Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of the study was to compare the effects of training on dry sand, wet sand and on natural turf on speed, strength, endurance and agility of soccer players.

120 (one hundred twenty) senior division soccer players were selected as the subjects for the study.

The subjects were selected at random basis. The data on speed, strength, endurance and agility of all the subjects were collected and then composite scores of each subject on the said items were computed. On the basis of the composite scores the whole group was equally scattered into four groups. The first group named Group-A was choosen to serve as the control group, the second group named Group-B for training on dry sand surface, the third group named Group-C for training on wet sand
surface and the last group named Group-D was chosen for training on natural turf. The selection of group was made at random. The average age of the subject was twenty one year ranging from 19 to 24 years of age.

A eight weeks training programme (six days in a week) of slow and fast running of medium intensity was employed to each of the three groups except the control group.

After the completion of eight weeks training programme collection of data of all the four groups on speed, strength, endurance and agility was made as the data of the post test.

To find out the existance of significant difference between means of initial and post test data of control group on speed, strength, endurance and agility "t" test was applied.

In order to compare the effects of training on dry sand, wet sand and on natural turf on
speed, strength, endurance and agility of soccer players the one-way analysis of variance was employed. In case of significant result, it was subjected to Scheffe's post-hoc test to find out the difference of pair of group means and the level of significance set at .05 level.

From the findings the results showed that all the F-values i.e., in case of speed, strength, endurance, and agility were significant. In case of speed, strength, endurance and agility the F-values were 6.60, 14.29, 15.67 and 6.25 respectively. The tabulated F-value was 2.69. From the post-hoc test, the result indicated the existence of significant difference in speed between control group and wet sand surface group (mean difference = 0.24 > 0.16) and in between control group and natural turf group (mean difference = 0.18 > 0.16). In strength the result indicated the significant difference between control group and dry sand surface group (mean difference = 0.11 > 0.06), between control group and wet sand surface group (mean
difference = 0.13 > 0.06) and in between control group and natural turf group (mean difference = 0.08 > 0.06). In case of endurance the result showed the significant differences in all other combination except the one in between the dry sand surface group and natural turf group. (Mean difference = 0.04 < 0.13). In case of agility the result of post-hoc test indicated the existence of significant differences between control group and natural turf group (Mean difference = 0.23 > 0.21), between dry sand surface group and natural turf group (Mean difference = 0.25 > 0.21) and also in between wet sand surface group and natural turf group (Mean difference = 0.28 > 0.21).

Conclusions

Within the limitations imposed by the subject's and experimental conditions and on the basis of the results of this study, the following conclusions were drawn -

1. There was no significant difference in any one of the four variables (speed, strength, endurance and agility) in initial and post
test data of the control group.

2. Wet sand surface group and natural turf group produced better performance in speed than the dry sand surface group.

3. Wet sand surface group and dry sand surface group showed superior performances in explosive strength to that of natural turf group.

4. Wet sand surface group produced best performance in endurance among the four groups.

5. Natural turf group had executed significantly better performance in agility than that of other two groups.

Recommendations

In the light of the conclusions drawn the following recommendations have been made:

1. Various forms of specific training programme giving specific stress on specific
components per training schedule may be employed to investigate the comparative effect of training on various turfs.

2. Intensity, density, duration and frequency of load may be specifically fixed.

3. The comparative degree of resistance of different turfs should be properly identified.

4. Training programme may be carried out on the untrained athlete of different age groups and sex.

5. Training programme may be carried out on fully residential groups and for a period of longer duration.