JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue

JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A STUDY ON MOTOR FITNESS VARIABLES OF COLLEGE LEVEL KABADDI PLAYERS IN RELATION TO PLAYING ABILITY OF KABADDI GAME

[1]Dr. Basavaiah K.M.

[1] Physical Education Director

[1] Government First Grade College

[1]Jayanagar, Yediyur, Bengaluru 560 071, Karnataka, India.

Abstract : The aim of research is to find out the relationship of motor fitness variables with playing ability of inter-college Kabaddi players. For this purpose, sixty college Kabaddi college players affiliated to Bangalore University those who have represented inter-college level tournaments, Karnataka were randomly selected as subjects. The age of the elected subjects were ranged from 18 to 25 years. The Motor Fitness variables such as speed, explosive strength, cardio respiratory endurance and flexibility were taken into consideration for the present investigation as independent variables. The Overall Playing ability was assessed by touching skills, kicking skills, foot work, catching skills, movement in chin, defensive skills and tactics studied as dependent variable. Speed was tested by 50 M Run, explosive strength was tested by standing broad jump, cardio respiratory endurance was measured by 600 yards Run/Walk Test and flexibility was assessed by sit and reach test. The Karl Pearson's Product Moment Coefficient of Correlation was used to examine the relationship between variables. The level of significance was fixed at 0.05 level of confidence. The playing ability was connected with motor fitness variables of speed, explosive strength, cardio respiratory endurance and flexibility. The said motor fitness components are most important for development of playing ability of Kabaddi players.

Index Terms - Kabaddi, Players, Playing Ability, Motor fitness, speed, explosive strength, cardio respiratory endurance, flexibility

I. INTRODUCTION

Now-a-days sports are no longer supposed to be experienced only in leisure time. Today, these are one of the major parameters to judge a country's development and growth. This is the fast becoming great career alternatives for the future generations. Today is the modern competitive Kabaddi era. Kabaddi players are one of the extremely imperative functions by which national and international recognition and prestige is expanded.

The Kabaddi game had various fundamental skills. For all sort of activities, motor fitness is incredibly essential. It is narrates to the ability to meet the demands of the environment specifically to preserve, to will stand stress, to oppose fatigue and to posses the power for an abundant life. Motor fitness is an portion of total fitness and it is observed as the capacity to function in every way at ones best. There are number of fitness components i.e. speed, flexibility, agility and maintenance of body weight. Motor fitness is to be measured by performance and this performance is based on a composition of many factors. Some of these factors evidently more dominant than others and thus have a higher relation with physical fitness.

Jeyaraj and Gopinathan's (2014) investigation found that the physical fitness variables of speed, agility, explosive power, shoulder strength, endurance and flexibility variables were significant relationship with Kababdi playing ability. Devaraju and Needhiraja's (2013) study revealed that Leg explosive strength, Speed, Muscular endurance and Muscular power become the common characteristics which can predict the playing ability in Kabaddi players. Saravanan and Amuldoss (2013) investigation found that strength showed significant relationship with kabaddi playing ability at University level. Motor fitness is an important component for an athlete in order to obtain optimal performance in sports. The level of motor abilities components is of prime 'importance for learning of various activities and perfection of different skills. Usually motor abilities have been viewed as a combination of factors that are basic to all moments. All the factors of motor ability are chiefly concerned with the ability of the player and his capacity of action.

Statement of the Problem

"A STUDY ON MOTOR FITNESS VARIABLES OF COLLEGE LEVEL KABADDI PLAYERS IN RELATION TO PLAYING ABILITY OF KABADDI GAME"

Objective of the study

The objective of the study is to find out the relationship between independent variables (Speed, Explosive Power, Cardio Respiratory Endurance and Flexibility) and dependent variable (Playing Ability of Kabaddi game

II. METHODOLOGY

2.1 Type of Research Method : Descriptive Survey Method

2.2 Selection of Samples: 60 (Sixty) college level Kabaddi college players affiliated to Bangalore University those who have represented inter-college level tournaments, Karnataka were randomly selected as subjects. The age of the elected subjects were ranged from 18 to 25 years.

