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A study on kabaddi playing ability of selected physical variables among state level women kabaddi players

Jyoti Savalagi and Dr. Jyoti A Upadhye

Abstract
The purpose of the study was to "a study on kabaddi playing ability of selected physical variables among state level women kabaddi players". The subjects for this study were selected from state level kabaddi competitions who had participated in state level kabaddi competition. 50 (fifty) subjects from state level female kabaddi players were selected for the present study. The ages of the subjects were in the age ranging between17 to19 Years. In the study, the data were collected on the various physical variables (i.e. agility, leg explosive strength and endurance (in min)), The appropriate statistical methods have been performed and used such as descriptive statistics including mean, standard deviation and 95% confidence interval. The Karl Pearson's product moment correlation coefficient analysis was applied to assess the linear relationships or magnitude and direction of relationship between the variables. The multiple linear and step wise linear regression analysis was performed to assess the cause and effect relationship and also predicting. Followed by correlation analysis and linear regression analysis (multiple linear and step wise) with interpretations. The principle of the usefulness, the different sections of this chapter of the study has been organized under different headings.

Keywords: kabaddi playing ability of selected physical variables

Introduction
Sport includes all forms of competitive physical activity or games which, through casual or organized participation, at least in part aim to use, maintain or improve physical ability and skills while providing enjoyment to participants, and in some cases, entertainment for spectators. Sports and games can be a great lesson in time management and they provide the spirit of competition that drives them to give extra effort. Through sports children learn to respect authority and rules. Sport increases self-esteem, mental alertness and it reduces stress and anxiety.

Sport develops a sense of friendliness among the children and develops their team spirit. It helps children to develop mental and physical toughness. A sport shapes their body and makes it strong and active. Children should actively participate in sports to avoid being tired and lethargy.4 Athletic endeavours, both amateur and professional, have a tremendous economic, political and cultural influence on our society. Watching and playing sports provide ways to escape the stress of our daily lives and come together as a community. Hosting sporting events can boost tourism and revenue for a city.

What is a Game
A game is a recreational activity involving one or more players. This can be defined by A) a goal that the players try to reach; B) some set of a rule that determines what the players can or cannot do. Games are played primarily for entertainment or enjoyment, but may also serve an educational or situational role game is a structured or semi-structured activity, usually undertaken for enjoyment. Key components of games are goals, rules, challenge, and interactivity. Games generally involve mental or physical stimulation, and sometimes both. Many games help develop practical skills, serve as a form of exercise, or otherwise perform an educational, stimulation or psychological role.

Known to have been played as far back as prehistoric times, games are generally distinct from work, which is usually carried out for remuneration, and from art, which is more concerned with the expression of ideas.

However, the distinction is not clear-cut, and many games may also be considered work, art, or all three.

Computer game designer Chris Crawford attempted to define the term game using a series of dichotomies

1. Creative expression is art if made for its own beauty, and entertainment if made for mane
2. A piece of entertainment is a plaything if it is interactive. Movies and books are cited as examples of non-interactive entertainment.
3. If no goals are associated with a plaything, it is a toy.
4. If a challenge has no "active agent against whom you compete," it is a puzzle',

Games and Sports

There is no clear line of demarcation between games and sports. Generally, sports are athletic in nature, and have an element of physical prowess, but then so do many games. For cultural anthropologists, the distinction between games and sports hinges on community involvement. Sports, as opposed to games, often require special equipment and playing fields or prepared grounds dedicated to their practice, a fact that often makes necessary the involvement of a community beyond the players themselves.

Origin of Kabaddi Game

The sport has a long history dating back to pre-historic times. It was probably invented toward of group attacks by individuals and vice-versa. The game was very popular in the southern part of Asia played in its different forms under different names. A dramatized version of the great Indian epic, the "Mahabharata" has made an analogy the game to tight situation faced by Bahaman's the heir of the Pandora kings when he is surrounded on all side by the enemy. Buddhist literature speaks of the Gautama Buddha playing for recreation.

Objectives of the Study

To assess the relationships between physical variables with playing ability of state level women Kabaddi players

To find out the significant predictors of playing ability of state level women Kabaddi players by overall analysis of selected physical variables (i.e., agility, leg explosive strength and endurance).

To find out the significant predictors of playing ability of state level women Kabaddi players by physical variables (i.e., agility, leg explosive strength and endurance).

