CHAPTER- V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The main objective of the present study was to compare the Kabaddi and Kho-Kho players of Delhi schools, who has obtained position at Zonal and Inter-zonal and participated in National School Games’ (SGFI) respective sports competition on selected physical and psychological abilities through the selected test items such as: Body Mass Index (BMI), Speed, Standing Broad Jump, Sit and Reach, Sit-ups, 12 Minutes Run/walk, Psycho-motor Ability Test, Concentration Ability and Sports Competition Anxiety Test between the players of Kabaddi and Kho-Kho.

For the purpose of the present study, finally one hundred players were selected as subjects. Out of total one hundred subjects, 50 subjects from the game of Kabaddi and 50 subjects from the Kho-Kho has been selected on purposive and random sampling basis, who has won medal/position in Delhi schools’ tournaments like: zonal, Inter-zonal and participated in National School Games (SGFI) during the 2009 and 2010. All the subjects were involved in regular practice as a preparation for their targeted competition in their respective sports. The selected subjects were voluntarily agreed to become as the subjects and promised to cooperate during the course of the study and collection of data.

The research scholar gleaned through all the scientific literature pertaining to Kabaddi and Kho-Kho from books, magazines, journals, periodicals available at various libraries of Delhi and internet websites. The scholar visited numerous
libraries where there was a possibility to locate the related literature. The scholar visited the libraries like: Indira Gandhi Institute of Physical Education & Sports Sciences: University of Delhi, Central Library: University of Delhi, Central Institute of Education: University of Delhi, National Council for Educational Research and Training: New Delhi, Laxmibal National University of Physical Education: Gwalior (MP) etc. to search the relevant literature and reviews for the present study. Keeping in view, the feasibility criterion in mind, especially in the case of availability of instruments, the test items for testing the following psycho-physical abilities were considered and selected i.e. Body Mass Index (BMI), Speed, Standing Broad Jump, Sit and Reach, Sit-ups, 12 Minutes Run/Walk, Psycho-motor Ability, Concentration ability and Sports Competition Anxiety Test.

The testing protocol of each selected test item was followed carefully for administration of test in a correct and required manner. The reliability of testers and instruments were also established before the start of the data collection. The necessary data was collected with standardized procedure by administering selected psychophysical ability tests as suggested by Hardyal Singh and W. Cooper etc.

The necessary work was done before the start of the test. Firstly, the practice sessions were administered several times of each test with the help of the Supervisor, experts and required support staff etc. All the tests were administered and explained to the subjects by the scholar categorically and left no ambiguity. In case of any doubt raised by the subjects were clarified before taking the test, but no special training was given to the subjects.

The tests were administered and data were recorded as the raw data. To find-out the difference between Kabaddi and Kho-Kho players of Delhi schools on
their selected Physical and Psychological variables, the required statistical calculations were computed with the help of SPSS software. The difference among all the selected motor abilities and psychological variables, the data were collected and analysed by using the descriptive statistics and ‘t’ test. The level of significance was set at .05. When a two tailed equal group statistical significance mean comparison ‘t’ test was employed on both the set of data Kabaddi and Kho-Kho players on selected variables, the results evident significant in majority of the variables.

The following variables were found significant at both 0.05 and 0.01 level of confidence such as: Body Mass Index: ‘t’ value 7.11, Speed Test by 40 M Dash: ‘t’ value 5.89, Standing Broad Jump: the ‘t’ value 4.24, Sit & Reach test: ‘t’ value 4.96, the test of strength endurance- One minute Sit-ups: the ‘t’ value 5.29, Cardio-vascular Endurance in the form of 12 Minutes Run/Walk Test, the ‘t’ value was 5.61, which were significant at both 0.05 and 0.01 level.

The Psychomotor Ability computed the ‘t’ value as 4.62, and Sports Competition Anxiety Test (SCAT) was found with ‘t’ value as 4.54, which was significant at both 0.05 and 0.01 level of confidence, while the tabulated value 2.01 and 2.68 respectively.

Whereas, the Mental Concentration Ability was tested through a test namely: Grid Test was applied and found with the ‘t’ value 1.77, which was not found significant difference at 0.05 level of confidence. Because its calculated ‘t’ value was less than the tabulated value. It may be due to the similar type of Concentration Ability among the Kabaddi and Kho-Kho players.
The Mental Concentration Ability was measured through Grid Test for concentration showed that Kho-Kho players had better scores than the Kabaddi players in mental concentration ability, but there was no significant difference found. It was observed that the level of mental concentration have a close requirement for the Kabaddi and Kho-Kho players.

