



ORIGINAL RESEARCH PAPER

Physical Education

ASSESSMENT OF PLAYING ABILITY AMONG MEN HANDBALL PLAYERS

KEY WORDS: Playing Ability, Inter University, Handball Players.

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ABSTRACT

The purpose of this research was to analyze the playing ability of men hand ball players. To achieve this purpose, 48 men hand ball players were selected belonging to various states who participated in the South Zone Inter University Handball Championship held at Bangalore North University, Bangalore, Karnataka. The age group of the subjects ranged between 18 to 25 years. The subjects were selected by using simple random sampling method. Playing ability, motor fitness and reaction time are the basic skills required in handball competition. They are not only for the general fitness but they serve as a primary determinant of handball performance. The dependent variable for the present study was playing ability of men Handball players. In order to assess the Handball playing ability of the subjects rating was done with help of three judges. In the present study three well experienced and efficient Handball coaches served as the judges for rating. For rating, the investigator has identified Handball skills and abilities of defensive and offensive tactics. The data collected from the men Handball players were statistically analyzed. Descriptive statistics was computed for Handball playing ability (dependent variable), teams separately. Further, one way analysis of variance was computed to find out the significance of difference among the men Handball players of five teams, for dependent variable and each independent variables separately. Whenever the 'F' ratio is significant, to know which of the paired mean differ significantly, Scheffe's test was applied. The level of significance was fixed as 0.01. Statistical package for the social sciences (SPSS) was used for the purpose of analyzing the data. The level of confidence was fixed at 0.01 level of confidence.

INTRODUCTION

Competitive sports are an important aspect of our country's physical education curriculum. It is linked to training, exercises, and competitions. It achieves its high efficacy through organized training and competition in the process of physiological and physical perfection. They enable and influence all other sectors of physical education, pave the route to optimum physical perfection, and play an extremely significant role in society as a whole. Science has contributed in each and every aspect of sports, as they have developed into distinct scientific discipline in itself and as a result of which all countries in the world produce top class players to win laurels in Inter-national competition. Considerable research is devoted in identifying factors that are functioning in achieving the higher level of skills with proper coaching. well-defined set of fundamental factors is required for high-level performance. Each athletic event necessitates sports-specific performance human factors (SSPHF), which are critical to success. Muscular strength and explosive power, for example, are important sport-specific performance human elements for weight lifting success, whereas cardiovascular respiratory endurance and low body fat levels are sport-specific performance human factors for marathon running success. Other significant human elements for sport-specific performance include response time, speed, anaerobic power, endurance, agility, flexibility, and balance. Although motor fitness elements are important in determining an individual's sport-specific performance human factors, appropriate training is required to maximize inherited performance potential. Sports performance is heavily reliant on physical fitness, which includes strength, speed, endurance, flexibility, and a variety of co-ordinative abilities. Sports activity is a physical activity, which is not possible without these motor abilities, therefore the improvement of physical fitness or motor abilities is a primary goal of sports training. The process of improvement of motor abilities is also called conditioning. Improvement of general health and organic functions increases strength and stability of the musculo-

skeletal system. The physical fitness can be differentiated into general and specific types and levels of different motor abilities and when a sportsmen possesses these, he is said to have the specific physical fitness. General physical fitness is the level of various motor abilities, regardless of any sports which the sportsmen possess. Although the influence of general physical fitness to sports performance is indirect, it should never be forgotten that specific physical fitness is heavily dependent on general physical fitness. Fitness comprises of many different components which must be viewed in relation to individual characteristics, needs, goals and tasks that must be performed. AAHPERD and many other professionals classify the fitness components into two categories, those pertaining to health and those pertaining to motor-skill performance. Health fitness is concerned with living where as motor-skill performance fitness is concerned with performing skills better and more efficiently.

Handball is a quick and physically demanding team sport in which natural moves and fundamental skills like running, jumping, and throwing are combined with speed, power, coordination, and endurance. All major joints of the body (ankles, knees, elbows, and wrists) are constantly employed to successfully execute a wide range of individual and team tasks with varying degrees of effort (maximal effort, submaximal, medium alternated with very short break moments). Handball is a relatively new sport. Some believe that the game had its origins in Germany, but other countries also had games which were very similar to handball. Countries such as Denmark, Germany, and Sweden are regarded as handball pioneers in modern times.

Along with Russia, France, Norway, Hungary, Romania, Spain, and Korea, these are the top handball nations. Handball has emerged as one of the most popular sports in Africa, alongside football. Egypt, Tunisia, Algeria, Angola, and Congo, to name a few, have achieved significant success at the African and international levels.

Ball games necessitate a wide range of abilities, including physical, technical, mental, and tactical ability. Physical abilities of players, for example, have a significant impact on both the individuals' own skills and the team's strategy. For the ball games in which the use of the hand is essential, hand morphology and functional properties could be important for the performance.

