Chapter V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The purpose of the study was to find out the Effect of physical education programme and handball drills on selected health related fitness and physiological variables among high school handball players. For the purpose of the study 225 students were given their willingness to act as subjects, out of which 60 male subjects were selected at random from government high school, Dindigul, Tamilnadu, India. The age of the participants ranged between 12 and 15 years. The selected subjects were randomly divided into three groups namely physical education group, handball drill group and control group with twenty subjects (n=20) in each group. Experimental groups underwent their respective training for twelve weeks, 4 days per week, sixty minutes per day and the control group did not undergone any training programme apart from their regular curricular activity. The health related fitness variables such as muscular strength, muscular endurance, flexibility, cardio respiratory endurance, body composition were selected. The Physiological variable such as breath holding time, systolic and systolic blood pressure, resting pulse rate and vital capacity were selected as criterion variables. The test items to appraise the criterion variables are muscular strength (pull up’s), muscular endurance (sit-ups), flexibility (sit and reach), cardio respiratory endurance (1.5 mile run and walk),
body composition (skin fold caliber), breath holding time (Hold the breath), systolic and systolic blood pressure (sphygmomanometer), resting pulse rate (radial pulse rate for a minute) and vital capacity (spirometer) were selected as test items. All the subjects of three groups were tested on criterion variables at prior to and immediately after the training programme. The analysis of covariance (ANCOVA) was used to find out the significant difference. if the optioned ‘f’ ratio was significant, Scheffe’s test was applied as a post hoc to determine the paired means difference. In all the case level of confidence was fixed at .05 to test the significance.

The results of the study showed that there was a significant difference among physical education group, handball drill group and control group on selected criterion variables namely muscular strength, muscular endurance, flexibility, cardio respiratory endurance, body composition resting pulse rate, breath holding time, blood pressure, vital capacity due to physical education programme and handball drills among school boys.

There was significant difference on muscular strength, flexibility, body composition, resting pulse rate and vital capacity between experimental groups and there was there was no significant difference between muscular endurance, cardiorespiratory endurance, breath holding time, systolic blood pressure, and diastolic blood pressure.
5.2 Conclusions

1. It was concluded that physical education programme group and handball drill group significantly improved muscular strength of the school boys and comparing between the experimental groups, it was found that handball drill group was significantly better than physical education programme group.

2. It was concluded that physical education programme group and handball drill group significantly improved muscular endurance of the school boys and comparing between the experimental groups, it was found that there was no significant difference between the groups.

3. It was concluded that physical education programme group and handball drill group significantly improved flexibility of the school boys and comparing between the experimental groups, it was found that physical education programme group was significantly better than handball drill group.

4. It was concluded that education programme group and handball drill group significantly improved cardiorespiratory endurance of the school boys and comparing between the experimental groups, it was found that there was no significant differences.

5. It was concluded that physical education programme group and handball drill group significantly reduced body composition of the school boys and comparing between the experimental groups, it was found that handball drill group was significantly better than physical education programme group.
6. It was concluded that physical education programme group and handball drill group significantly improved breath holding time of the school boys and comparing between the experimental groups, it was found that there was no significant difference.

7. It was concluded that physical education programme group and handball drill group significantly reduced resting pulse rate of the school boys and comparing between the experimental groups, it was found that handball drill group was significantly better than physical education programme group.

8. It was concluded that physical education programme group and handball drill group significantly reduced systolic blood pressure of the school boys and comparing between the experimental groups, it was found that there was no significant differences.

9. It was concluded that physical education programme group and handball drill group significantly reduced diastolic blood pressure of the school boys and comparing between the experimental groups, it was found that there was no significant differences.

10. It was concluded that physical education programme group and handball drill group significantly improved vital capacity of the school boys and comparing between the experimental groups, it was found that handball drill group was significantly better than physical education programme group.
5.3 Recommendation

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

1. The results of the study indicate that the hand ball drills was superior to the physical education group in selected criterion variables, while physical education programmes also significantly altered selected criterion variables. In the light of the findings, it was suggested that a combination of physical education programme and handball drills would be more beneficial to the school boys.

2. In the light of the findings of this study, it was recommended that similar studies comparing physical education programme with drills of football, basketball, volleyball, exercises may be conducted.

3. A similar study with larger samples may be conducted to support the findings of this study.

4. In the light of the findings of this study, handball coaches and players may fix load and intensity to enhance the performance.

5. The result of the study is helpful to know the level of students’ health related physical fitness and physiological variables and the possible effects of physical education programmes and handball drills. Physical Education teachers of the schools and
the coaches can take suitable steps to improve the specific criterion variables in which the students are lacking.

6. The result of the study may be helpful to all the physical educationist and educationist over India and overseas to enhance physical education programme and game specific drills in the school curriculum.

7. The similar study may be carried out by selecting college level students as subjects with extended period of time.

8. The similar study may be conducted by selecting girl’s students as subjects.