Hypotheses

- There is significant influence of physical variables on the performance of kabaddi players.
- There may be significant influence of physical variables in improving the on predication the performance of the players.

Multiple Linear Regression Analysis

Hypotheses

- Physical variables (i.e. agility, leg explosive strength and endurance (in min)) would not be significant predictors of playing ability of state level women Kabaddi players

Delimitations of the Present Study

1. This study was confined only 50 state level kabaddi players who participated in the state level kabaddi competition of Karnataka state India.
2. The study was only women kabaddi players.
3. The study is further delimited to a sample 50 players form kabaddi game.
4. The subjects selected were in the age ranging between 17 to 19 years.
5. The study was delimited to the term physical variables to import bodily characteristics including fitness variables essential for kabaddi player's agility, strength and endurance only.

Limitations of the Study

1. Since the sample selected for this study were from different which might have an effect on the study also considered as one of the limitations of the study.
2. No special motivation technique were used during tests. Therefore, the difference may occur in performance due to lack of motivation was another limitation of the study.

Methodology

The subjects for this study subjects were selected from state level kabaddi competitions who had participated in state level kabaddi competition. 50 (fifty) subjects from state level female kabaddi players were selected for the present study. In order to ensure the cooperation from the samples the investigator had discuss with them in presence of their respective physical education teachers, managers and coaches. The investigation of this study was made clear by instruction in order to assertion that there was no ambiguity among the subject's samples regarding the efforts which they had to put in for the successful completion of the research.

The investigator reviewed the available scientific literature pertaining to the game of kabaddi books, articles, periodicals, journals, research papers, magazines. According to the discussion with supervisors, availability of instruments, feasibility criteria and the relevance of the variables to the research study. With the above criteria in mind the following physical, anthropometrical and psychological variables

Selection of the Tests

To measure the selected variables the respective tests are administered and mentioned below.

Table 1: Summary of Playing Agility Scores of State Level Women Kabaddi Players

		Values
Minimum		16.00
Maximum		36.00
Mean		24.58
S.D		4.92
Variance		24.21
95% confidence intervals	Lower	23.18
	Upper	25.98

The above table depicts the mean, range, standard deviation, variance and 95% confidence intervals of playing ability scores of state level women Kabaddi players. The mean and SD of playing ability scores of state level women Kabaddi players is 24.58±4.92 with 95% confidence interval (23.18, 25.98). The summery and nature of distribution of playing ability scores of state level women Kabaddi players is also presented in the following figure.

