Chapter - V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

SUMMARY

In India, archers are doing well at international level. But research work on this particular sport is scanty with the passage of time. Hence, the research scholar felt utmost need to develop the sports standard of the country by undertaking this particular research study on national archers.

The purpose of the study was to know about the physical and physiological profiles of males and females of Indian National level archers. The present study was delimited to those who took part in the national archery championship in the year 1994-95. Forty national archers, twenty male and twenty female archers were selected at random, representing different states and union territories.

The data was collected on selected physical and physiological variables for the purpose of the study:
Physical Variables

1. Age
2. Height (Standing height)
3. Weight (Total body weight)
4. Arm length
5. Leg length

Physiological Variables

1. Positive breath holding time
2. Resting pulse rate
3. Resting respiratory rate
4. Resting blood pressure:
   a) Resting systolic blood pressure.
   b) Resting diastolic blood pressure.
5. Body composition
   a) Lean body weight
   b) Fat percentage
6. Arm and shoulder strength
7. Grip strength:
   a) Right hand grip strength
   b) Left hand grip strength
8. Shoulder and wrist flexibility
The data pertaining to physical and physiological variables were collected by administering standard tests and measurement procedure available in the literature.

The data was analysed by calculating mean, standard deviation, skewness and kurtosis as a descriptive statistics. Product moment correlation was calculated to find out the relationship between performance with other selected physical and physiological variables. Further, the data was analysed by computing the mean difference method (t-ratio) to find out the significant difference, if any between the male and female archers. The level of confidence was set at .05 level.

CONCLUSION

Within the limitations of the study it seems reasonable to conclude the following:

(1) Male archers were found to be dominating in performance, and selected physical and physiological variables. Resting pulse rate,
resting respiratory rate, resting systolic blood pressure, resting diastolic blood pressure and fat percentage were found low in male than female archers.

(2) Performance of male archers were found significantly correlated with resting pulse rate, right hand grip strength, left hand grip strength and shoulder and wrist flexibility. Whereas, female archers were found significantly correlated with height and arm and shoulder strength.

(3) Male and female archers differs significantly between means in performance score, height weight, arm length, leg length, positive breath holding time, resting pulse rate, lean body weight, fat percentage, arm and shoulder strength, left hand grip strength and shoulder and wrist flexibility. Whereas, no significant difference between mean among male and female archers were found in age, resting respiratory rate, resting systolic blood pressure and resting diastolic blood pressure.
RECOMMENDATIONS

In the light of the conclusion drawn the following recommendations were made:

(1) A similar study may be conducted with different physical and physiological variables.

(2) A similar study may be undertaken to prepare a psycho-physical profile.

(3) A comparative study can be done using such type of characteristics.

(4) A similar study may be conducted to prepare an unique profile of different stooting distances.

(5) A prediction equation can be prepared to predict the performance of archers at very early stage.