Chapter-V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. SUMMARY

Recent years have witnessed a revolution in the area of sports and sports performance has been receiving phenomenal attention. In this new orientation the emphasis has shifted to a more progressive research leading to an understanding of performance factor of various sports. Speed, strength and agility exercises are also looked upon as a system of exercises that helps to improve performance abilities.

A sports training is a planned and controlled process to achieve a goal. Sports performance is the product of the total personality of the sports person. Sport training is a planned, systematic and scientific process of preparation of sports persons for high level of performances. To achieve this aim different means and methods are used and these are not static in nature. These are being constantly improved, modified and new ones being discovered by the sports science disciplines.

Sport training is a systematic process extending over a long period. For best results the system of training to be based and conducted on scientific facts and lines. Sports training is a pedagogical process based on scientific principles, in sports competition. The process of scientific observation, experimentation, analysis and synthesis is an important characteristic of sports training in modern age.
The purpose of this study was to find out the effect of circuit training on grass, gravel and synthetic field on motor fitness and performance variables among college hockey players. To achieve the purpose of the study 80 male hockey players from different arts and science and engineering colleges in Tamil Nadu the selected as subjects and their age group of 18-25 years. The study was formulated as a true random group design consisting of a pre-test and post test. The subjects (N=80) were randomly assigned to four equal groups of twenty subjects in each group. Namely, experimental group I, experimental group II, experimental group III and control group. Experimental group I was circuit training on grass field, experimental group II was circuit training on gravel field, experimental group III was circuit training on synthetic field and the control group was not given any experiment. The variables selected for the study were motor fitness variables: speed, agility, leg strength and cardiovascular endurance. The Performance variables selected for this study were dribbling, hitting and trapping. After the experimental period of twelve weeks post test were conducted and the scores were recorded. The normality of data collected were tested using mean, standard deviation and F ratio and data collected were found normal. The pre and post scores in statistical treatment using Analysis of Covariance (ANCOVA) to find out the significant mean differences. Scheffe’s post hoc test was used to find out the paired mean differences. In all the cases the 0.05 level of confidence was fixed.

5.2. CONCLUSIONS

Within the limitations of the present study the following conclusions were drawn.

- It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields
group have achieved significant improvement as compared to control group towards improving motor fitness variables such as speed.

- Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields there was significant difference on speed.

- The motor fitness variables of speed were better in the synthetic field with compare of grass and gravel fields.

- It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group have achieved significant improvement as compared to control group towards improving motor fitness variables such as agility.

- Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group there was significant difference of agility.

- The motor fitness variables of agility were better in the synthetic field with compare of grass and gravel fields.

- It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group have achieved significant improvement as compared to control group towards improving motor fitness variables such as leg strength

- Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group there was significant difference of leg strength

- The motor fitness variables of leg strength were better in the synthetic field with compare of grass and gravel fields.
It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group have achieved significant improvement as compared to control group towards improving motor fitness variables such as cardio vascular endurance.

Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group there was significant difference of cardio vascular endurance.

The motor fitness variables of cardio vascular endurance were better in the synthetic field with compare of grass and gravel fields.

It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group have achieved significant improvement as compared to control group towards improving performance variables such as dribbling for hockey.

Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group there was significant difference of dribbling for hockey.

The performance variable dribbling shows performed in the synthetic field was better than the grass and gravel fields.

It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group have achieved significant improvement as compared to control group towards improving performance variables such as hitting for hockey.

Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group there was significant difference of kitting for hockey.
The performance variable hitting shows performed in the synthetic field was better than the grass and gravel fields.

It is concluded that three experimental groups namely Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group have achieved significant improvement as compared to control group towards improving performance variables such as trapping for hockey.

Circuit training on grass fields, Circuit training on gravel fields and Circuit training on synthetic fields group there was significant difference of trapping for hockey.

The performance variable trapping shows performed in the synthetic field was better than the grass and gravel fields.

5.3. RECOMMENDATIONS

On the basis of the results of the present study the following recommendations are made.

- Circuit training should be included as an integral part of training in physical education program in primary school, secondary school and also in college and universities.

- The results of the study may be utilized by the Coaches, Physical educationists and State Association personnel involved in coaching the men hockey teams to formulate an effective training programme to rectify the deficiencies such as speed, agility, power, self-confidence, anxiety, aggression, dribbling, hitting and trapping.
The results of this study may be utilized by the Coaches and Physical educationists while training in the artificial field especially for the grass level.

The results of the study may be utilized by the Government and Sports promotion bodies to know about the importance of artificial field to achieve higher level of performance in National and International events and also the importance of laying artificial fields in the districts, regions and states to make an equal competition and to prepare better National and International players in the districts, regions and states.

The results of the study may be utilized for the future research to select new problems relating to the study and may also be utilized for women hockey players. Further the results of the study will be more beneficial for the National team selectors and National team coaches while selecting the players and designing the coaching programmes according to their needs.

The results of the study may be useful for designing programmes in selection, training and coaching in relation with the different playfields. It is recommended that the investigations may be conducted on our National Hockey team with other Nation’s hockey teams.

It is recommended to conduct such investigations at various levels such as sub-juniors and juniors and also for other disciplines also.
The results of the study will be more useful for the players to understand their strength and weaknesses in each playfield and needs to improve.

5.4 FUTURISTIC DIRECTION OF RESEARCH

During the course of this research, the investigators come across a number of ideas and based on the experiences gained the following suggestions are made for further research.

- Similar research study may be conducted to find out the psychological impact on different play fields to enhance the selected variables of various sports and games among school students.
- The study is expected to yield useful information and directions to the players, managers and coaches.
- A similar study may be conducted for female students.
- A similar study may be conducted with fifteen and above weeks.
- A similar study may be conducted with a change of training protocol for other games like basketball, volleyball, cricket and football.
- A similar study may be conducted with a change of training protocol for college level athlete especially for jumpers and runners.
- The findings of this study may possibly provide coaches and other sport professionals, who are involved with team sport participants, with information and guidelines that would enable them to plan and set-up safer and more effective training programs.