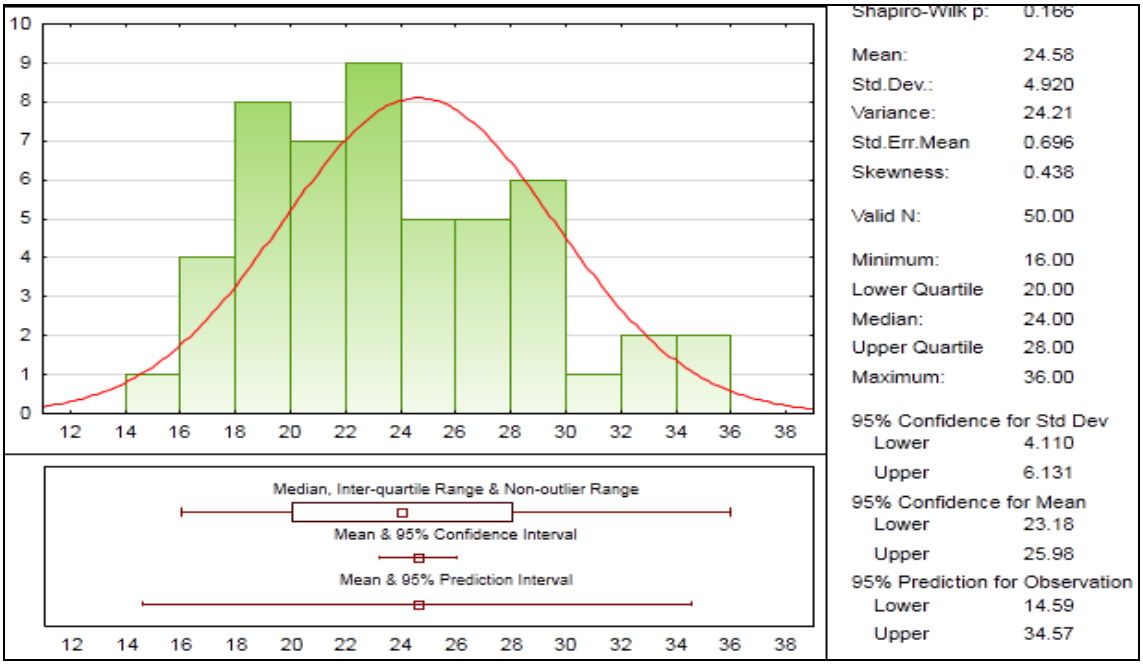

Fig 1: Summary of Playing Agility Scores of State Level Women Kabaddi Players

Table 2: Summary of Physical Variables (I.E. Agility, Leg Explosive Strength and Endurance (In Min)) Of State Level Women Kabaddi Players

Physical variables	Min	Max	Mean	SD	Variance	95% CI for mean	
						Lower	Upper
Agility	11.67	20.93	15.46	1.93	3.72	16.00	11.67
Leg explosive strength	176.00	210.00	189.90	7.08	50.09	191.91	176.00
Endurance	8.10	11.12	8.65	0.73	0.54	8.86	8.10

The above table depicts the range, mean, standard deviation and variance of physical variables (i.e., agility, leg explosive strength and endurance) of state level women Kabaddi players. The considerable and smaller value of standard deviation and variance (dispersion measures) was seen in all the physical variables (i.e., agility, leg explosive strength and endurance) in state level women Kabaddi players. It means that, they have least variability. The summery and nature of distribution of all physical variables (i.e., agility, leg explosive strength and endurance) are also presented in the following figures.

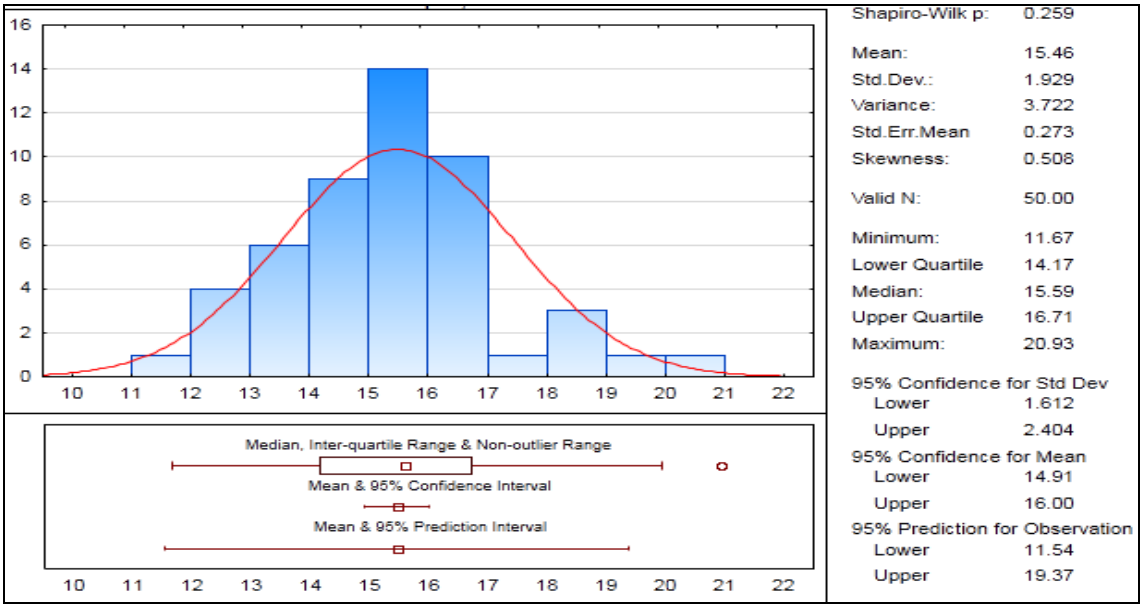

Fig 2: Summery of physical variables (i.e., agility, leg explosive strength and endurance) of state level women Kabaddi players

Correlation Analysis

This section, the author calculated linear relationships between playing ability with physical variables (i.e. agility, leg explosive strength and endurance (in min)), psychological variables (i.e. stress, anxiety and aggression); anthropometric variables (i.e. height, weight, arm length and leg length) and playing ability of state level women Kabaddi players by applying the Karl Pearson's product moment correlation coefficient and significance was tested by t test based on correlation coefficient. The results are presented in the following tables with hypotheses.

