



Comparative study of playing ability of Kho-Kho and football on health related fitness of Sit and Reach Test

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INTRODUCTION:

In present we have realized the importance of physical education. Everyone should have the knowledge of physical education in today's world. This should be prescribed for the limited schools and colleges and others have come to know its importance of physical education

Even still today we cannot take and give physical education because if socially accepted sports, western sports, training methods and financial condition taken into consideration, it is not easy for all to facilitate with physical education, Health education and recreation and to get it. If schools are taken into account, physical education, facilities and amenities of sports cannot be made available to all students in one particular school.

Researchers have focused on the influence of parents having on the youth athlete's participation, Motivation, achievement of goals and beliefs about success. Motivational outcomes good and poor sports behavior and the Childs sports carrier

In today's world many different plans, skills are implemented through physical education and sports in order to develop player's different abilities. and to make sure that they give their best performance this plans are not going or running smoothly due to rural and urban facilities, financial difficulties and the lack of proper guidance

As compared to football Kho- Kho can be played in each and every school because the required play ground for this sport is not like cricket, football, hockey play grounds it requires a very small place. so there is no difficulty in playing this game in rural are in every school . The importance of this sport in convinced through research. This kho – kho game is not expensive s there is no necessity of instruments and equipments for playing this game, by this sport every one can get physical education and the pleasure of playing kho-kho . By playing kho-kho body gets all sided and fair exercise it helps the body to be sturdy and healthy through this medium of sports only for this it is necessary to see the effects, distinctive features and usefulness of the game kho kho nd get it known by playing it

Football is team sport game in which players attempt to score goals by passing and dribbling the ball down the field passed. By defending the Opposing defenders by kicking or heading the ball into the goal net outwit the defending goal keeper

Both the games Kho Kho and football requires good health, stamina, understanding and knowledge of skills etc. It helps to improve this sport and to reform its ancient traditional standard. Simultaneously still no research is done on this neglected Indian sports and so research on this subject is important and essential. Due to research on this subject will be rendered to Football & Kho Kho. This traditional sport is getting the approval of the Society and Governments of sports.

OBJECTIVES OF RESEARCH:

- (1) To Examine health Related Physical Fitness of Football and Ko-Kho Players.

Null Hypothesis

There is Comparatively Difference between playing Football & kho-kho on flexibility.

Comparative Hypothesis

There is Comparatively Difference between playing Football & kho-kho on strength and endurance of abdominal muscles.

SCOPE AND LIMITATIONS

This study has larges scope to conduct similar research program for other Indian cities.

The limitations of the study were as follows

- (1) The researcher could not collect more data for more accurate results.
- (2) The researcher cannot impose restrictions on the diet of the selected subjects for research.
- (3) The study does not control daily routine of the subjects.
- (4) The study does not consider caste, Religion, Community background, race, Heredity, family background, Socio- economic status.
- (5) The study does not consider environmental factors.

Delimitation of research

- (1) The study is delimited only New Madhyamic Vidhyalaya Unchagaon Tal.Karveer.Dist Kolhapur.
- (2) The study is delimited for 9th standard students.
- (3) The study is delimited only for the boys having age group of 14 to 16 Years
- (4) The study is delimited to' Health Related Physical Fitness ability.

METHOD OF THE STUDY:

The experimental method was followed for this research work. The study was designed i.e. True experimental design and pre-test and post-test. Equivalent group design were applied.

POPULATION SAMPLE:

For the present research the total strength of the students includes the students (Boys) of 9th Standard belonging to the age group of 14 to 16 years ie

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Adolescents. Near about 200 students learning in New English School, Gadmodshigi , Kolhapur. were taken into consideration for their selection.

EXPERIMENTAL AND CONTROL GROUP:

Simple random sampling method pertaining at Lottery system into the two groups of 30-30 will be divided as samples out of 60 students having equal ability.

Later on by way of Lottery system group number 1 was selected as experimental group and group number 2 was selected as control group. Thus two groups were selected out of total strength of population from the sample.

Method of working was fixed as shown below in the present research.

Subject	Pre-test	→	Equal Group →	Experimental Group	→ Post-Test
Sample			Equal Group →	Control Group	

PLANNING OF DURATION FOR TREATMENT AND TEST TAKEN AT THE TIME OF ACTUAL TRAINING:

The researcher had given the game Kho-Kho and Football as the treatment of actual training of the experimental group where as only movements of warming up were given to the controlled group. But practically Kho-Kho and Football was not given the treatment but it had duration of 135 days. 135 days were divided into three parts each. Consisting of 45 days and after a gap of 45 days each post-test was taken. The planning of duration of this treatment was as follows.

	Treatment (Training)		Time Duration		Treated/Trained Group
1	Warming up	→	10 to 15 Minutes	→	Experimental Group and Control Group
2	Conditioning movements	→	10 to 15 Minutes	→	Experimental Group
3	Kho-Kho and Football Game as a treatment	→	25 to 30 Minutes	→	Experimental Group
4	Relaxation Exercises	→	10 to 15 Minutes	→	Experimental Group

The above arrangement of the term for the experimental group was given in a week for six days (Excluding Sunday). One session of 55 to 75 Minutes i.e 6.30 am to 8.30 am was given, where as the controlled group was given only warming up and sent home. The treatment of actual training was given for 135 days in three stages of 45 days for the main study.

