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‘A FORCE VITAL CAPACITY OF KHO – KHO PLAYERS OF TUMKUR DISTRICT’

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- **Abstract;** The study was conceptualized with a purpose to analyze ‘A Force vital capacity of Kho – Kho Players of Tumkur District’ have also been analyzed from the Present Academic year 2019-2020 ,To analyze like Taluk, rural & urban, age wise of the Force vital capacity level among selected Degree College level Kho-Kho players of Tumkur District. This study is delimited to selected six Taluk of Tumkur District Degree colleges Kho-Kho players. This study was delimited to men section.The study was delimited to academic year 2019-20. It was hypothesized that there will not be positive difference in Force vital capacity scores among the selected degree college level Kho-Kho players of Tumkur District

Keywords; Force vital capacity, Kho – Kho, tumkur District, Spirometer.

I. INTRODUCTION

Respiratory system is very essential to sports activities. Shortness of breath is major limitation in most athletes, but in about a third muscle fatigue is an even greater problem. Although exercise does not improve lung function, training helps many athletes with lung diseases by strengthening lung muscles thus improving endurance and reducing breathlessness. Proper warm up and cool down may prevent or reduce the incidence of injuries and induced asthma. The main function of the respiratory system is gaseous exchange. Fast moving exercise causes your heart and breathing rates to increase, delivering fresh oxygen to your blood stream and energy to muscles. Your lung capacity can be increased through regular aerobic workouts, but only to modest amount.

Force Vital capacity is closely related with motor qualities especially endurance. Endurance is one of the elements of physical fitness and it is determined first and foremost by the functional efficiency of the cardio-vascular metabolic and nervous systems as well as the level of co-orientation of the activities of the systems of the body. Force Vital capacity is very essential in the games like Kho-Kho where the players have to perform with endurance and strength endurance for a longer period with breathing mechanism. The players of such games need to have larger lung volume to supply sufficient amount of oxygen to working muscle groups for effective performance. Similarly the proportion of body mass index is also very essential in the above mentioned games. Keeping these aspects ahead the

Statement of the Problem

The study was conceptualized with a purpose to analyze the 'A Force vital capacity of Kho – Kho Players of Tumkur District' have also been analyzed from the Present Academic year 2019-2020

Purpose of the study

The major purpose of this research is “Study on Force Vital Capacity of selected Kho-Kho players of Tumkur District”. The study is conducted on selected Degree college kho-kho players of Tumkur District. The study aims to find out the Force vital capacity level among the Degree college kho-kho players. The study also makes the comparisons on Force vital capacity among the six Taluk Degree college kho-kho players of Tumkur District.

Objectives of the study

- To find out the Force vital capacity level among selected Degree College level Kho-Kho players of Tumkur District.
- To analyze like Taluk, rural & urban, age wise of the Force vital capacity level among selected Degree College level Kho-Kho players of Tumkur District.
- To analyzed the Force vital capacity level among college level Kho-Kho players with standard norms to find out in which category they will fall in.

Delimitations of the study

- This study is delimited to selected six Taluk of Tumkur District Degree colleges Kho-Kho players.
- This study was delimited to men section.
- The study was delimited to academic year 2019-20.
- Only 40 subjects were selected for the study.
- The study is limited to the age 18-22years.

Hence these are considered as delimitations of the study

Limitations of the study

The following were the limitations of the study:

- The study depends on primary sources available in the Degree colleges of Tumkur District.
- The study is limited to select Tumkur District, Karnataka State.
- The study is limited to measurement of Force vital capacity level among degree colleges Kho-Kho players.

Hypotheses of the Study

- It was hypothesized that there will not be positive difference in Force vital capacity scores among the selected degree college level Kho-Kho players of Tumkur District.
- It was hypothesized that there will not be positive difference in Age among the selected degree college level Kho-Kho players of Tumkur District.
- It was hypothesized that there will not be positive difference in Area like urban and Rural among the selected degree college level Kho-Kho players of Tumkur District.

REVIEW OF RELATED LITERATURE

Chahar (2013) conducted a study to compare the Force vital capacity among different groups of sportsmen. Thirty inter-university level sportsmen of age group 17-24 years from Gwalior were selected. The variables such as age, height, weight and Force vital capacity of the sportsmen were studied. The Force vital capacity (FVC) in L/min of the sportsman was measured with the help of PRO computerized spirometer. The result showed significant difference in Force vital capacity among the different groups. The swimmers showed maximum Force vital capacity

METHODOLOGY

Sources of Data

Required data for this study was collected from Department of Public Instructions and Department of Youth and Sports Affairs Karnataka, in the age group 18 to 22 years Kho – Kho Players of Tumkur District.