2.3 Selection of Variables:

The Motor Fitness variables such as speed, explosive strength, cardio respiratory endurance and flexibility were taken into consideration for the present investigation as independent variables. The Overall Playing ability was assessed by touching skills, kicking skills, foot work, catching skills, movement in chin, defensive skills and tactics studied as dependent variable. Speed was tested by 50 M Run, explosive strength was tested by standing broad jump, cardio respiratory endurance was measured by 600 yards Run/Walk Test and flexibility was assessed by sit and reach test.

2.4 Criterion Measures: The following variables selected for the study with tests and criterion measures

Variables		Tests	Criterion Measure
Independent	**Motor Fitness**		
	1. Speed	50 Meters Run	In Secs.
	2. Explosive Strength	Standing Broad Jump	In Meters
	3. Cardio respiratory Endurance	600 Yards Run/Walk	In Minutes
	4. Flexibility	Sit & Reach Test	Secs.
Dependent	Overall Playing Ability	It was measured by a panel of experts consisting three persons (Overall playing ability in terms of touching skills, kicking skills, foot work, catching skills, movement in chin, defensive skills and tactics)	In scores

2.5 Statistical Procedure

The Karl Pearson's Product Moment Coefficient of Correlation was utilized to find out the relationship of playing ability of Kabaddi Players with their motor fitness variables (speed, explosive strength, cardio respiratory endurance and flexibility). The level of significance was fixed at 0.05 level of confidence.

III. RESULTS

The relationship of elected motor fitness variables of Kabaddi players with their overall playing ability was computed by the obtained values of coefficient of correlation. The results are given in Table-1.

Table-A: Table-A shows relationship between Motor Fitness variables and Overall Playing Ability of Degree College Kabaddi players

Variable	N	Mean	Standard Deviation	'r' value	Level of Sig.
Speed	60	6.371	0.415	– 0.400	*
Explosive Strength	60	2.231	0.234	+ 0.392	*
Cardio respiratory Endurance	60	2.485	0.421	– 0.407	*
Flexibility	60	5.455	1.986	+ 0.242	NS
Overall playing ability	60	73.966	11.869	-	

* Significant at 0.05 level.

From the said table-A it was seen that playing ability (overall) of the Kabaddi degree college players was connected with speed, explosive strength, cardio-respiratory endurance and flexibility as elected motor fitness variables. The said table clearly observed that there was correlation between overall playing ability and motor fitness variables of speed, explosive strength and cardio respiratory endurance as the obtained 'r' values –0.400, +0.392, and –0.407 were greater than the table value 0.250 at 0.05 level of significance

except flexibility as the obtained 'r' value of 0.242 is less than the table value 0.250 at 0.05 level of significance.

