

CHAPTER V

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The purpose of the study was to find out the effect of skill based exercises with varied frequencies of tabata training on selected bio motor, physiological and performance related variables namely, cardiovascular endurance, explosive power, agility, mean arterial blood pressure, anaerobic power, vital capacity, passing, shooting and playing ability among handball players. To achieve the purpose of the study, eighty (N=80) handball players were randomly selected from Chennai, Tamilnadu, India. The age group of the subjects ranged between 20-25 years. The selected subjects were fit to undergo experimental training and gave their written consent to participate in the study. The selected subjects were randomly divided in to four groups and assigned in to skill based exercises with tabata training one day per week (Group I), skill based exercises with tabata training two days per week (Group II), skill based exercises with tabata training three days per week (Group III) and control group (Group IV). Each group consisted of twenty (n=20) subjects. All the three experimental groups were underwent regular handball training for a period of sixteen weeks. And in addition the experimental group I underwent tabata training one day per week on Wednesdays, experimental group II underwent tabata training two days per week on Tuesdays and Fridays and experimental group III underwent tabata training three days per week on Mondays, Thursdays and Saturdays. The pre and post test were conducted on all the four groups on the selected criterion variables.

The subjects were compared on selected criterion variables among different groups. The data on selected criterion variables namely, cardiovascular endurance,

agility, explosive power, mean arterial blood pressure, vital capacity, anaerobic power, passing, shooting and playing ability were collected. The ANCOVA was used to find out the significant differences if any, between the groups on selected criterion variables separately. In all the cases, 0.05 level of confidence was fixed to test the significance, which was considered as appropriate.

The results proved that skill based exercises with varied frequencies of tabata training significantly improved selected criterion variables namely, cardiovascular endurance, agility, explosive power, vital capacity, anaerobic power, passing, shooting and playing ability among handball players. The results further proved that there was no significant influence on arterial mean blood pressure due to skill based exercises with varied frequencies of tabata training.

The post hoc analysis proved that, skill based exercises with three days per week tabata training significantly better than skill based exercises with two days per week tabata training group and skill based exercises with one day per week tabata training on, cardiovascular endurance, explosive power, anaerobic power and playing ability. The post hoc results further proved that there was no significant differences between experimental groups on agility, passing and shooting of handball players. And the results also proved that skill based exercises with three days per week tabata training significantly better than and skill based exercises with one day per week tabata training on vital capacity among handball players.

5.2 CONCLUSION

Within the limitations and delimitations of this study, the following conclusions were drawn:

1. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved bio motor variable such as, cardiovascular endurance among handball players. Comparing between treatment groups, it was found that there skill based exercises with three days per week tabata training was significantly better than skill based exercises with two days per week tabata training and skill based exercises with one day per week tabata training on cardiovascular endurance among handball players.
2. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved bio motor variable such as, agility among handball players. Comparing between treatment groups, it was found that there was no significant differences on agility among handball players
3. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved bio motor variable such as, explosive power among handball players. Comparing between treatment groups, it was found that there skill based exercises with three day per week tabata training was significantly better than skill based exercises with two days per week tabata training and skill based exercises with one day per week tabata training on explosive power among handball players.
4. It was concluded that there was no significant influence on selected physiological variable such as, mean arterial blood pressure due to skill based exercises with varied frequencies of tabata training among handball players.

5. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved physiological variable such as, vital capacity among handball players. Comparing between treatment groups, it was found that there skill based exercises with three days per week tabata training was significantly better than skill based exercises with one day per week tabata training on vital capacity among handball players.
6. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved physiological variable such as, anaerobic power among handball players. Comparing between treatment groups, it was found that there skill based exercises with three days per week tabata training was significantly better than skill based exercises with two days per week tabata training and skill based exercises with one day per week tabata training on anaerobic power among handball players.
7. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved performance related variable such as, passing among handball players. Comparing between treatment groups, it was found that there was no significant differences on passing among handball players.
8. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved performance related variable such as, shooting among handball players. Comparing between treatment groups, it was found that there was no significant differences on shooting among handball players.
9. It was concluded that skill based exercises with varied frequencies of tabata training significantly improved performance related variable such as, playing ability among handball players. Comparing between treatment groups, it was found that there skill based exercises with three days per week tabata training

was significantly better than skill based exercises with two days per week tabata training and skill based exercises with one day per week tabata training on playing ability among handball players.

5.3 RECOMMENDATIONS

The findings of the study proved that skill based exercises with varied frequencies of tabata training significantly improved for selected bio motor, physiological and performance related variables, namely, cardiovascular endurance, agility, explosive power, vital capacity, anaerobic power, passing, shooting and playing ability among handball players, which was agreement with previous researches. In the light of the above findings, the following recommendations are made.

1. Effort may be taken to include skill based exercises with varied frequencies of tabata training in the training in the physical education curriculum of the handball players as it improve selected bio motor, physiological and performance related variables.
2. Effort may be taken by coaches, sports scientists and educational authorities to include skill based exercises with varied frequencies of tabata training in the training schedules of athlete preparation.
3. Advantage of skill based exercises with varied frequencies of tabata training may be popularized among handball players for their all round development bio motor fitness, physiological fitness and performance level.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

During the course of research. The investigator come across different ideas and suggestions that can be looked in to by feature researchers. Some of the importance one are detailed here under.

1. A separate research to find out the effect of skill based exercises with varied frequencies of tabata training on other bio motor variables among handball players.
2. Since this study covered the men handball players only, a similar research may be undertaken among women handball players to find out the effect of skill based exercises with varied frequencies of tabata training.
3. Research may be under taken to study effect of tabata training with varied frequencies of skill based exercises on bio motor, physiological and performance related variables among handball players.
4. The similar studies may be conducted on different age groups and different games both men and women.