

# CHAPTER V

## SUMMARY CONCLUSION AND RECOMMENDATION

### 5.1 Summary

In this chapter, describes the summary of the research procedures, statistically treated data results, findings and discussions with regard to the talent identification and follow-up development programme on selected motor fitness and performance variables of track and field events in school boys.

For the purpose of the study 156 boys were selected randomly, from Tisaiyanvillai, Tirunelveli (Dt). They were in the age group of 12 to 14 years. The selected students underwent the talent identification programme and they were divided into two equal groups named as group A and group B (Group A=Group B=78 each). From the group A, thirty (30) (Sprint & Jumping talent -15, Throwing talent-15) students were selected on the basis of talent screening test and they acted as the experimental group. Similarly thirty (30) (Sprint & Jumping talent -15, Throwing talent-15) students were selected from the group B, who acted as the control group. They participated in the research voluntarily and cheerfully without any compulsion.

After the selection process experimental group (selected talented students) was assigned to the developmental anaerobic training for a period of 12 weeks for 4 sessions (60 min/sessions) per week. All the subjects tested prior and after the experimental treatment periods on selected motor fitness and performance variables in track and field event. The control group was not participated any training programme rather than their daily physical education programme and routine work. Then the suitable statistical tools were applied to evaluate the talent identification programme and test significance difference between pre and post test of experimental group and control groups. The influence of the talent identification programme on selected motor fitness and performance in track and field event can be identified by using multiple regression analysis. The paired 't' test was applied to test the significance difference between pre and post test scores of experimental group and control group due to the anaerobic training at 0.05 level of confidence.

## **5.2 Conclusion**

The track and field performances of sprinting, jumping and throwing abilities measured by using 100 m dash, long jump and shot-put respectively and the eleven predictor variables were used in the sprint & jump and throw events models.

### **The analysis of data for the samples reveals that the following findings**

1. The 100 m performance is predicted from sprint & jump model. It includes, standing broad jump, 50 m dash and five consecutive hops, which produce high multiple correlations with 100 m performance. It is evident that the obtained regression equation has significant predictive validity. Thus the predictive equation may be used to select the potential talent for sprint events in track and field events at the age of 12-14 years.
2. The long jump performance predicted from the sprint & Jump model and it includes vertical jump, five hops, standing broad jump and 50 m dash. As the multiple correlations on long jump performance with the combined effect of predictor variables are significant. It is apparent that the obtained regression equation has significant predictive validity. Thus the predictive equation may be used to select the potential talent for jump events in track and field events at the age of 12-14 years.
3. The shot-put performance predicted from the throwing model and it includes, shot backward throw, isometric strength and standing triple jump. As the multiple correlations on shot-put performance with the combined effect of independent variables are significant. It is apparent that the obtained regression equation has significant predictive validity. Thus the predictive equation may be used to select the potential talent for throw events in track and field events at the age of 12-14 years.

### **Follow-up Developmental Programme (Anaerobic training) on selected Motor fitness and Performance variables of Track and Field events.**

In this research the results shows that selected motor fitness variable, namely isometric leg strength, muscular endurance, speed, explosive power, cardio-respiratory endurance, flexibility, coordination, 100 m dash, long jump and shot-put

performances in track and field events improved after the anaerobic training for experimental group. But control group, there is no significant difference between pre test and post test scores on selected motor fitness and performance variables.

The mean gain difference between experimental and control group of sprint, jump and throw talents for isometric leg strength, muscular endurance, explosive power, flexibility, coordination, 100 m dash, long jump and shot-put performance significantly differed due to the anaerobic training. But speed and cardio-respiratory endurance did not differ significantly due to the anaerobic training.

### **5.3 Recommendation & Scope for the Further Research**

1. The tests used for this talent identification model are non specialist equipment which is also not particularly expensive except somatotype testing. From this initial screening a smaller, more select group of children were selected. That will be assessed by using more specific testing.
2. The present data will serve as a reference standard for the selection of potential school boys for track and field events. The relevance of this model is highlighted and recommendation for future work provided.
3. The predictors motor abilities can enables the coach and sports scientists to classify the talents of 12-14 years old boys for sprint & jumping and throwing talents, and then to develop the potential of the athlete accordingly.
4. The same study will be conducted for female students.
5. The founded predictive equation can be applied to test the track and field performances in various geographical regions in India.
6. The talent identification model can prepared for other sport and games to predict the performance.
7. The predictive model can be used to select students in specific event directly and suitable development training can be recommended according to the sport characteristics.