CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of the study was to determine the variations in selected psycho motor variables and profile of mood states resulting from circadian rhythm between trained and untrained men.

To achieve the purpose of the study, 15 trained and 15 untrained male were selected from the affiliated colleges of Manonmaniam Sundaranar University, Tirunelveli as one of the independent variable and six different times of the day such as 02:00, 06:00, 10:00, 14:00, 18:00 and 22:00 hours were selected as another independent variable. Reaction time, flexibility, agility, balance and profile of mood states were selected as criterion variables.

The experimental design used was static group factorial design. The first factor consisted of training status as trained men and untrained men, second factor consisted of circadian variation measured at six different times of the day (02:00, 06:00, 10:00, 14:00, 18:00, and 22:00 hours).

Two factor analysis of variance with second factor repeated (2 x 6) measure was used to find out the influence of each of the factor
independently and also their combined influence on each of the selected variables.

Three “F” ratios were computed, one for rows to assess the training status on selected dependent variables and the second F-ratio was calculated for columns to assess the circadian variations on the selected dependent variables. The third F-ratio was calculated for training status and different times of the day. Whenever the main purpose is usually lies in the interaction, it is sufficient to discuss the interaction effect only, unless some special circumstances exist, interest in testing the main effects are usually limited (Thomas and jack, 2001). Thus, the main purpose lies in the interaction, the main effects were not discussed. The interaction effect was only discussed for all the selected criterion variables. Hence, whenever the obtained F-ratio for interaction effect was found to be significant, the simple effect test was used as a follow up test. Since, two groups and six different stages of tests were compared, whenever the obtained ‘F’ ratio value in the simple effect test was significant, the Scheffe’s test was applied as post hoc test to determine the paired mean differences, if any. In all the cases 0.05 level of significance was fixed and considered to be appropriate in view of the fact that very highly sophisticated equipments were not used for more stringent level of significance.
Conclusions

1. There was a significant difference between trained and untrained men on the selected variables such as reaction time, flexibility, agility, balance and profile of mood states irrespective of the different times of the day.

2. There was a significant difference among different times of the day on selected variables such as reaction time, flexibility, agility, balance and profile of mood states irrespective of the training status.

3. There was a significant variation in Circadian Rhythm between trained and untrained men on the selected variables among different times of the day.

4. The peak performance was found at 18:00 hours in all the selected variables.

Recommendations

1. It was recommended that the coach, physical education teachers should consider the existing knowledge with regard to the circadian variation on the selected psycho motor ability and profile of mood states.

2. It was recommended that the physical educators and coaches should prepare the training schedules and travel plans for their players in their respective games.