The Kho-Kho players had reported higher level of anxiety than Kabaddi players. An optimum level of stress and anxiety were observed which indicate about the necessity for optimum / best possible level of sports performance. It was also observed that both Kabaddi and Kho-Kho players found normal level of anxiety. But, Kho-Kho players had little higher level of anxiety than the Kabaddi players which may be due to situational aspect and mood state of the players at the time of administration of the test. Further, the said situation may be considered as one of the limitation of the study.

The data were presented in requisite tables as per the requirement of the delimitations, objectives and selection of the variables. The tables were presented along with the relevant analysis which were also supported the graphical representations. The scholar has drawn certain conclusions out of the findings of the present study and suggested some recommendations for the future research, which may be conducted in related area.
Conclusions:

On the basis of the data analysis, limitations and findings of the present study, the following conclusions were drawn:

1. The significant difference was found in the Body Mass Index - in relation to the Kabaddi and Kho-Kho players. The Kabaddi players’ group was found with a higher level of BMI which shows greater body mass than the Kho-Kho players’ group.

2. The significant difference was found in the Speed Ability tested through 40 M Dash Test. The Kho-Kho players’ group had better speed in comparison to the Kabaddi players’ group.

3. The significant difference was found in the Standing Broad Jump, a test of explosive strength in relation to the Kabaddi and Kho-Kho players. The Kabaddi players’ group had better explosive strength, showing greater jumping ability than the Kho-Kho players’ group.

4. The significant difference was found in the Sit and Reach Test. The Kho-Kho players’ group had better hips and legs flexibility in comparison to the Kabaddi players’ group.

5. The significant difference was found in the One Minute Sit-ups, a test to measure muscular strength endurance in relation to the Kabaddi and Kho-Kho players. The Kabaddi players’ group had better muscular strength endurance of abdomen muscles group, showing greater muscular endurance ability than the Kho-Kho players’ group.
6. The significant difference was found in the 12 Minutes Run/Walk Test of Cardio-vascular Endurance in relation to the Kabaddi and Kho-Kho players. The Kho-Kho players’ group had better Cardio-vascular Endurance, showing greater heart and lungs’ capacity than the group of Kabaddi players.

7. The significant difference was found in the Psycho-motor Ability in relation to the Kabaddi and Kho-Kho players. The Kho-Kho players’ group had better Psycho-motor Ability or Eye-hand Co-ordination, proving better mental and physical Coordinative Ability than the Kabaddi players.

8. There was no significant difference found in relation to Concentration Ability measured through Grid Test between Kabaddi and Kho-Kho players.

9. The significant difference was found in the Sports Competition Anxiety Test (SCAT) in relation to the Kabaddi and Kho-Kho players. The Kho-Kho players’ group had higher level of anxiety than the selected group of Kabaddi players. Whereas, both the groups had optimum level of anxiety to perform better in their respective sports competitions.

**Recommendations:**

In light of the findings and conclusions drawn from the present study, the following recommendations were made for further academic and research pursuit in the field of physical education and sports:

1. The similar nature of studies may be undertaken on female players or counter part of male Kabaddi and Kho-Kho players.
2. The similar studies may be conducted by taking others variables which may affects the performance of the Kabaddi and Kho-Kho players along with others important variables such as: physical, physiological and psychological.

3. The similar nature of studies may also be undertaken by comparing the players of the other team games sports’ competition.

4. Similar studies may be undertaken by comparing the players of the other team games sports’ competition.

5. The similar nature of studies may also be undertaken by comparing the players of the individual sports’ competition.

6. Similar studies may be undertaken by comparing the players belonging to different socio-economic status, geographical conditions and variation in ethnicity.

7. The same type of study can be conducted on other levels of players as subjects like: Senior National or International level.

8. It is also recommended that the training programme for Kabaddi and Kho-Kho players should be different as per their respective needs and requirements of the games.

9. The training for the speed and flexibility should not be neglected for the Kabaddi players as these are important factors to apply difficult technique in Kabaddi as well as to avoid injuries.
10. The safety precautions should always be adopted for the Kabaddi and Kho-Kho training and competition for the safety of the players.

11. A study may be undertaken with fully residential subjects of different age groups junior / senior, men and women, who should be regular in their preparation for the competitions.