Selection of Subject

The researcher will selected 40 Kho – Kho Players from Tumkur, Gubbi, Tiptur and Kunigal various Taluk of Tumkur District. Data collected by simple random sampling method from Department of Public Instructions and Department of Youth and Sports Affairs Karnataka

Selection of Tests

To measure the selected variables the respective tests are administered and represented in the table 1.

Table-1: Variable and Tests

S.N	Variables	Tests
1.	Vital Capacity	Forced Vital Capacity(FVC)

Method of using spirometer instrument

- Hold the mouth flow device by the handle.
- Before each use, make sure the spirometer is reset to starting value.
- Subject is asked to sit straight, their mouth should be empty, ensure normal breathing condition.

- Subject should put the mouth piece in the mouth and seal the lips and teeth lightly around the mouth piece.
- Lab technician should close the nasal breathing with the help of nose clip.
- Subject should take three normal inhalation and exhalation. Following this process they should take deep inhalation and forceful exhalation.
- We should blow out as hard as we can, Remember a “deep breath” or ‘fast breath’. Fast is better than a “slow blow”.
- Note the reading values when the flow of breathing is maximum.
- Record the best readings on a vital graph sheets.

Lab technician should take subjects height and weight before conducting

Scoring

The best of the three trials was recorded as the test score.

Cooper Normative data for Force Vital Capacity (**FVC2max**)

Male (values in ml/kg/min)

Age	Very Poor	Poor	Fair	Good	Excellent	Superior
18-21	<35.0	35.0-38.3	8.4 -45.1	45.2 -50.9	51.0-55.9	>55.9
22-25	<33.0	33.0-36.4	6.5 -42.4	42.5 -46.4	46.5- 52.4	>52.4

Statistical Technique for Analyzing of Data

The study was based on true randomized group design. The data collected were subjected to various statistical analyses. After discussing with the statisticians, experts in the field of physical education the following statistical procedures were like mean employed in this study.

The obtained data was analysed by applying statistical mean, it would be tabulated and analyzed. Represented data on tabular form by using different types of tables interpretations of data were presented in the following chapter by using percentage and direct interpretation with the assistance of table wherever necessary.

STATISTICAL ANALYSIS & INTERPRETATION OF DATA

The purpose of this study was to examine and analysis the A Force vital capacity of Kho – Kho Players of Tumkur District. To fulfill the above purpose, I have drawn few important objectives to know the Force vital capacity level of Kho – Kho Players of selected Tumkur District, participated in Various District level Tournaments, during the year 2019-2020. In this chapter, all analysis and interpretation of the responses received from the respondents with regard to the measure the selected variables the respective tests are administered and the selected Kho – Kho Players pertaining to the study have been presented in thesis. The collected data were analyzed by mean employed way statistical techniques were used to analyze the data.

GRAPH-I

The Force vital capacity level among Degree College Kho-Kho players of Different Area of Tumkur District

