CHAPTER – V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

One of the goals of scientific research is to predict future events or results from present or past data. There are different types of prediction that we come across in our daily life, such as wealth-forecast, market-forecast, share market-forecast, election trends etcetera. These are based upon some known facts and so they are reliable prediction.

Research in the field of sports and games had proved that the future performance of an individual or team could be predicted through the analysis of certain variables, which are found to be the basis for total performance. Among many factors the following factor such as anthropometrical, physical, physiological, psychological and skill performance that decide the playing ability of an individual are more important.

The purpose of the study was to predict the playing ability in Kabaddi from the selected anthropometrical, physical, physiological and psychological variables among college level players. To achieve this purpose two hundred and sixty eight male inter-collegiate Kabaddi players were randomly selected from various colleges in Tamil Nadu state, India and their age ranged between 17 and 25 years. The subjects had past playing experience of at least three years in Kabaddi and only those who represented their respective college teams were taken as subjects.

The present study mainly concerned with anthropometrical, physical, physiological and psychological variables, which is essential need for better Kabaddi performance. The researcher
reviewed various journals, books, e-resources, unpublished theses, dissertations and coaching manuals to find literature related to Kabaddi performance with selected anthropometrical, physical, physiological and psychological. Based on these observations, the investigator selected the following independent variables for this study.

The anthropometrical variables namely - Body weight; **Length measurements** – Height, Arm length, Arm span, Leg length, Hand length, Hand breadth; **Girth measurements** – Chest girth, Waist girth, Hip girth, Thigh girth and Calf girth. Physical variables namely – Speed, Agility, Flexibility, Leg explosive strength and Muscular endurance. Physiological variables namely - Cardiovascular endurance, Resting heart rate, Peak expiratory flow rate and Breath holding time. Psychological variables namely - Somatic anxiety, Cognitive anxiety, Self confidence and Sports achievement motivation. The playing ability which was taken as the performance factor was subjectively assessed by three qualified Kabaddi coaches. Collected data was subjected to statistical analysis as explained below.

Mean and Standard deviations were calculated for each of the selected variables. The inter-relationship among the selected anthropometrical, physical, physiological, psychological variables and Kabaddi playing ability, were computed by using Pearson’ product-moment correlation coefficients. The computation of multiple regressions was also used. In multiple regressions, a criterion variable from a set of predictors was predicted. Step-wise argument methods of multiple regression was used in this
study to find out the predictor variable that has the highest correlation with the criterion variables were entered in the equation depending on the contribution of each predictor.

The constant ‘a’ obtained for the regression equation was -4.524. The beta weights for the nine selected variables were 0.062 for arm span, 0.014 for resting heart rate, 0.03 for breath holding time, -0.145 for agility, 0.359 for leg explosive strength, -0.015 for somatic anxiety, 0.001 for peak expiratory flow rate, 0.015 for self confidence and 0.006 for body weight. Thus, the obtained equation for predicting Kabaddi playing ability of the Inter - collegiate Kabaddi players was:

\[
\text{Playing Ability (CR)} = -4.524 + 0.062 \, (X_4) + 0.014 \, (X_{19}) + 0.003 \, (X_{21}) - 0.145 \, (X_{14}) - 0.359 \, (X_{16})-0.015\,(X_{22})+0.001(X_{20})+0.015 \, (X_{24}) + 0.006 \, (X_2)
\]

where CR = the predicted score
a = - 4.524 (Constant)
\(X_4\) = Arm span
\(X_{19}\) = Resting heart rate
\(X_{21}\) = Breath holding time
\(X_{14}\) = Agility
\(X_{16}\) = Leg Explosive Strength
\(X_{22}\) = Somatic anxiety
\(X_{20}\) = Peak expiratory flow rate
\(X_{24}\) = Self confidence
\(X_2\) = Body weight
Conclusions

1. The results revealed that an Inter-relationship exists significantly between the anthropometrical, physical, physiological, psychological and performance variables among male inter-collegiate Kabaddi players.

2. The results revealed that arm span, resting heart rate, breath holding time, agility, leg explosive strength, somatic anxiety, peak expiratory flow rate, self confidence and body weight become the common characteristics which can predict the playing ability in Kabaddi players.

Recommendations

1. Similar study may be undertaken with Kabaddi players of different levels such as University and National level players.

2. Similar study may be conducted on women Kabaddi players.

3. A similar study may be conducted on different games and sports.

4. This study may be conducted on position-wise analysis of Kabaddi players.

5. The result of this study will help the young budding researchers to take up similar studies in other areas and disciplines.