Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The main purpose of the study is to analyze the skill of bowling in cricket kinematically. The secondary purpose is to find out whether there is any relationship between the cricket bowling and the selected kinematic principles namely speed, displacement, acceleration of cricket players, classified on their arm length, leg length, height, weight, upper body length. The statement of the problem is the comparative analysis of selected body dimensions and kinematic variables of bowling performance in cricket.

The present study consisted of one dependent variable such as speed of ball in bowling and twenty seven independent variables. The independent variables selected for this study were weight, height, arm length, leg length, hand length, and upper body length, speed, power, acceleration, force, bowling arm angle at the time of delivery, non bowling arm angle at the time of delivery, leading leg inner angle at the time of delivery, back leg angle at the time of delivery, last stride length, back leg ankles angle at front foot landing, front leg ankles angle at front foot landing, upper body angle at front foot landing, bowling arm angle at front foot landing, non bowling angle at front foot landing, leading leg knee angle at front foot landing, back leg knee angle at front foot landing, upper body angle at back foot landing, bowling arm angle at back foot landing, non bowling angle at back foot landing, leading leg knee angle at back foot landing and back leg knee angle at back foot landing. Data
were collected for the twenty seven independent variables in relation to speed of ball in bowling among cricket players. Collected data was subjected to statistical analysis as explained below.

To determine the relationship between dependent variable and independent variable Pearson product moment correlation was used. The computation of multiple regression was also used. In multiple regression, we are predicting a criterion variable from a set of predictors. Forward selection method of multiple regression was used in this study to find out the predictor variable that has the highest correlation with the criterion variables is entered into the equation first. The rest variables are entered into the equation depending on the contribution of each predictor.

Conclusions

From the analysis of the data, the following conclusions were drawn.

1. Prediction of speed of ball in bowling for fast bowlers in Cricket can be done by speed, leading leg knee angle at front foot landing, upper body length and non-bowling arm angle at the time of delivery.

2. The speed, acceleration, force, power, upper body length, back leg ankles angle at front foot landing, non-bowling angle at front foot landing, leading leg knee angle at front foot landing, back leg knee angle at back foot landing are highly related to speed of ball in bowling.
Recommendations

With the help of results derived from the present study, the following recommendations can be made.

1) The results of the present study can be very much useful for Physical educators, coaches and trainers for screening and selecting potential cricket players.

2) It may be recommended that the present study may be repeated by selecting subjects belonging to lower age groups.

3) Intensive research study of this nature may be done in other games and sports where criterion used for measuring success will be performance in game / sport.