

## Research Paper

# CO-RELATION OF KHO-KHO PLAYING ABILITY WITH HEALTH FITNESS AND MOTOR FITNESS OF BOYS

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## ABSTRACT

### INTRODUCTION

Indian culture is the oldest culture in this world. It has gifted many things to this world. Literature, arts, sports, philosophy, scientific theories and social, political and economical thoughts spread in the world are originated from Indian culture. The most ancient and holy religious treatise 'Rig-Veda' is the national asset of India. Greatest epics Mahabharata and Ramayana are from India. For the welfare of mankind the concept of Ramrajya (utopian world) is derived from Ramayana. In the same way India culture is the mother of various games and sports in this world. We find reference of various games and sports in the ancient treatises of India.

Basically Kho-Kho is Indian traditional game. Kho- kho game is played particularly in rural and urban areas. This game has become popular in other states also. All states also have their own Kho-kho Associations, which are affiliated to Kho-kho Federation of India.

Kho -Kho game originated in India has considerably long tradition. The Kho-Kho game is , at present ,becoming most popular among the indigenous activities in Physical Education in India & neighboring Countries in South Asia .In our country the competition on Kho-Kho are being held in school , College level interuniversity level , all India interuniversity level occasionally attempts are being made to include this Kho-Kho game in the area of competitive Sports at the international level .Traditionally the Kho -Kho game is played by Indian because it involves less financial requirement & small play field area .Moreover , many participants can play the game together as a team sports & can in rich health & fitness . Like other games & sports this Kho-Kho game is also organized for competition at most of the junior & tertiary level even the Zonal ,State & inter State intercollegiate & all India university levels. Kho-Kho at competitive level requires high performance, which depend upon the procedure "How the player are selected & way the selection criteria are reliable & valid? Although there is a multiplicity of opinions about this question & as till date there is no solution to this, it was thought desirable by present investigator to design & standardize co-relation of Kho-Kho playing game ability test, which could be of great use in selecting the sport talents in Kho-Kho for exhibiting top performance.

Kho-Kho and Sports have an important place in India. Since Ancient times because of several reasons, Sports of many kinds are being played in our Country since a long time. Several kinds of exercises have been in vogue even today. Some sports are played for the growth of our body. Whereas some re played for the purpose of winner in Tournament and record in this game.

Researchers in India decided to study the playing Kho-Kho being the traditional game. The researcher in the aforesaid research studied the Co-relation of Kho-Kho

playing this game related to player's physique and what results it shows on their health fitness and motor fitness playing ability. For this objective boys coming from 18 to 25 Years group are selected by S. R. T. M. University Nanded.

By using Survey and observe Research method to Inter-collegiate and Inter-University players are formed after coaching, Training and Tournament the Survey observation for 300 days practically the playing kho-kho game by players. Playing ability with health fitness and motor fitness ability tests were formed in both playing kho-kho team. The standardized measurement of the tests were taken and it was evaluated through the medium of Rating scale ability test measure Grade and conclusion were drawn.

### 2 STATEMENT OF THE RESEARCH PROBLEM

The study of co-relation of kho-kho playing ability with health fitness and motor fitness is done in the present research. It aims at study of co-relation of playing kho-kho ability of the player of kho-kho with motor fitness and health related fitness. For this purpose kho-kho must be observed with the co-relation by measuring their health related fitness and motor fitness.

In this research concerned, the Researcher has study and measured the Health related fitness and Motor fitness of the Adolescents kho-kho players. For this study and the measurements of Adolescents, the researcher had regularly observed Adolescents play of kho-kho game fixed period.

The kho-kho game is being played since so many years. But nobody has been found the benefits of playing this game on physical physiological, social, mental, aspect of the player. So Researcher has decided to find out "Co-relation of playing ability with Motor fitness and Health fitness of boys." This study will enlighten the fitness of the kho-kho player and their performance in all these tests

The rural player can know their fitness through co-relation of kho-kho playing ability with health fitness and motor fitness.

### 3 OBJECTIVES OF THE RESEARCH THE STUDY

The present study will be conducted with the following objectives

1 To find out the relationship of motor fitness with playing ability of kho-kho player.

2 To study the co-relation of kho-kho playing ability with health related fitness

### 4 HYPOTHESIS OF THE STUDY

**H1** There is no significant co-relation of kho-Kho playing ability with cardio-respiratory endurance.

**H2** There is no significant co-relation of playing kho-kho on strength and endurance of abdominal muscles.

**H3** It is Hypothesised that there may not be significant co- relation between Motor fitness with playing ability of kho-kho player

**H4** There may not be significant relationship between kho-kho playing ability and Health related fitness.

**H5** It is Hypothesised that there is no significant co-

relation of kho-kho playing on flexibility & agility

**H6** It is Hypothesised that there is no significant co-relation of kho-kho playing on explosive strength.

**H7** It is Hypothesised that there is no significant co-relation of playing kho-kho on power.

**H8** There is no significant co-relation of playing kho-kho ability on speed

**H9** It is Hypothesised that there may not be significant co-relation between Motor fitness with playing ability

### 5SCOPE AND LIMITATION OF THE STUDY

#### copeS

The study will have wider scope to the players of all games as well as common person those who are not player in relation to health of his life to have in any field of life.