Null hypothesis: There is no significant relationship between playing ability physical variables (i.e. agility, leg explosive strength and endurance (in min))ofstate level women Kabaddi players presents

Alternative hypothesis: There is a significant relationship between playing ability and physical variables (i.e., agility, leg explosive strength and endurance (in min)) of state level women Kabaddi players. To test the above null hypothesis, the Karl Pearson's product moment correlation coefficient was performed and results are presented in the following table.

Table 3: Pearson's Correlation Co-Efficient Between Physical Variables (I.E. Agility, Leg Explosive Strength and Endurance (In Min)) With Playing Ability of State Level Women Kabaddi Players

Physical variables	Correlation between playing ability scores of state level women Kabaddi players with				
	r-value	r^2	df	t-value	p-value
Agility	0.7599	0.5774	48	8.0990	0.0001*
Leg explosive strength	0.5819	0.3386	48	4.9572	0.0001*
Endurance	0.6048	0.3658	48	5.2618	0.0001*

Indicate 5% level of significance ($p<0.05$)

It is evident and clearly seen from above table that

1. A significant and positive correlation was observed between playing ability and Agility (r=0.7599, t=8.0990, $p<0.05$) of state level women Kabaddi players at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the Agility increases the playing ability of state level women Kabaddi players also increases linearly and significantly and vice-versa.
2. A significant and positive correlation was observed between playing ability and Leg explosive strength (r=0.5819, t=4.9572, $p<0.05$) of state level women Kabaddi players at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the Leg explosive strength increases the playing ability of state level women Kabaddi players also increases linearly and significantly and vice-versa.
3. A significant and positive correlation was observed between playing ability and Endurance (r=0.6048, t=5.2618, $p<0.05$) of state level women Kabaddi players at 5% level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the Endurance increases the playing ability of state level women Kabaddi players also increases linearly and significantly and vice-versa.