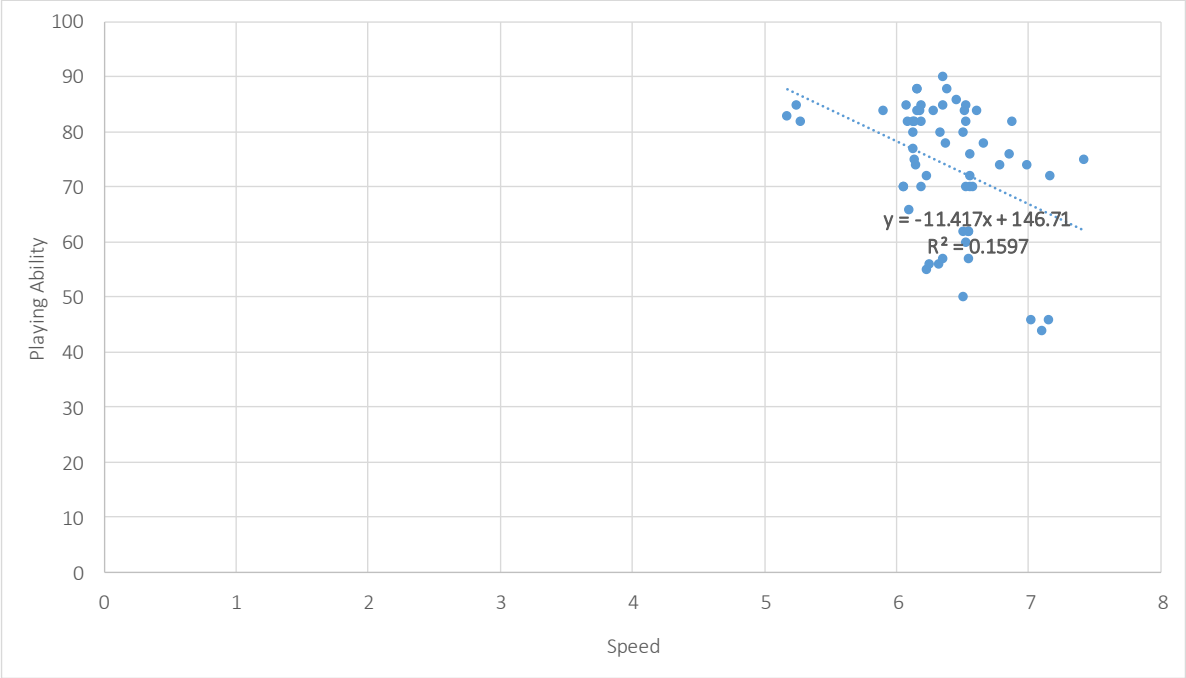

Fig.1: Scatter figure shows the raw scores of Speed with Playing Ability of College level Kabaddi players.

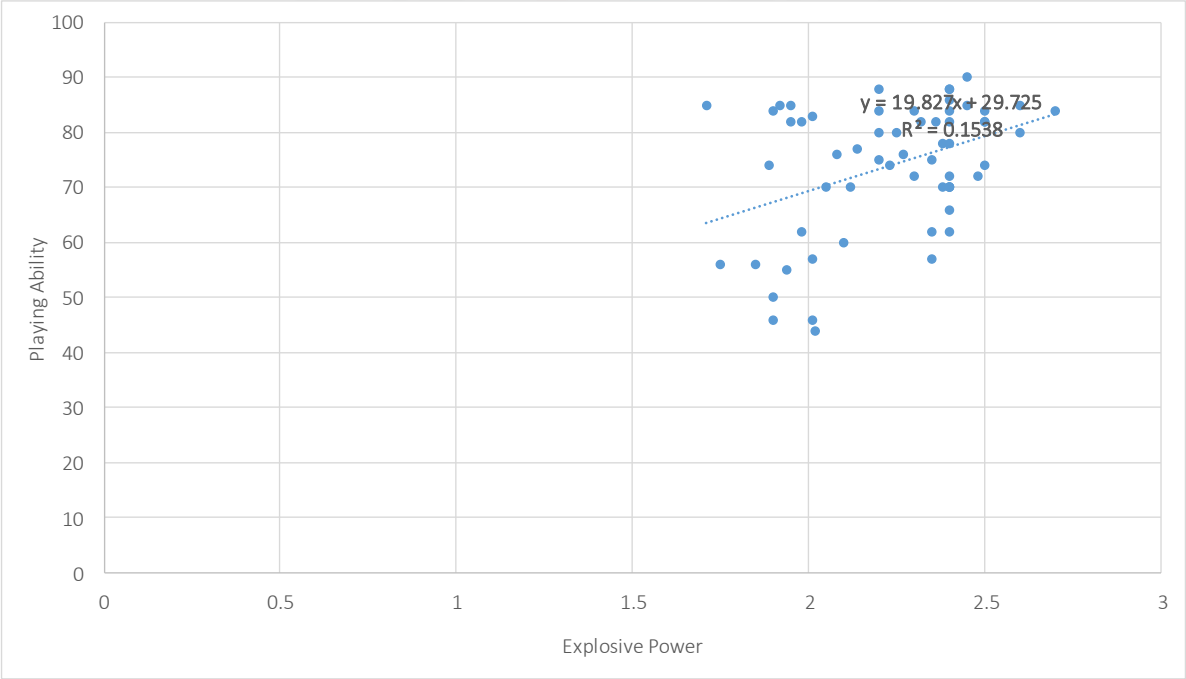

Fig.2: Scatter figure shows the raw scores of Explosive Power with Playing Ability of College level Kabaddi players.

