate sprinting performance.

2. The teachers of Physical Education and Coaches may be combined loads of training namely Resistance training drills, Running A.B.C and Specific training with bar bell in combination with stick drills use for the development of speed.

3. To gain the better performance in speed, the Physical Education teachers and Coaches may be construct their training scheduled with an emphasis on stick drills and resistance training drills.

4. Similar studies may be undertaken with female Athlete’s also.

5. Similar studies may be under taken by increasing the duration of the training programme.
6. Similar studies may be undertaken by involving different training methods which have not been employed in the present study.

7. A similar study may be undertaken on different levels of sprinters.

8. Similar studies may be conducted to other sprinting events also.