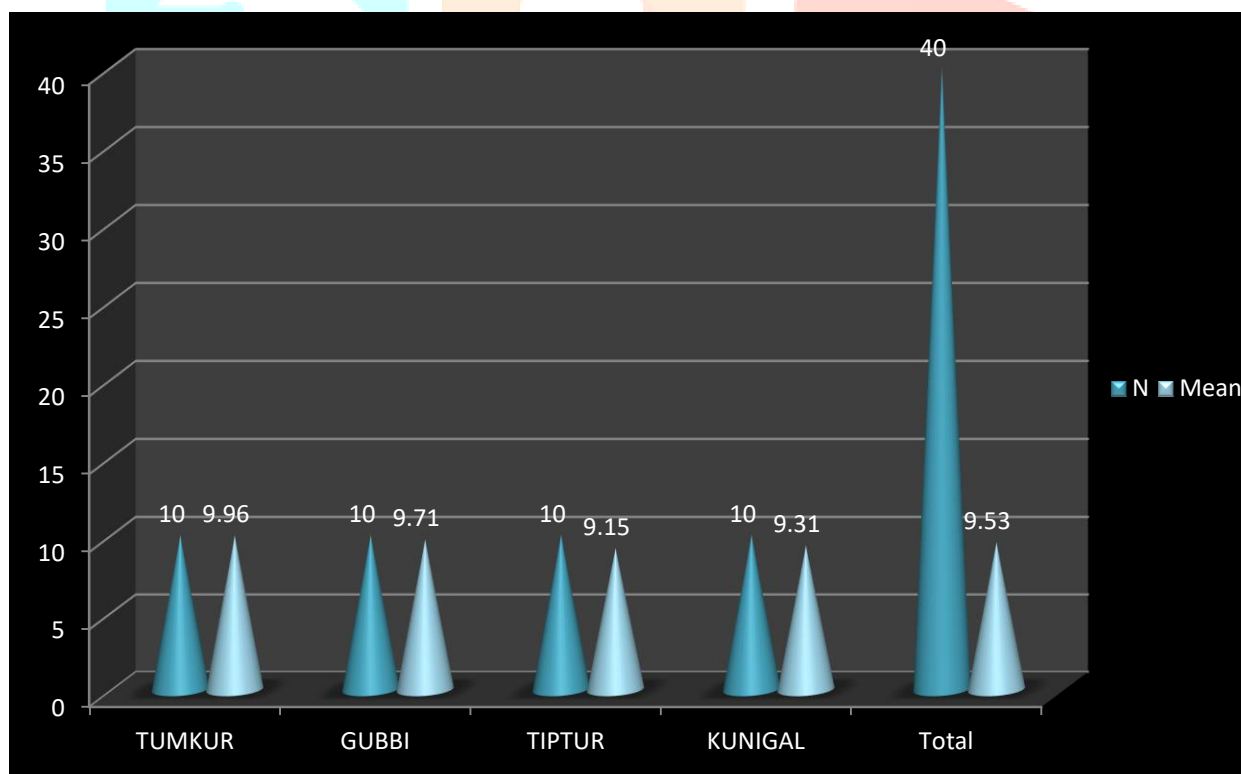


TABLE-II

The Force vital capacity level among Different Age level Kho-Kho players of Tumkur District

N	Age Level	Mean	
12	18-19	10.64	Good
12	19-20	10.48	Good
08	20-21	7.01	Good
08	Above 21	7.01	Good
40		8.78	Good

This investigation was found out the Force vital capacity among the different age level of degree college Kho-Kho players. Forty Degree colleges Kho-Kho players from different age level were taken as subjects for this study. Their Force vital capacity was measured by using spirometer. The statistical analysis to which the data was subjected has been presented in this chapter.

It can be seen from the Table.No.2 that the values of 18-19 years (10.64), 19-20 years (10.48), 20-21 years (7.01) Kho-Kho players fall under 'Good' category according to standard norms of cooper normative data for FVC2 max. Above 21 (7.01) Kho-Kho players fall under 'Good' category according to standard norms of cooper normative data for FVC2 max. Thus, it can be concluded that average values of all Age level Degree college Kho-Kho players is 8.78 which fall under 'Good' category according to standard norms of cooper normative data for FVC2max. In other words the above four area Degree college Kho-Kho players have efficiency to perform under fatigue conditions in Kho-Kho game. The graph 2 also reveals the same.

SUMMARY, CONCLUSION, AND RECOMMENDATION

'Study on force vital capacity of Kho – Kho Players of selected Tumkur District' a very vast topic. Karnataka as a state is huge in size. Force vital capacity means the amount of air

which the lungs can store and also capacity to involve in a physical activity for a longer period with the help of oxygen. Lung is a pair of respiratory organ in a human body where in exchange of oxygen and carbon dioxide takes place and the amount of air which the lungs can store the capacity of an individual to involve in a physical activity for a longer period of time with the help of the oxygen. Lung capacity still continues to be one of the important lung volumes frequently appraised in respiratory physiology. The study was taken to assess and compare the lung capacity of high school volleyball and handball players. A spirometer was used to measure the lung capacity using the standard method.

The purpose of this study was to examine and analysis the A study on the vital capacity level of Kho – Kho Players of selected Tumkur District. To fulfil the above purpose, I have drawn few important objectives to know the vital capacity level of Kho – Kho Players of selected Tumkur District, participated in Various District level Tournaments, during the year 2019-2020. In this chapter, all analysis and interpretation of the responses received from the respondents with regard to the measure the selected variables the respective tests are administered and the selected Kho – Kho Players pertaining to the study have been presented in thesis. The collected data were analyzed mean by employed way statistical techniques were used to analyze the data.

All the data pertaining to the present study were examined test to find out whether A study on the vital capacity level of Kho – Kho Players of selected Tumkur District. The analysis of data and interpretation is done based on the statistical results and findings of the present study. The data analysis for the present research was done quantitatively with the help of descriptive statistics. The descriptive statistical techniques like mean, standard deviation and t-test were used to find out significant difference between the variables were used during data analysis.

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