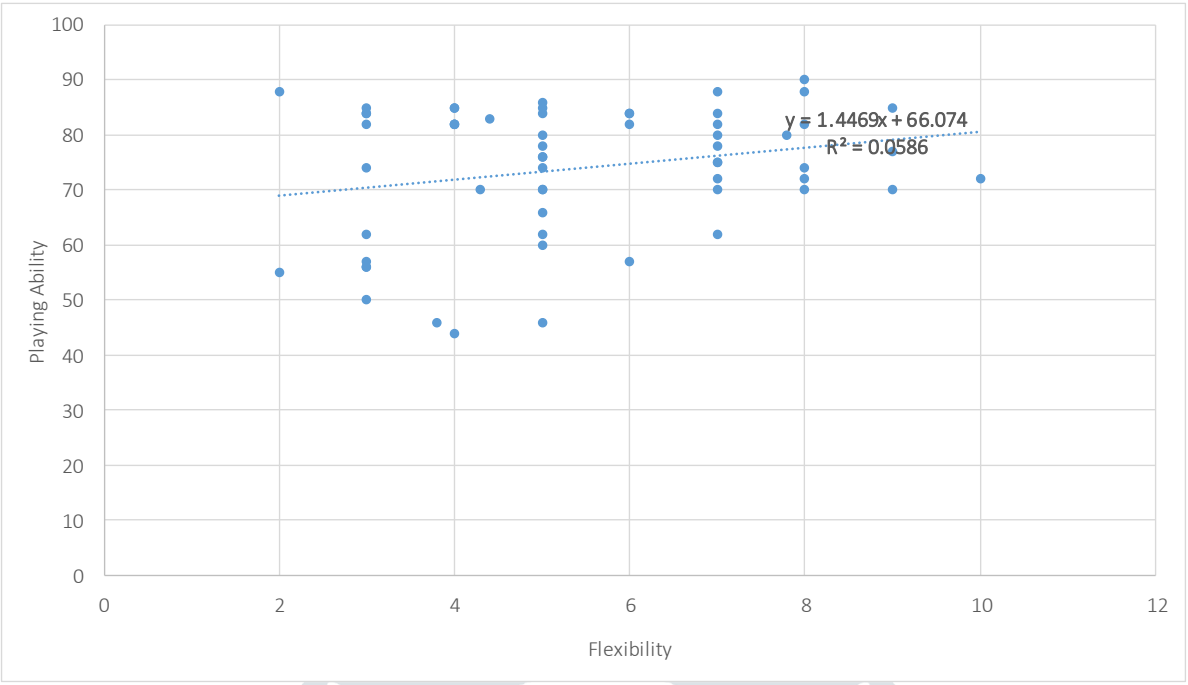

Fig.3: Scatter figure shows the raw scores of Flexibility with Playing Ability of College level Kabaddi players.

