ORIGINAL ARTICLE

COMPARATIVE STUDY OF AGILITY, AND FLEXIBILITY MEASURE OF BASKETBALL AND KHO - KHO PLAYERS

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Abstract:

Man is social animals and the primary distinction from other animal is his ability to learn. He has been endowed with intelligence which enables him to modify his animal tendencies in accordance with the demands of the environment and the education which enhances his intelligence and capabilities so as to ensure proper progress in life. Education is a process which enables a man to acquire knowledge through conducive attitude, which is essential for being a human being. Objectives are the particular and precise means employed to realize an aim. Objectives are steps, advances, and realities in relation to the aim. They are considered worthwhile as they measure up to the standard of the aim. The objectives are something desirable, which seem possible of being attained, and through which the final goal is brought nearer to realization. The American physical education association listed five objectives. a. Physical fitness b. Mental health c. Social-moral character d. Emotional expression and control e. Appreciation's Physical Education, sports & physical fitness are interrelated terms. One of the significant aims of every physical education & sports programmed is to develop physical fitness meant merely muscular strength. This concept of fitness has also undergone a change, now a new concept of "Total fitness means that state which characteristic the degree to which the person is able to function".

KEY WORDS:

Flexibility Measure , Basketball and Kho - Kho , social animals .

INTRODUCTION

The results of review of literature presented are of greater importance for prediction of different games and sports although more research is needed in the area. There are relatively many studies relating to flexibility but researcher had taken the latest review which shows that flexibility of every individual is differ it is mainly depends on the fitness or exercise done daily by an individual. Flexibility mainly depends upon joint mobility as well as muscles elasticity property and it can be gain through regular stretching exercise. Hence in many study it shows significant. The results of review on agility and strength revealed that many studies shows significant difference on agility and strength amongst different age groups, games, sports activities and trainings schedule, some learning point toward with the intention of ready for action round rupture behavior implement among maximal attempt may possibly fabricate development in gallop and suppleness presentation. There seems to be an agreement on the findings of the studies pertaining to reaction time many studies show significant difference some shows with the aim of be relevant position rejoinder inclination during an added straight bearing is significant for hurry hastening beginning a

contestant. This is dependable through the suggestion to enlarge netting straight whim creation with sleigh draw or by means of expandable fighting campaign.

METHODOLOGY

As every research demands a systematic method and procedure likewise this chapter adopts the following procedures including information regarding research design, source of data, sampling method, selection of subjects, criterion measures, selection of test, description of test and collection of data etc. A research become successful accompanied and supported by some reliable and authentic data. The statistical analysis of the gathered data provides a well-knit picture of a complete and successful hypothesis as pre-sated by the researcher. The chapter has been divided into the following headings:

Source of data
Selection of the subjects
Design of the study
Criterion measures
Administration of the test
Tester's reliability and reliability of test
Instrument reliability
Collection of the data
Classification and Tabulation of Data

Sources of data

The data pertaining to this study was collected by administrating the appropriate tests described below on the 16-19 years players of Maharashtra stet level tournament, who were participated at least Maharashtra stet level tournament where healed in Amravati.

Selection of the subject

15 male basket ball players and 15 male kho-kho players, who had participated in stet level tournament be preferred as matters used for this learning. The period of the subject is range beginning eighty (16) sixteen years to nineteen (19) years.

Design of the study

The design of the study was random group design, as 15 players from volleyball and 15 players from basketball and kho-kho of field ground .were select randomly for the purpose of the study.

Collection of the data

The data pertaining to this study was collected by administrating the above mentioned test on 15 male basketball players and 15 male kho-kho players, who had participated in stet level tournament. The measurements were taken where the tournament would be healed.

Statistical Analysis

Statistical procedures constitute the means by which quantitative data such as test scores from any individuals are organized, analyzed, and interpreted. As Walker expressed this concept, "statistical method is one of the devices by which men try to understand the generality of life." In this chapter researcher have extended data table wise and suggests statistical treatments that may be appropriate for each design. Significant level is found out by the application of 't' test.

Statistical Treatments of the entire test.

Mean and Standard Deviation (SD) of all the test were calculated by the formula, mention below

M   = $\Sigma x...N$

Σx = Sum of raw scores.

N = Number of subjects.

SD   = $\dfrac{\sqrt{\Sigma x^2 - (\Sigma x)^2}}{\mathcal{N}}$

Σx^2 = Sum of squares of raw scores.

Σx = Sum of raw scores.

N = Number of subjects.

Level of significance was calculated by the 't' ratio as follows

Table no 1
Comparison of agility between basketball and kho-kho players

AGILITY		
	Basketball	**Kho-Kho**
Number	15	15
Mean	13.57	12.96
SD	1.04	0.90
SE-IND	0.0072	0.0054
SE	0.11	
MD	0.61	
OT	5.43*	
TT	1.96	
LS	0.05	

Significant at 0.05 level with 298 degree of freedom tab t

SD	Standard Deviation
SE	Standard Error
SE-IND	Standard Error Individual
MD	Mean Deviation
OT	Obtained T Value
TT	Tabulated T Value
LS	List Significant

It was hypothesized that there will be significant difference between mean performance of the basketball and kho-kho players in agility.

It is seen from the table no. 1 that there is a difference in the mean performance of basket ball (13.57) and kho-kho (12.96). The value of 't' to be significant at 0.05 level at 298 degree of freedom is 1.986. As the obtained value of 't' is above 1.986 that is 5.439 which shows that there is a significant difference in agility of basketball and kho-kho players.