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TOOLS OF RESEARCH:**Health related fitness tests**

- 1) Flexibility – Sit and Reach Test

Statistical Tools

The statistical principals were used for the scientific explanation of collected information and while giving up the main concepts or accepting it or presenting its conclusions, statistics is used.

- 1) Mean
- 2) Standard Deviation
- 3) Repeated Measure ANOVA computer package.

Descriptive statistics of Sit and Reach Test**Table****Descriptive statistics of Sit and Reach Test of Experimental and Control group**

Sit and Rich	Mean			Standard Deviation		
	Pre	mid	Post	pre	mid	post
Experimental	0.12	0.33	0.34	0.06	1.10	1.10
control	0.14	0.12	0.12	0.11	0.06	0.06

OBSERVATION AND INTERPRETATION

From Table there were 30 subjects each in experimental and controlled group. Mean performance of the pre-Test for sit and reach test of experimental group was 0.12 centimeters (SD = 0.06) and for control group it was 0.14 centimeters (SD = 0.11).

Mean performance of Mid- test for sit and reach test of experimental group was 0.33 centimeters (SD = 1.10) and for control group it was 0.33centimeters (SD= 1.10).

Mean performance of the post – test for sit and reach test of experimental group was 0.34 centimeters (SD = 1.10) and for control group it was 0.12 centimeters (SD = 0.06).

Table
Difference Between-Subjects Effects sit and reach

Dependent Variable: sit_and reach					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.874 ^a	5	.175	36.816	.000
Intercept	5.432	1	5.432	1.144E3	.000
Group_1	.182	2	.091	19.161	.000
Group_2	.391	1	.391	82.382	.000
Group_1 * Group_2	.301	2	.150	31.688	.000
Error	.826	174	.005		
Total	7.132	180			
Corrected Total	1.700	179			

CONCLUSION:

By observing Significance values (Sig. values) in the above table, the F value corresponding to corrected model is 36.816 (P value i.e. Significance value =0.000) it is significantly different at 0.05 level of significance at 5 degrees of freedom. The F values corresponding to Group 1 (Pre, Mid and Post) and Group 2 (Experimental and Control) are 19.161 (P=0.000, df=2) and 82.382 (P=0.000,df=1) respectively, these are significantly different at 0.05 level of significance. Also interaction between Group 1 and Group 2 is present in the model because the F value corresponding to interaction (Group_1*Group_2) is 31.688 (P=0.000, df=2) is significantly different at 0.05 level of significance that means the performance of Experimental and Control group is different also performance in pre, mid and post test is different

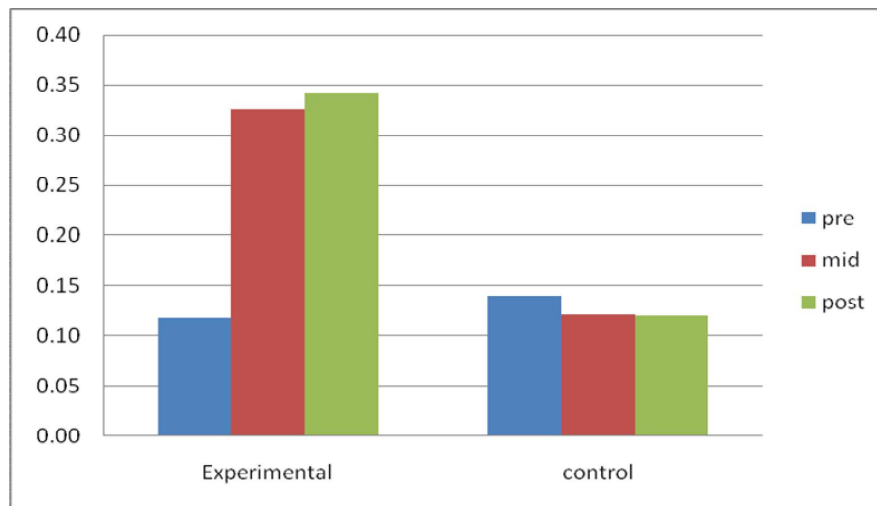


Fig. Sit and Rich

By observing above descriptive statistics table and bar chart, we conclude that in experimental group Sit and Rich of students are uniformly increasing over pre, mid and post test, while in control group there is no any effect is observed.

RESULTS AND CONCLUSIONS:

With the help of the available information and statistical analysis the following conclusions were drawn and for this Repeated measure ANOVA was used and the standard significant level 0.05 was chosen.

Within the limitations, the present study concludes the following conclusions :

1) There was significant effect of playing Kho-Kho and Football it was observed at Level 1 Vs Level2. This indicates that playing Kho-Kho and Football improves flexibility of the subjects.

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