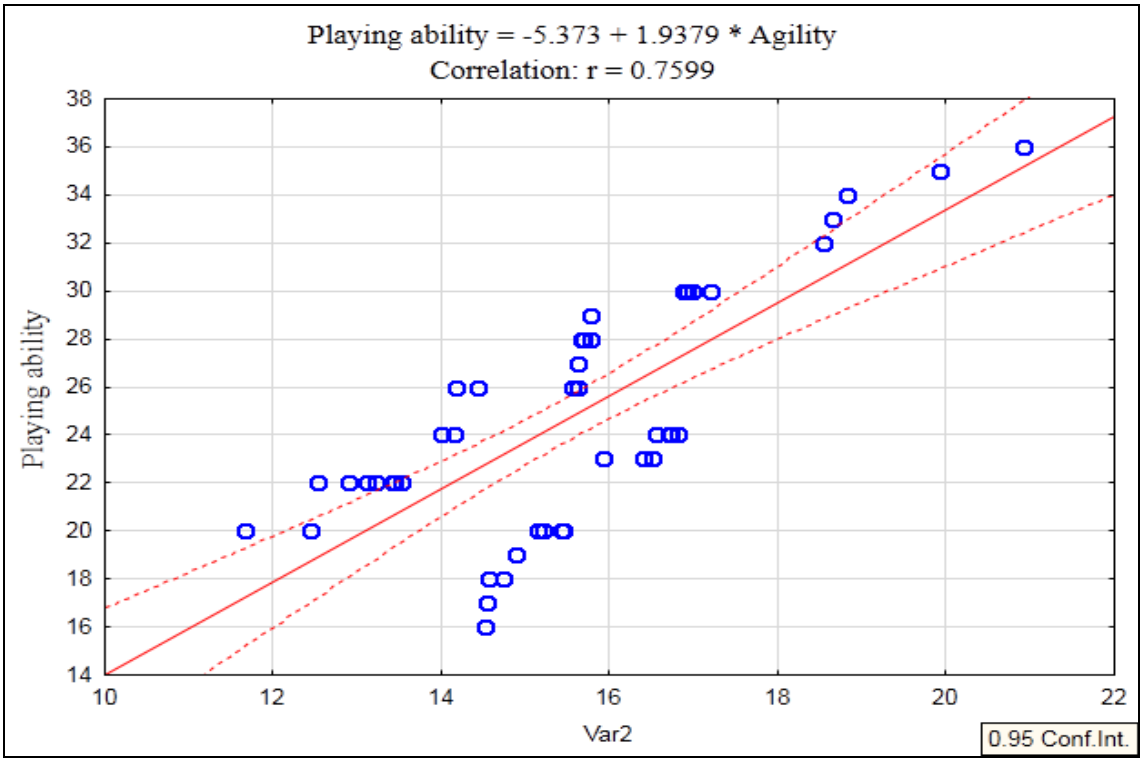

Fig 3: Scatter diagram showing correlation between agility with Playing ability of state level women Kabaddi players

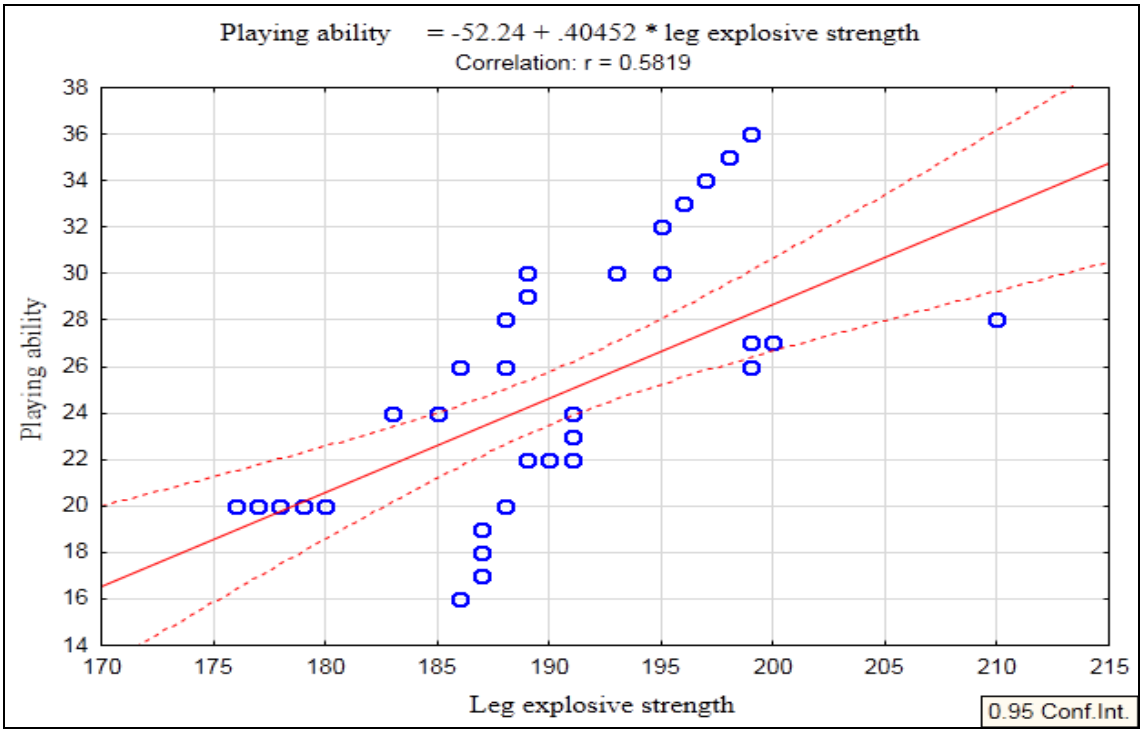

Fig 5: Scatter diagram showing correlation between leg explosive strength with playing ability of state level women Kabaddi players