#### Limitation of the study

Limitation is those conditions which are beyond the control of the researcher and those conditions may place respirations on the conclusion of the study or may have in influence over the accuracy of results find inns.

1The study is limited to the girl's players of S. R. T. M. University Nanded.

2The study is limited to Daily routine of the player

3 The study is limited to Non players S.R.T.M.University & college

4 The study is limited to Physical fitness, mental fitness, Social fitness, Emotional fitness of the Kho-Kho player.

5The study is limited to habits of player of kho-kho game.

#### Delimitation of the study

1The study is delimited to the S. R. T. M. University Nanded

2The study is delimited to the college players of S. R. T. M. University Nanded.

3The study is delimited to Motor fitness i) Sit-ups ii) Pull-ups iii) Standing Broad Jump IV) 30mtrs. Shuttle runs v) 600m. Run

4The study is delimited to Health fitness I) B.M.I. II) Fat III) 600m. Run (cardiovascular endurance) IV) 100m.Speed V) Balance VI) Standing Broad Jump (Power)

5The study is delimited to only for kho-kho game.

6The study is delimited to only boy's players.

7The study is delimited to playing ability of kho-kho player

8The study is delimited to the player who has played at least, S. R. T. Marathwada University level.

Selected subjects Health related fitness and Motor abilities, strength, muscular and cardiovascular endurance, peed agility, flexibility and power

### 6METHOD OF THE STUDY

“The present research is based on Survey Method”

### 7THE NATURE OF DESIGN

This piece of research was designed simply on the basis of the principles of developmental Research (Hubbard 1973). A test battery of co-relation of kho-kho playing ability with motor fitness and health fitness was applied to collect the data and the co-relation of the same was established scientifically. After standardization of the kho-kho playing ability with motor fitness and health fitness of boy's applicability of the same was determined by conducting .The various tests of fitness and playing ability by which Co-relation of kho-kho players were identified with the help of the standardized test.

The researcher has applied the survey and comparative method in the present research study. Similarly he has brought into AAPERD youth motor fitness and health related fitness test battery was use. There were two rating scale test used to measure the playing ability offensive and defensive as a sources of data.

### 8POPULATION & SAMPLING

In Swami Ramand Teerth Marathwada University, Nanded, there are students of four District Namely Latur, Nanded, Parbhani and Hingoli. Among these students the researcher has decided to mode of survey & co-relation, comparative data of 400 kho-kho players of age group 18 to 25 Years. But among 400 players the researcher have conduct the survey of only 243 kho-kho players which ware available who have participated as kho-kho player in inter-college & inter-University kho-kho , coaching training and tournament.

The researcher conducted test of co-relation of kho-kho playing ability with health related and motor fitness of the pilot study for selection of samples.

### 1TOOLS OF RESEARCH

Motor fitness and health fitness test tools of research as below.

	Variables	Test
1	Body mass index	Skin fold caliper
2	Body Fat	Skin fold caliper
3	Balance	Static Balance test
4	Cardio-respiratory Endurance	600 m. Run
5	Speed	100m.Run. (Speed
6	Explosive power	Standing broad jump
7	Arm strength	Sit-ups
8	Arm strength	Pull -pus
9	Cardio-respiratory Endurance	600 m. Run.
10	Agility	Shuttle run
11	Playing ability test	Rating scale

### 10STATISTICAL TOOLS

As scientific analysis has got special importance in the study of researcher, statistical knowledge in it has been utilized specially. As the present research has got the nature of survey and observation design, the researcher has to frame a scheme of how to collect information and which means. He has to analyze the accumulated information and then to assess the hypothesis and has to determine whether to accept it accordingly or not for to give it up.

The researcher has made use of the following statistical data in order to draw conclusion from the obtained figure extracted from the co-relation of kho-kho playing ability with motor fitness and health fitness of boys in the present research.

