

A Study of Breath Holding Capacity Among Elite Level Players of Different Sports Disciplines

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ABSTRACT

The breathing of every player has different form and it has execute their breathing capacity according to their own capable capacity to enhance and kept in practical time as well as it has been included to growth their own development capacity for playing any game or sports in practical way. So there are some basic students from sports are commonly hold their breath as they have the capacity the sports disciplines requires enough capacity to play a good sports and it has convert into winning performance of players so this research is too much important to understand the breathe holding capacity and how to enhance their capacity for converting into win the different sports. Players expiration capacity before breath and after breath is difference because the both capacities requires stamina for playing the sports therefore the researcher tried to find out the conclusion regarding how to develop and enhance breath holding capacity during play the event or sports.

I. INTRODUCTION

There are some players from different discipline are doing good research in sport science subject as well as other sports events because of basically some researchers had done satisfactory level of research not only in sports science subject but also other inter disciplinary subjects so the researcher has been choose this subject to understand basic capacity of player from different game or events. Breath of every player has different level because it has not able to differentiate one to others due to different capacity of other players so that kind of works need to understand basically before and after breathing capacity of players during playing the game as well as practical time.

Some players has good breathing capacity but not able to convert breath holding capacity in practical time or sporting time. Some players has taken good practice for doing best event or game as they have the capacity but they are not converted into winning point of view. Whenever a such player doing very good practice to hold breath for few seconds or its important to enhance the capacity according to the game of player and event from not only one discipline but also different discipline.

II. METHODOLOGY

In this chapter selection of subject, selection of variables, collection of data and the statistical technique used for analyzing the data have been described in this chapter.

Limitations of the research

This research is limited to breathe holding capacity **AFTER EXPIRATION** among elite level players only as well as This research is limited to different sports disciplines only

Sampling frame:

The sampling frame was included Kabaddi, Kho-Kho, Volleyball and track-and field players the aged 18 to 28 years and divided into two groups of age from 18-22 and 23-28. The investigator was made an attempt to classify the sports person based on the aged group. The age also was categorized in several groups.

Sampling method and Sample Size:

The method of sample was purposive–A non-random method of sampling design for sportsman with a specific purpose. Total 200 players from different sports discipline such as Kabaddi, Kho-Kho, Volleyball and track & Field were selected as sample size of the study.

Source of Data:

The study depends mainly on primary source of data. The data was collected through respondents in the form of Questionnaires from 200 sports person of different sports separately, investigator contacting to the player personally and some cases at the venue of Inter-varsity, tournaments. The sportsperson was require to filling out a questionnaire. In collecting the data, the researcher Follow to ethical guidelines, principles, and standards for studies conducted with human beings .Instructions was given to the players before filling these questionnaires by the researcher.

Demographic Information:

The Demographic information was collected through respondents in the form of different descriptive tests. The demographic information about, age, height, weight etc. was obtained before seeking responses.

Universe of the study:

The Universe of the study was Kabaddi, Kho-Kho, Volleyball and track-and field players who have been participating in varsity level tournaments.

Research Design

The design in a research study refers to “the researcher’s overall plan for answering the researcher’s question or testing the research hypotheses”. This study involves a cross sectional, survey of Kabaddi, Kho-Kho, Volleyball and track-and field players in a non-experimental, Descriptive research design. Descriptive studies usually employ some form of questionnaire and ask subjects to fill out the questions. This explores and measures the psychological and physiological traits of Kabaddi , Kho-Kho, Volleyball and track-and field players.

Data processing:

Data processing play very significant role in the interpretation of numerical data obtained from individuals by giving numerical expressions to the relationships and the variations with respect to different aspects. The collected data was analysed as a whole and fragments .The data was checked for accuracy and completeness and was coded and entered into the Statistical Package for Social Sciences (SPSS) software version 16 Descriptive statistics for all studied variables, F-test and post hoc test, were considered statistically technique throughout the study.

