



Correlated study of selected anthropometric measurements with explosive leg strength of kabaddi male players

Dr. Sudhakara G

Physical Education Teacher, Sri Prabulingaswamy High School, Hiremagalore, Chikkamagalore, Karnataka, India

Abstract

By nature human beings are competitive and ambitious for the excellence in all athletic performances. Not only every man but every nation wants to show their supremacy by challenging the other nation. Thus these challenges stimulates, inspires and motivates all the nations to sweat and strive to run faster, jump higher, throw further in present competitive sports world. The purpose of the study is to correlated selected anthropometric measurements with explosive leg strength of Kabaddi male players. Methodology: to achieve the purpose 30 senior Kabaddi male player's different part of chikkamagalur district the ranging age of 18 to 25 years were selected for the study. The explosive leg strength was measured with the standing broad jump the score was measured in meter and centimeter. Selected anthropometric measurements such as Body weight was measured by weighing machine and the score was measured in kilograms standing Height was measured by stadiometer and the score was measured in cm. Sitting height was measured by anthropometric rod and the score was measured in cm .total leg length, shoulder circumference, upper arm girth and thigh girth were measured by gullick tape and scores was recorded in cm. For analysis and interpretation of data, the investigator was used Pearson Product Moment Correlation statistical techniques with the help of SSPSS analytic software. Results: There Were Significant Relationship Found Between selected anthropometric measurements with explosive leg strength of kabaddi male players.

Keywords: anthropometry, explosive strength, kabaddi

1. Introduction

By nature human beings are competitive and ambitious for the excellence in all athletic performances. Not only every man but every nation wants to show their supremacy by challenging the other nation. Thus these challenges stimulates, inspires and motivates all the nations to sweat and strive to run faster, jump higher, throw further in present competitive sports world.

Kabaddi is basically an Indian game, which requires both skill and power, and combines the characteristics of wrestling and rugby. Kabaddi is aptly known as the "GAME OF THE MASSES" due to its popularity, simple, easy to comprehend rules, and public appeal. The game calls for no sophisticated equipment what so ever, which makes it a very popular sport in the developing countries. Though it is basically an outdoor sport played on clay court, of late the game is being played on synthetic surface indoors with great success. The duration of the game is 45 minutes for men & junior boys with a 5 minute break in between for the teams to change sides. In the case of women & sub junior boys, the duration is 35 minutes with a 5 minute break in between. Kabaddi is a combative team game, played with absolutely no equipment, in a rectangular court, either out doors of indoors with seven players on the ground in each side. Each side takes alternate chances at offense and defense. The basic idea of the game is to score points by raiding into the opponents' court and touching as many defense players as possible without getting caught on a single breath. During play, the players on the defensive side are called 'Antis' while the player of the offense is called the

'Raider'. Kabaddi is perhaps the only combative sport in which attack is an individual attempt while defense is a group effort. The attack in Kabaddi is known as a 'Raid'. The antis touched by the raider during the attack are declared out if they do not succeed in when their side scores points against the Opposite side during their raiding turn or if the remaining players succeed in catching the opponent's raider.

Scientific investigation into performance of sportsmen has been playing an increasingly important role in the training of sportspersons, in the scientific way, to attain excellence in performance, in different spheres of sports. Various research studies conducted by experts, in Physical Education and sports, have emphasized the importance of investigating the specific structures correlated with various sports activities for the selection and development of talent in sports for better performance, at different levels of sports competitions. Anthropometry is the interface between anatomy and movement. It is the application of a series of measurements made on the body and from these we can use the data that we gather directly or perform calculations using the data to produce various indices and body composition predictions and to measure and describe different body physique. Kabaddi is a game in which two teams fight each other's. Two teams try to score points against one another. Raid and catch in Kabaddi is both an art and a science. Kabaddi raid and catch the art form because it involves finely tuned hand-eye leg-eye coordination rather than gross motor skills. The correlation also been done on selected Anthropometric variables and sports performance of different athletic events, games and sports. They have

emphasized that top level performance, in particular sports and game activity, demands particular size, shape and proportions of the body. Performance improvement are mainly due to application of different sport sciences, new techniques, methods of training, fitness techniques, availability of appropriate body structures, and modern equipments and facilities. Time has come to explore the possible body structures and motor fitness related to specific sports activity and develops them for particular level of performance. In this way anthropometry and physical fitness components plays an important role in the selection and training of sportspersons. Physical fitness is the ability to perform activities that require muscular coordination such as walking, running, playing and manipulating instrument and machinery.

The main purpose of this study was to correlate the selected anthropometric measurements with explosive leg strength of kabaddi male players.

2. Methodology

2.1 Selection of Subjects

To achieve the purpose of the study, and data was collected from 30 senior male Kabaddi players different part of chikkamagalur district the ranging age of 18 to 25 years were selected for the study.

2.2 Administration of Tests

The explosive leg strength was measured with the standing broad jump the score was measured in meter and centimeter. selected anthropometric measurements such as Body weight was measured by weighing machine and the score was measured in kilograms standing Height was measured by stadiometer and the score was measured in cm. sitting height was measured by anthropometric rod and the score was measured in cm .total leg length, shoulder circumference, upper arm girth and thigh girth were measured by gullick tape and scores was recorded in cm.

2.3 Statistical Analysis

To determine whether relationship among the research variables exists or not, Pearson Product correlation method was applied. The data was computed on the SPSS Statistical Package for the Social Sciences.

3. Results of the Study

Table 1: Correlation of selected anthropometric measurements with explosive leg strength of kabaddi male players

Si no	Variables	Co-efficient of correlation
1	Leg strength and Body weight	.684**
2	Leg strength and standing height	.646**
3	Leg strength and total leg length	.747**
4	Leg strength and shoulder circumference	.567**
5	Leg strength and upper arm girth	.540**
6	Leg strength and sitting height	.666**
7	Leg strength and thigh circumference	.546**

** Correlation is significant at the 0.01 level. (2-tailed)

Above table says that the correlations of selected anthropometric measurements such as Body weight ($r=.684$),

standing height ($r=.646$), total leg length ($r=.747$), shoulder circumference ($r=.567$), upper arm girth ($r=.540$), sitting height ($r=.666$) and thigh circumference ($r=.546$) with explosive leg strength of kabaddi male players.

4. Conclusion

As per above interpretation the researcher showed that the anthropometric measurements i.e. Body weight, standing height, total leg length, shoulder circumference, upper arm girth, sitting height and thigh circumference are important for performance of Kabaddi players, because explosive leg strength are improve the performance of Kabaddi male players and explosive leg strength and above anthropometric measurements are direct and positive correlation.

5. References

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