The game's structure symbolizes the dimension that produces the phenomena; in other words, it dictates and is then determined by nature's physiological, energetic, and psychological demands. The organization and coordination of actions (shapes, principles, and factors) in the phases of attack and defense provide the game's structure. The game consists of many tactics, such as holding, catching, and passing the ball, as well as dribbling, which is combined into various game actions, implying the offensive and defense technique.

METHODOLOGY

To achieve this purpose, 48 men hand ball players were selected belonging to various states who participated in the South Zone Inter University Handball Championship held at Bangalore North University, Bangalore, Karnataka. The age group of the subjects ranged between 18 to 25 years. The subjects were selected by using simple random sampling method. The dependent variable for the present study was playing ability of men Handball players. In order to assess the Handball playing ability of the subjects rating was done with help of three judges. In the present study three well experienced and efficient Handball coaches served as the judges for rating. For rating, the investigator has identified Handball skills and abilities of defensive and offensive tactics. The data collected from the men Handball players were statistically analyzed. Descriptive statistics was computed for Handball playing ability (dependent variable), teams separately. Further, one way analysis of variance was computed to find out the significance of difference among the men Handball players of five teams, for dependent variable and each independent variables separately. Whenever the 'F' ratio is significant, to know which of the paired mean differ significantly, Scheffe's test was applied. The level of significance was fixed as 0.01. Statistical package for the social sciences (SPSS) was used for the purpose of analyzing the data. The level of confidence was fixed at 0.01 level of confidence.

RESULTS

The analysis of variance for the influence of independent variables on playing ability is given in table I.

Table – I Analysis Of Variance Of Independent Variables On Playing Ability Of Men Handball Players

	Sum of Squares	df	Mean Square	F ratio	Level of Significance
Regression	6304.842	2	3152.421	2505.899	0.01
Residual	56.609	45	1.258		

It is clear from table I that the obtained F value 2505.899 is significant at 0.01 level. It reveals all the independent variables are collectively influencing the playing ability of handball players. As the F ratio is significant, multiple regressions computed.

The stepwise multiple regressions between playing ability and independent variables is given in table II.

Table II Stepwise Multiple Regression Between Playing Ability And Independent Variables Of Men Handball Players

Multiple R	R Square	Adjusted R Square	Standard Error
0.99459	0.99075	0.99014	1.06842

Table II reveals that among all the independent variables,

hand reaction time and half squad jump very much influence the playing ability of men handball players. From R square value it is clear that 99% of playing ability of men handball players is mainly due to hand reaction time and muscular endurance.

Comparative Analysis

Analysis of handball playing technique

The mean and standard deviation of handball playing ability of men handball players is presented in table III.

Table III Mean And Standard Deviation On Playing Ability Of Men Handball Players

S.No	University	Mean	SD
1	Sree Krishnadevaraya University,	80.50	2.12
2	Royalaseema University,	85.40	2.22
3	Bangalore North University,	75.60	2.54
4	Sree Krishna University,	66.50	2.36

With a view to analysis the difference among different handball teams in their department and independent variables, one way analysis of variances was computed separately.

The analysis on playing ability of men handball players of different teams is given in table I.

Table IV Analysis Of Playing Ability of Men Handball Players

Source	Sum of Squares	df	Mean Square	F ratio	Level of Significance
Between	4746.39	3	1582.13	458.59	0.01
Within	151.79	44	3.45		

The table value required for significant at 0.01 level for 3, 44 df is 4.262.

From table IV it is clear that the obtained F value, 458.59 is significant at 0.01 level as it is higher than the table value 4.262, required for 3,44 df. It reveals the playing ability of different handball teams differ significantly.

As the F ratio is significant, to know which of the paired mean differ significantly, Scheffe's test was applied in table V.

Table V The Scheffe's Test For Playing Ability

SKDU	RSU	BNU	SKU	Mean Difference	CI
80.50	85.40			4.90	3.50
80.50		75.60		4.90	3.50
80.50			66.50	14.00	3.50
	85.40	75.60		9.80	3.50
	85.40		66.50	18.90	3.50
		75.60	66.50	9.10	3.50

The result of scheffe's shows that all the teams differ significantly in their handball playing ability.

The graphical representation of different teams on handball playing ability is presented in figure-1.

PLAYING ABILITY

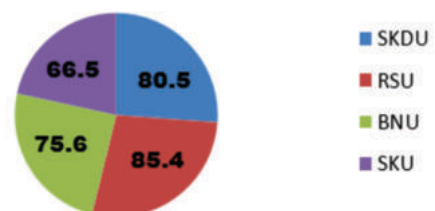


Figure I Graphical Representarion On Playing Ability On Men Handball Players Of Different Teams

DISCUSSION/CONCLUSIONS

The findings of the study showed that there was no significant difference between Sri Krishna Devaraya University vs Rayalseema University and Sri Krishna Devaraya University vs Bangalore North University of handball playing ability.

The findings of the study showed that there was a significant difference between Sri Krishna Devaraya University vs Shree Krishna University, Rayalseema University vs Bangalore North University, Rayalseema University vs Shree Krishna University, Bangalore North University vs Shree Krishna University of handball playing ability.

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