Table -1 Mean scores and SDs of breathe holding capacity (after Expiration) among age group (18-22) Elite level Players of different sports disciplines

Breath Holding Capacity (after Expiration)	Numbers	Mean scores	Standard deviations
Kabaddi	30	46.70	19.08
Kho-Kho	30	30.30	12.87
Volleyball	30	33.13	12.39
Athletic	30	41.43	19.79

As per table-1, Shows that the Mean scores and SDs of breathe holding capacity after Expiration among age group (18-22) Elite level Players of different sports disciplines.

The mean scores and the SDs obtained from table -1, reveals that the highest mean score Breathe holding capacity before of Kabaddi players (46.70),and the lowest mean of Kho-Kho players (30.30) and the mean score of the rest falls between these four groups of players from different sports discipline.

SDs Breathe holding capacity after Expiration which is not higher than 19.79 in case of athletic players and not lower than 12.39 in case of volleyball players.

Table 2 The results of Analysis of variance of physiological characteristics with respect to BHC (after Expiration) among four groups of players.

Source variance	DF	Sum of squares	Mean of square	F-ratio
Between Groups	3	5112.15	1704.05	6.33*
Within Groups	116	31183.43	268.82	

Significant at .05level

(f=6.33.P<.05)

Table-2, show that statistically significant difference of breath holding capacity(after Expiration) among playersof different sports disciplines. As above observed in F-ratio was 6.33which is required to be 3,116 df. 2.65 at .05 level of significance. Table 3, Presents the results in order to located the differences of physiological characteristics with respect to B.H.C. (after Expiration) having four groups of players; L.S.D. post hoc test was applied on the B.H.C. (after Expiration) for compared four groups players

Table 3 L.S.D. post hoc test was applied on the B.H.C. (after Expiration) for compared four group players.

Mean Scores					
Kabaddi	Kho-Kho	Volleyball	Athletics	Mean difference	C. D. at 5% level
46.70	30.30			16.40	24.78NS
46.70		33.13		13.56	21.85NS
46.70			41.43	5.26	13.65NS
	30.30	33.13		2.83	5.55NS
	30.30		41.43	11.13	2.74*

*Significant at .05 level

Table- 13 Shows that the L.S.D. post hoc statistical comparison for means difference of B.H.C. (after Expiration) among four groups of players from different sports discipline.

The finding of the study reveals that

1. Insignificant difference of B.H.C. (after Expiration) was found between Kabbadi and Kho-Kho Players.
2. Insignificant difference of B.H.C.(after Expiration)was found between Kabbadi and Volleyball Players.
3. Insignificant difference of B.H.C.(after Expiration)was found between Kabbadi and Athletics Players.
4. Insignificant difference of B.H.C. (after Expiration) was found between Kho-Kho and Volleyball Players.
5. Significant difference of B.H.C. (after Expiration)was found between Kho-Kho and Athletics Players. Result reveals that B.H.C. after(Expiration) of Kho-Kho players incurs significantly less as compare than Athletics players. Kho-kho player was strong cardiovascular fitness than Athletics players.
6. Significant difference of B.H.C. (after Expiration) was found between Volleyball and Athletics Players.

III. CONCLUSION

1. Insignificant difference of B.H.C. (after Expiration) was found between Kabbadi and age group (18-22) Kho-Kho Players.
2. Insignificant difference of B.H.C. (after Expiration) was found between Kabbadi and age group (18-22) Volleyball Players.
3. Insignificant difference of B.H.C. (after Expiration) was found between Kabbadi and age group (18-22) Athletes.
4. Insignificant difference of B.H.C. (after Expiration) was found between age group (18-22) Kho-Kho and age group (18-22) Volleyball Players.
5. Significant difference of B.H.C. (after Expiration) was found between age group (18-22) Kho-Kho and age group (18-22) Athletes.
6. Age group (18-22) Kho-Kho players incurs significantly less B.H.C. after (Expiration) as compare than age group (18-22) Athletes.
7. Age group (18-22) Kho-Kho player was strong cardiovascular fitness than age group (18-22) Athletes.
8. Significant difference of B.H.C. (after Expiration) was found between age group (18-22) Volleyball and age group (18-22) Athletes.

IV. REFERENCES

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