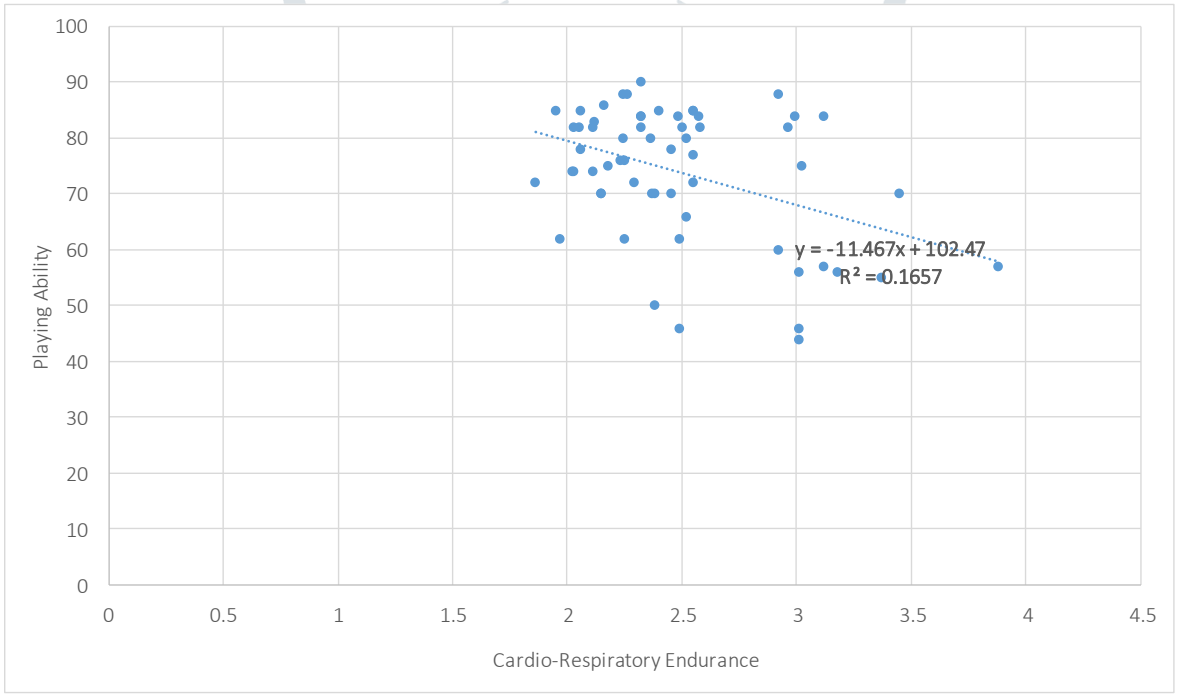

Fig.4: Scatter figure shows the raw scores of Cardio-Respiratory Endurance with Playing Ability of College level Kabaddi players.

IV. DISCUSSION OF RESULTS

Every game needs motor fitness and particular skills which are important for success in any competitions. The motor fitness components required differ as per the demands of the skills and the particular game. Kabaddi is the indigenous game involves varied fitness components. The outcome of the present investigation shows that there was significant correlation between selected motor fitness variables of speed, explosive power and cardio respiratory endurance with overall playing ability of college level Kabaddi players. The similar results concurred with Jeyaraj and Gopinathan (2014) and Devaraju and

Needhiraja (2013). The motor fitness will be improved through various resistance and plyometric exercises with specific training schedule.

V. CONCLUSION

From the present investigation it was observed that there was significant correlation between selected motor fitness variables (speed, explosive strength and cardio respiratory endurance) and overall playing ability of college level Kabaddi players.

VI. REFERENCES

[1] Barrow H.M. and McGee R.M. (1979). "Practical Approach to Measurement in Physical Education." (3rd ed), Delhi, Surjeet Publications, P.75.

[2] Devaraju K. and A. Needhiraja. "Prediction of Playing Ability in Kabaddi from Selected Anthropometrical, Physical, Physiological and Psychological Variables among College Level Players." Elixir Psychology (2013), 56: 13212-13215.

[3] Garret H.E., Statistics in Psychology and Education, Bombay: Feffer and Simons Ltd., 1981.

[4] Jeyaraj N. and P. Gopinathan. "Relationship of Selected Physical Fitness and Psychological Variables to Kabaddi Playing Ability." Indian Streams Research Journal (2014), Vol.4(4): 1-6.

[5] Kansal, D. K. (1996). Test and Measurement in Sports and Physical Education. New Delhi:D.V.S. Publications.

[6] Mathews, Donald K. (1973). Measurement in Physical Education, Philadelphia: W.B. Saunders company, p. 36.

[7] Williams, J. G. P. (1962). Sports Medicine, Edward Arnold Ltd.: London, p.1.