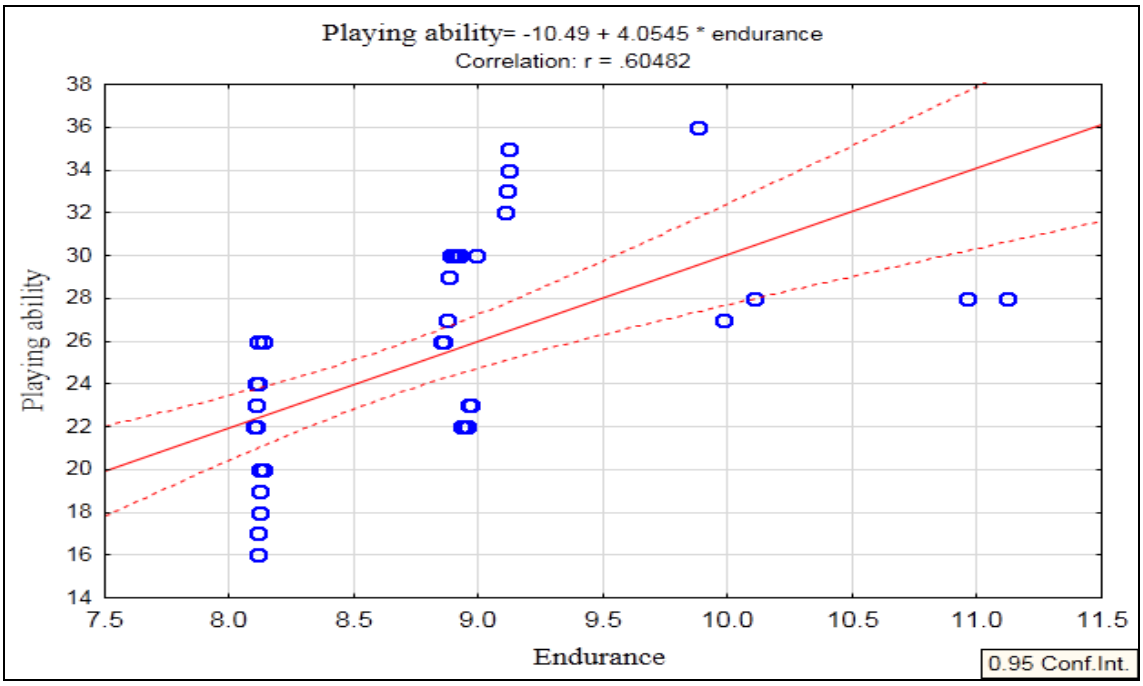

Fig 6: Scatter diagram showing correlation between endurance with playing ability of state level women Kabaddi players

Null hypothesis: There is no significant relationship between playing ability and psychological variables (i.e. stress, anxiety and aggression) of state level women Kabaddi players presents

Alternative hypothesis: There is a significant relationship between playing ability and psychological variables (i.e. stress, anxiety and aggression) of state level women Kabaddi players presents. To test the above null hypothesis, the Karl Pearson's product moment correlation coefficient was performed and results are presented in the following table.

Conclusions Correlation analysis

- The Agility increases the playing ability of state level women Kabaddi players also increases linearly and significantly and vice-versa
- The Leg explosive strength increases the playing ability of state level women Kabaddi players also increased linearly and significantly and vice-versa
- The Endurance increases the playing ability of state level women Kabaddi players also increased linearly and significantly and vice-versa
- The playing ability of state level women Kabaddi players is influenced by their Agility.
- The playing ability of state level women Kabaddi players is not influenced by Leg explosive strength.
- The playing ability of state level women Kabaddi players

is not influenced by Endurance.

- Agility contributes better towards playing ability of state level women Kabaddi players than other variables.
- That, the playing ability of state level women Kabaddi players is not influenced by Arm lengthh.
- The playing ability of state level women Kabaddi players is influenced by Leg length. Which selecting the players we should assess the mental studies of the players.

Reference

1. Barry Johnson L, Jack Nelson. A practical measurement for evaluation in physical education. (3'^'^ Education) Delhi: Surjit Publication, 1982, 166.
2. Clarance Barnnavt L, Robert Bhanrnhart K. In Physical The booked dictionary. New York; World Book, Chilocraft International INOG, 1980, II.
3. Donald Mathews K. Measurement in Physical Education, Philadelpia: W.B. Sunders Company 1973, 160.
4. Goel YA. Hand Book on 'Kabaddi': Shyam Asthetkar., (M.S.K.A. Publication: 1st Edition., May 1978, 6.
5. Hardayal Singh. Science of Sports Training, Sports Performance Paper covered First published in 1993. ISBN. 81-85, 466-05-X, Reprint, 1995,
6. Hadayal Singh. Sports Training : General theory and methods (Patialal: Netaji Subhash National Institute of Sports. 1984, 103.
7. James Boaco S, William F. Gustafson, Measurement and Evaluation in Physical.
8. Pandya AK. National sports talent contest schemes "Sports Authority of India", Jawaharalal Nehru Stadium, New Delhi, 1992, 57.