- I) Mean
- II) Standard Deviation
- III) Factorial ANOVA was be used for this study
- IV) Spearman co-relations co-efficient test

**Table 1**

**Correlation Coefficient between playing ability and B. M. I., Body Fat% cardio Vascular Endurance, Sit ups,**

	Playing Ability	B.M.I.	Fat %	Cardio Vascular Endurance
B.M.I.	-.151(*)			
Fat %	-.343(**)	.571(**)		
Cardio Vascular Endurance	-.575(**)	.053	.161(*)	
Sit Ups	.542(**)	.018	-.185(**)	-.661(**)

\* Significant at 0.05 significance level  
 \*\* Significant at 0.01 significance level

**Table.2**  
**Correlations between playing ability and cardio Vascular Endurance, Speed, Standing Broad jump, Pull ups, Shuttle Run, Balance**

	Playing Ability	Cardio Vascular Endurance	Speed	Standing Broad Jump	Pull Ups	Shuttle Run	Balance
Playing Ability	1.000						
Cardio Vascular Endurance	-.575(**)	1.000					
Speed	-.630(**)	.442(**)	1.000				
Standing Broad Jump	.444(**)	-.545(**)	.391(**)	1.000			
Pull Ups	.388(**)	-.554(**)	.297(**)	.607(**)	1.000		
Shuttle Run	.467(**)	-.540(**)	.364(**)	.590(**)	.555(**)	1.000	
Balance	.511(**)	-.440(**)	-.393(**)	.335(**)	.334(**)	.399(**)	1.000

\*\* Correlation is significant at the 0.01 level (2-tailed).

**11 RESULTS**

1 Correlation between playing ability of B.M.I... There is negative correlation between playing ability and B.M.I. Therefore the researcher accepted hypothesis No. 1.  
 2 Correlation between playing ability of Fat %... There is negative correlation between playing ability and Fat%. Therefore the researcher accepted hypothesis No. 2.  
 3 Correlation between playing ability of Balance. There is Positive correlation between playing ability and Balance. Therefore the researcher rejected hypothesis No. 3  
 4 Correlation between playing ability of Cardio Vascular Endurance. There is Negative correlation between playing ability and cardio-vascular Endurance. Therefore the researcher accepted hypothesis No 4.  
 5 Correlation between playing ability of and 100 met. Speed there is negative correlation between playing ability and Speed. Therefore the researcher accepted hypothesis No 5.  
 6 Correlation between playing ability of Standing Broad Jump This indicates that there is positive correlation between playing ability and Standing Broad Jump. Therefore the researcher rejected hypothesis No 6.  
 7 Correlation between Playing ability and Sit-ups .This indicates that there is positive correlation between playing ability and Sit-ups. Therefore the researcher rejected hypothesis No 7.  
 8 Correlation between Playing ability and Pull-ups There is positive correlation between playing ability and Pull-ups. Therefore the researcher rejected hypothesis No 8.  
 9 Correlation between Playing ability and Shuttle Run There is positive correlation between playing ability and Shuttle Run. therefore the researcher rejected hypothesis No 9  
 10 Correlation between Playing ability and 600 Mt. Run There is negative correlation between playing ability and 600 meter Run. Therefore the researcher accepted hypothesis

No10.

**12 CONCLUSIONS**

The following conclusions are drawn from the present Research work  
 1 Playing ability and fat have close relationship in Kh-kho players  
 2 Playing ability and cardio vascular ability have close co-relation of Kho-kho players.  
 The players of Kho-Kho game have close relationship with playing ability and balance  
 4 The players of Kho-Kho game have close relationship with playing ability with Explosive strength have close relationship.  
 5 Theirs is close relationship between playing ability and abdominal strength.  
 6 There is close relationship between the playing ability and Arm strength.  
 7 The players of Kho-Kho game have more agility because the results indicate the positive co-relation with playing ability with agility(Shuttle run)  
 8 There is no reection ship between speed and playing ability of Kho-Kho Game.  
 9 There is no correlation between playing ability and Fat% of Kho-Kho Game  
 10 There is close correlation between the playing ability and 100m. Run.

**13 RECOMMENDATIONS**

Recommendations for further Research  
 1 The same type of Research may be conduct for another game like kabuki, Dodge ball, Tennis volleyball, Atyapatya.  
 2 The new research scholar may conduct the research on co-relation of playing ability with psychological and sociological variables. of Kho-Kho game.  
 3 The Research on skill test of Kho-Kho game may conduct.  
 4 The similar type of Research may be conduct on National player of Kho-Kho.  
 5 The researcher has studied the health fitness as well as motor fitness abilities of the boys 18 to 25 Age group. Research on the several factors and co-relation of Kho-Kho playing ability with health fitness, Fat in the lean body fat in the wrist can be investigated.  
 6 Such type of research can be made on the boys belonging to different age groups.  
 7 The similar type of Research may conduct on female player of Kho-Kho Game.  
 Application of this Research finding  
 8 More students may be conducted to identity the speed of the body for selection of team of Kho-Kho.  
 9 Coaches and training can use the Researches of this investigation for training and coaching of Kho-Kho play use these findings for their improvement of performance  
 10 The Parents may use the findings of this Research to select the choice of game to play by his son or daughter.  
 11 Kho-Kho player may use the findings of this Research to select the choice of game

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