

## Relationship of Kabaddi Performance with Selected Coordinative Ability of the Inter-District Players of Paschim Medinipur

Dr. Binod Chowdhary<sup>1</sup> Dr. Alope Sen Borman<sup>2</sup> Sujan Barman<sup>3</sup>

<sup>1</sup>. Asst. Professor, Seva Bharati Mahavidyalaya, Kapgari, Paschim Medinipur, Pin-721505, W.B., India.

<sup>2</sup>. Asst. Professor, Seva Bharati Mahavidyalaya, Kapgari, Paschim Medinipur, Pin-721505, W.B., India.

<sup>3</sup>. Asst. Professor(Guest), Seva Bharati Mahavidyalaya, Kapgari, Paschim Medinipur, Pin-721505, W.B.India

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### Abstract:

**Background:** Coordinative abilities are qualities of an organism to coordinative separate elements of action in our system to decide a concrete action task coordinative abilities help in learning faster and also to achieve high level of performance. Kabaddi is a combative with great strength and coordinative ability oriented sports. Therefore it is necessary to investigate that certain coordinative abilities are acting as basic factors of the kabaddi performance or not. **Aim:** The purpose of this study was to investigate the relationship between Kabaddi performance and selected coordinative ability of the district player. **Methodology:** For the present study fourteen male Kabaddi players who had participated in district kabaddi competition held at Medinipur were randomly selected for this study. Age group of the subjects was 18-27 years. To find out the relationship of Kabaddi performance to selected coordinative abilities namely orientation ability, differentiation ability, reaction ability, balance ability and rhythmic ability. Product moment correlation was computed and verified at 0.05 level of significance.

**Result:** Findings reveals that coordinative abilities such as reaction ability and rhythmic ability were found significantly related to the kabaddi performance as their calculated Correlation Coefficient(r) were 0.66 and 0.54 respectively. Orientation ability, differentiation ability and balance ability were not found significantly related to the kabaddi performance as their calculated Correlation Coefficient(r) were 0.05, 0.01 and 0.34 respectively.

**Keywords:** Kabaddi performance, Coordinative ability and Orientation.

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### I. Introduction

Modern sports, therefore have taken roots in different areas of social life with a mere pursuit only of those who take part in sports as competitors. The historical introspection of the place of sports in the social structure leads to the conclusion that 'sports' is an integrated component of society and its concept and role in the society has been changing with the changing time. Sports as many sided social phenomenon are an active factor in physical education, one of the basic forms of preparing a person for labour and other socially 30<sup>th</sup> necessary types of activities and alongside this one of the important means of the ethical and aesthetic education, satisfaction of the moral requirement of society, consolidation and expansion of international ties. Sports are included in the system of social relation and are conditional in its development by the social economic and related factors. Physiological parameters may be defined as those parameters which are directly linked with various physiological systems and may be voluntary, such as pulse rate, blood pressure, vital capacity, Toor(1996). Kabaddi is a combative team game, 'played with absolutely no equipment, in a rectangular court, either outdoors or indoors with seven players on each side of the ground. Each side takes alternate chances for offence and defense. The basic idea of the game is to score points by entering into opponents 'court and touching as many defense players as possible without getting caught in a single breath. In kabaddi the basic defense position are in three zones, center zone and left zone, the defense player occupying one of these zones have specific functions to perform. in co-ordination with his counterparts in the other defense zones, for maintaining the defensive strong hold. The player is identified by the position he occupies irrespective of the varying number of offense and defense players. The game of kabaddi requires a high level of motor fitness and neuro-muscular coordination in order to perform very complex movement of the game. Speed and endurance are the demands of the game with special reference to the other aspect of coordinative ability. Coordinative abilities are qualities of an organism to coordinative separate elements of action in our system to decide a concrete action task coordinative abilities help in learning faster and also to achieve high level of performance. **Aim:** The aim of the study to investigate the relationship with kabaddi performance with selected coordinative ability of the district player.

**II. Methods:**

**Selection of sample:** For the present study fourteen male Kabaddi players who had participated in Inter-District Kabaddi competition held at Medinipur were randomly selected for this study. Their age ranged 18-27 years. The necessary data was collected by administrating various coordinative ability tests as suggested by Peter Hertz.