Figure no. 1
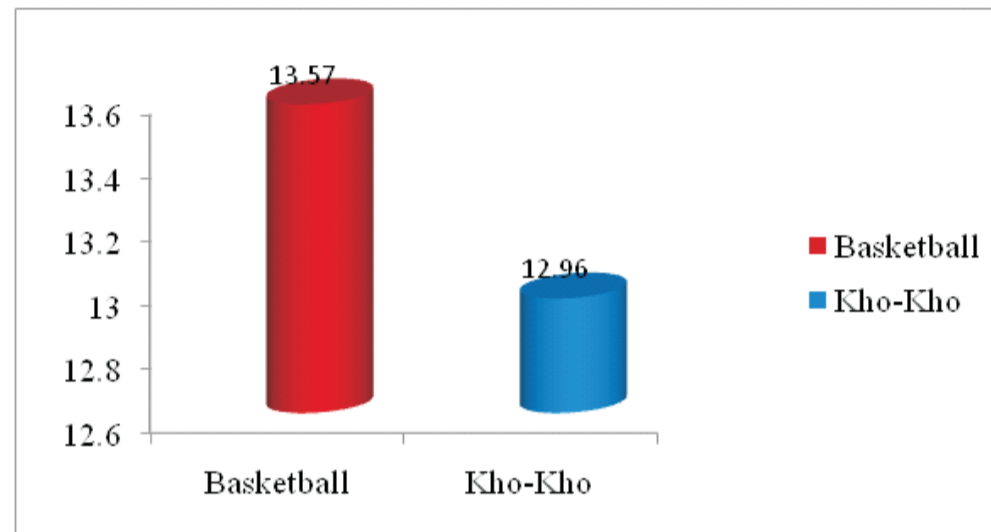
Mean performance of basket ball and kho-kho players in Agility.

Table no. 2
Comparison of Flexibility between basket ball and kho-kho players

| Flexibility		
	Basket ball	Kho-Kho
Number	15	15
Mean	15.56	12.26
SD	4.17	2.91
SE-IND	0.11	0.056
SE	0.41	
MD	3.3	
OT	7.93*	
TT	1.96	
LS	0.05	

Significant at 0.05 level with 298 degree of freedom tab t

It was hypothesize with the intention of in attendance there will be significant difference between mean performance of the basket ball and kho-kho players in flexibility.

It is seen from the table no. 4 that there is a difference in the mean performance of basketball (15.56) and kho-kho (12.26).

The value of 't' to be significant at 0.05 level at 298 degree of freedom is 1.986. As the obtained value of 't' is above 1.986 that is 7.93 which shows that there is a significant difference in flexibility of basket ball and kho-kho players.

Figure no. 2
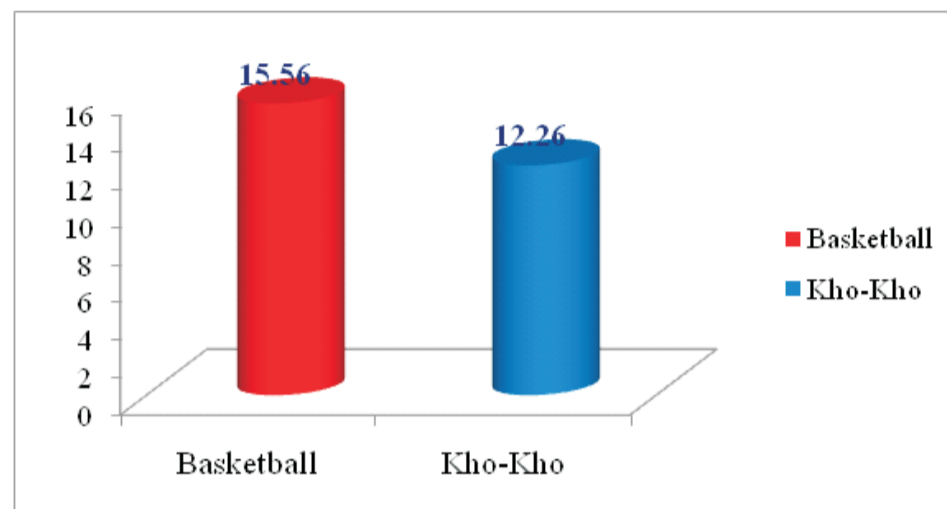
CONCLUSION

A sample of 30 players from J. C. Junior College Karanja Dist - Washim who had participated in Maharashtra State was taken as subjects to recognize the difference between basket ball and kho-kho players.

After the statistical analysis of the data the following conclusions were elucidated:

There is similarity between reaction time of both the legs of basketball and kho-kho players as the obtained't' ratio of right leg (1.349) and left leg(0.624) is significantly lesser than the tabulated 't' ratio 1.968.
Strength was measured by the vertical jump having't' ratio as 5.410 was significant at the 0.05 level.
Significant difference was establish connecting the agility of basketball and kho-kho players as the calculated 't' value (5.439) is greater than the tabulated 't' value 1.968 which shows that kho-kho players having more sprinting ability than basketball players.
Stretching was measured with the help of sit & reach test having't' ratio (7.936) which shows significant at the 0.05 level.

Within the limits of this investigation which has studied the effects of activity on tests of agility, strength and flexibility it seems logical to conclude that there was similarity between reaction time of basket ball and kho-kho players. There will not be any significant difference in the reaction time of different body segments of basket ball and kho-kho players.

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