CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this investigation was to characterize elite Indian Judokas by their selected Psychological and Physiological responses to standard human performance measures and to compare them in different weight categories and in two different age groups.

The subjects for this study were selected from various Indian Universities and States which participated in All India Inter-varsity and Junior National Judo Championship respectively. A total of one hundred and sixty Judokas, ten from each of the eight weight categories from two age groups i.e. Seniors and Juniors were selected. The age of the subjects for seniors ranged from 18 to 25 years, and for juniors from 14 to 18 years.

To characterize elite Indian Judokas by their selected Psychological and Physiological responses to standard human performance measures, the mean and standard deviation were used. To examine significant differences in different
weight categories, analysis of variance was applied at .05 level of confidence. To examine the significant difference in two age groups (Juniors and Seniors) t-ratio was applied at .05 level of confidence.

Mean, standard deviation, T-Ratio were calculated by using the package, Microsoft Excel Software.

Second type i.e. two sample equal variance (homoscedastic) with two tailed distribution t-test was computed among seniors and juniors.

Analysis of variance (ANOVA) table was formulated by ANOVA programme in PASCAL LANGUAGE.
CONCLUSIONS

It was concluded that:

1. In subjects' characteristics of seniors, no significant difference was found among all weight categories in relation to training age and chronological age.

2. In subjects' characteristics of seniors, significant difference was found among all weight categories in relation to height.

3. In subject characteristics of juniors, no significant difference was found among all weight categories in relation to age and training age.

4. In subject characteristics of juniors, significant difference was found among all weight categories in relation to height.

5. In physiological variables of seniors, no significant difference was found among all weight categories in relation to Anaerobic Power, Positive Breath Holding Capacity.
6. In physiological variables of seniors, significant difference was found among all weight categories in relation to Resting Heart Rate, Resting Respiratory Rate, Vital Capacity, Total Body Fat Percentage, Lean Body weight and Negative Breath Holding Capacity.

7. In physiological variables of juniors, no significant difference was found among all weight categories in relation to Resting Heart Rate and Negative Breath Holding Capacity.

8. In physiological variables of juniors, significant difference was found among all weight categories in relation to Anaerobic Power, Resting Heart Rate, Vital Capacity, Total Body Fat Percentage, Lean Body weight and Positive Breath Holding Capacity.

9. In Psychological variables of seniors, no significant difference was found among all weight categories in relation to Excellence, Power, Sensation, Independence, Success, Aggression, Affiliation, Achievement Motivation, State Anxiety, Trait Anxiety and Sports Competition Anxiety.
10. In psychological variables of juniors, no significant difference was found among all weight categories in relation to Excellence, Power, Sensation, Independence, Success, Aggression, Affiliation, Achievement Motivation, State Anxiety, Trait Anxiety and Sports Competition Anxiety.

11. In subjects characteristics significant difference was found between juniors and seniors in relation to chronological Age, Height and Training Age.

12. In physiological variables no significant difference was found between juniors and seniors in relation to Resting Heart Rate, Resting Respiratory Rate, Vital Capacity and Total Body Fat Percentage.

13. In Physiological variables, significant difference was found between juniors and seniors in relation to Anaerobic Power, Lean Body Weight, Positive Breath Holding Capacity and Negative Breath Holding Capacity.

14. In Psychological variables significant difference was found between juniors and seniors in relation to state Anxiety.
15. In psychological variables no significant difference was found between juniors and seniors in relation to Excellence, Power, Sensation, Independence, Success, Aggression, Affiliation, Achievement Motivation, State Anxiety, Trait Anxiety and Sports Competition Anxiety.

16. In Incentive Motivation all the subjects were average and above average in both the groups i.e. Juniors and Seniors.

17. In Achievement Motivation all the subjects are of moderate level of sports achievement motivation in both the groups i.e. Juniors and Seniors.

18. All the Judo players i.e. Juniors and Seniors have high level of State Anxiety.

19. All the Judo players i.e. Juniors and Seniors have high level of Trait Anxiety.
20. In Sports Competition Anxiety, all the judo players i.e. juniors and seniors were found quiet relaxed at the time of competition.

21. In relation to height (seniors), the sequence of performance among all weight categories was open > below 86 > below 78 > below 71 > below 65 > below 60 > below 50 > below 55 kg.

22. In relation to Resting Heart Rate (seniors), the sequence of performance among all weight categories was below 86 > open > below 71 > below 76 > below 50 > below 55 > below 65 > below 60 kg. (Lower Resting Heart Rate indicated better efficiency).

23. In relation to Resting Respiratory Rate (seniors), the sequence of performance among all weight categories was open > below 86 > below 78 > below 50 > below 55 > below 71 > below 65 > below 60 kg. (Lower Resting Respiratory Rate indicated better efficiency).
24. In relation to Vital Capacity (seniors), the sequence of performance among all weight categories was below 78 > Open > below 86 > Below 71 > below 65 > below 60 > below 55 > below 50 kg.

25. In relation to Total Body Fat Percentage (seniors), the sequence of performance among all weight categories was open > below 86 > below 78 > below 71 > below 65 > below 60 > below 55 > below 50 kg.

26. In relation to lean body weight (seniors), the sequence of performance among all weight categories was open > below 86 > below 78 > below 71 > below 65 > below 60 > below 55 > below 50 kg.

27. In relation to Negative Breath Holding Capacity (Seniors), the sequence of performance in all weight categories was below 65 > below 71 > below 60 > below 78 > below 55 > below 86 > below 50 > Open categories.

28. In relation to Height (Juniors), the sequence of performance in all weight categories was open > below 71 > below 65 > below 60 > below 55 > below 50 > below 45 > below 40 kg.
29. In relation to Anaerobic Power (Juniors), the sequence of performance in all weight categories was below 65 > below 55 > below 60 > below 71 > Open below 50 > below 45 > below 40 kg.

30. In relation to Resting Respiratory Rate (Juniors), the sequence of performance in all weight categories was open > below 71 > below 65 > below 40 > below 45 > below 60 > below 65 > below 50 kg. (Lower Resting Respiratory Rate indicated better efficiency).

31. In relation to Vital Capacity (juniors), the sequence of performance in all weight categories was below 60 > Open = below 55 > below 65 > below 50 > below 71 > below 45 > below 40 kg.

32. In relation to Lean Body Weight (juniors), the sequence of performance in all weight categories was open > below 71 > below 65 > below 60 > below 50 > below 45 > below 40.
33. In relation to Total Body Fat Percentage (juniors), the sequence of performance in all weight categories was Open > below 71 > below 65 > below 60 > below 55 > below 50 > below 45 > below 40.

34. In relation to Positive Breath Holding Capacity (juniors), the sequence of performance in all weight categories was below 55 > below 50 > below 65 > below 60 > below 45 > below 71 > Open > below 40.

RECOMMENDATIONS

In light of the findings of this study, the following recommendations are made for the sports scientists, sports administrators, teachers of Physical Education, Research Scholars, coaches and players of Judo.
1. A study may be repeated with the subject participating at higher level of competition than those selected in this study.

2. A similar study may be concluded on variables, other than those selected in this study.

3. Similar study may be undertaken in other sports.

4. Similar study may be conducted on female Judo Players.

5. Some study may be repeated by employing a larger sample of students.

6. Similar study may be conducted on different age groups.

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