**Criteria of measurement of Coordinative Abilities:**

**Orientation Ability:** It was measured by “Numbered Medicine ball run test” measured in terms of time in seconds.

**Differentiation Ability:** It was measured by determine throw “Backward medicine ball through test” measured in terms of scores.

**Reaction Ability:** It was measured by “Ball reaction exercise test” measured in terms of distance in meters.

**Balance Ability:** It was measured by “Long Nose Test” measured in terms of time of seconds.

**Rhythmic Ability:** It was measured by “Sprint at given at Rhythm Test” measured in terms of time in seconds.

**Kabaddi Performance:** For evaluating the subject’s Kabaddi performance a panel of three judges was selected and they evaluated each player on the basis of their performance level. The average value of all the three experts was considered for the purpose of the study.

**Statistical Analysis:** To find out the relationship of Kabaddi performance to selected coordinative abilities namely orientation ability, differentiation ability, reaction ability, balance ability and rhythmic ability. Product moment correlation was computed. For testing the hypothesis the level of significance was set at 0.05.

**III. Results:**

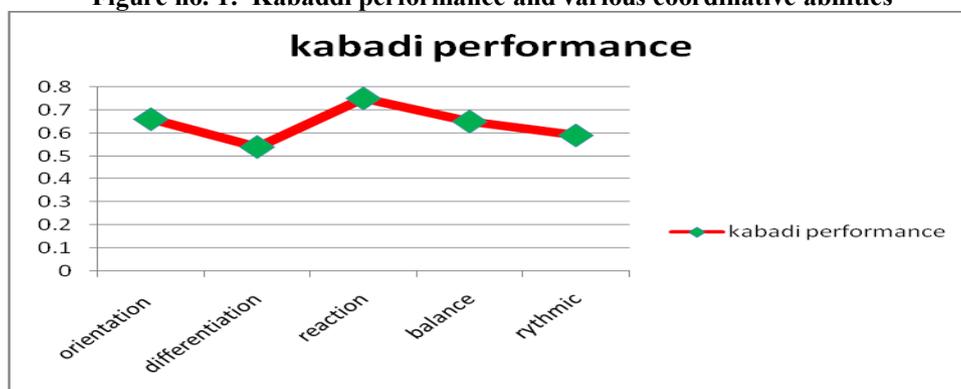
Findings regarding selected coordinative ability and their relationship with Kabaddi performance is presented in the following table.

**Table -1: Relationship Of Selected Coordinative Ability To Kabaddi Performance**

Dependent Variables	Independent Variables	Correlation Coefficient(r)
Kabaddi Performance	Orientation Ability	0.66
Kabaddi Performance	Differentiation Ability	0.54
Kabaddi Performance	Reaction Ability	0.75*
Kabaddi Performance	Balance Ability	0.65*
Kabaddi Performance	Rhythmic Ability	0.59*

It was established from the table-1 that coordinative abilities such as reaction ability, balance ability and rhythm ability were found significantly related to the kabaddi performance. Orientation ability and differentiation ability were not found significantly related to the kabaddi performance as their calculated Correlation Coefficient(r) were 0.06 and 0.03 respectively.

**Figure no. 1: Kabaddi performance and various coordinative abilities**



**IV. Discussions:**

The finding of present study on relationship of selected coordinative ability to kabaddi performance reveals that the reaction ability, balance ability and rhythm ability are significantly related to Kabaddi performance. The present study was supported by the findings of Westerlund and Turtle (1931) that their exist high level of correlation between reaction time and shorts distance running, as in our study the subjects has to react very quickly to cover short distance after getting kho from team mates. The obtain result in the study shows that the quality of neuro-muscular coordination (reaction ability and rhythm ability)which is the integral

part of the coordinative abilities required for performance in kabaddi was adequately developed in the subjects. In case of Orientation ability and Differentiation ability are insignificantly related to Kabaddi performance. This may be attributed to the fact that the level of coordinative abilities (Orientation ability and Differentiation ability) of the subjects are still at the preliminary level as the subjects selected for the study have played up to state level.

#### **V. Conclusion**

Selected coordinative abilities such as reaction ability, balance ability and rhythmic ability are significantly related to Kabaddi performance.

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