

# Comparative Analyze of Physiological Variables of Football Players in Malnad and Coastal Area in Karnataka

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**Abstract**—An attempt has been made to compare physiological variables of football players in Malnad and Coastal area, selected 25 football players in Malnad and 25 football Players in Coastal area of the age group 18 – 25 year. The selected players were subjected for analyze of Vital capacity by Wet Spiro meter, Blood Pressure by electronic Blood Pressure apparatus (Appolo model) Respiratory rate and Breath holding time was analyze manually. To determine the significant difference of any between the selected groups independent t-test was calculated separately for each variables. The result showed significant difference in Respiratory rate, vital capacity and Blood Pressure. The finding also reveals that the football players belonged to Malnad area were significantly superior to coastal area players.

**Index Terms**— Physiological parameters, Coastal and Malnad football Players.

## I. INTRODUCTION

The developing tendencies in international sports, especially in team games are identified as the increase in game tempo, tougher body game and greater variability in technique and tactics. An increased performance level can only be achieved by working and training of all major components i.e. technique, coordination, tactics, physical fitness, physiological qualities. Physiological exercise testing is important in help identify potential talent but also to provide the players, trainers and coaching staff with some profiles for the players and a measure for evaluating training programs.

Testing physiological requirements for Football has become more specific over the past decade with further advances in both sports science technology and general understanding of the physiological requirements for testing Football. However despite this progress in testing procedures and knowledge there still appears limited research regarding the analysis and critical appraisal of tests used specifically for football. Many laboratory and field tests for physiological assessment do exist, however to be thorough in reviewing physiological status it is important to assess all components of the sport, specifically measuring each energy system.

The other main component of the game not covered within this review is skill. These tasks can be assessed with testing procedures that exist but the coaching staff normally specializes in this area and thus generally will devise their own skill assessment. It is important also to note the musculoskeletal screening assessments involving information regarding the players muscle balance, core stability and general flexibility. This testing

is normally done separate to the fitness based testing and is performed by physical educationists, trainers, physiotherapists, coaches and researchers. Together all of this information provides a perfect combination to ensure analysis of every physical component of the game.

*Objective of the study*

- To study the physiological variables between Malnad and Coastal area.
- Selection of Variables
- Physiological Variables
- Pulse Rate
- Systolic Blood Pressure
- Diastolic Blood Pressure
- Tools used for data collection

The criterion measure was used to collect the data in a deal and systematic way to record in a correct unit and style for each test item.

Pulse rate of the subjects was measured with the help of stopwatch and measurement was in number of pulse minute. The basal pulse rate was measured for the study.

Systolic blood pressure was also be measured by using digital blood pressure apparatus and the unit was measured in MM of Hg.

Diastolic blood pressure was also be measured by using digital blood pressure apparatus and the unit was measured in MM of Hg.

*Data Analysis*

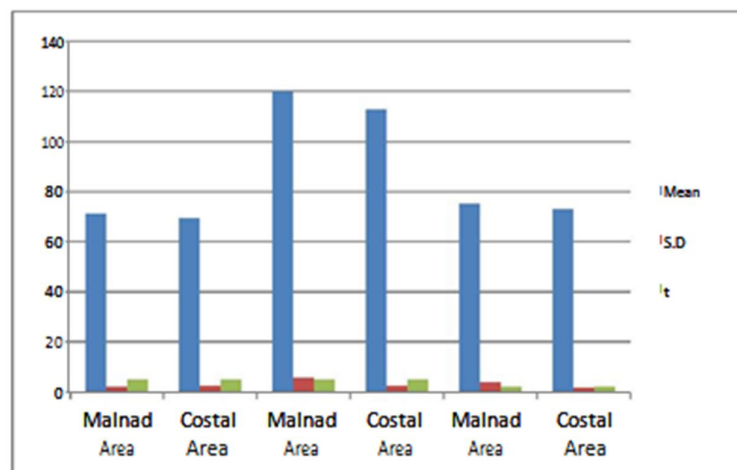
TABLE I: COMPARISON OF PHYSIOLOGICAL VARIABLE OF MALE FOOTBALL PLAYERS OF MALNAD AND COASTAL AREA

Variable	Area	Mean	S.D	T
Pulse Rate	Malnad area male Football players	71.30	2.23	5.01*
	Coastal area male Football players	69.45	2.51	
Systolic Blood Pressure	Malnad area male Football players	120.03	5.78	5.21*
	Coastal area male Football players	113.02	2.30	
Diastolic Blood Pressure	Malnad area male Football players	75.30	4.00	2.06*
	Coastal area male Football players	73.20	1.64	

Significant at 0.05 levels

't' 0.05 = 1.66

Table-1: shown the comparison of Physiological variables of the players of the Malnad and Coastal area male Football players. The mean values of pulse rate of the Football male players of the Malnad and Coastal area state were 71.30 beats/min and 69.45 beats/min respectively. The mean values of systolic blood pressure of the players of Malnad and Coastal area state were 120.03 and 113.02 respectively. The mean values of diastolic blood pressure of the Malnad and Coastal area male Football players 75.30 and 73.20 were respectively. The 't' value of the pulse rate, blood pressure (Systolic and Diastolic) of the Malnad and Coastal area male Football players were .01\*,5.21\* and 2.06\* respectively which was tested at the level of significant at .05 level and the tabulated value of 't'=1.66, which showed that significant difference in mean value of Pulse rate, (Systolic and Diastolic) blood pressure was found and our hypothesis was rejected



Graphical representation of Physiological Variable of male Football players of Malnad and Coastal area

## II. DISCUSSION OF THE STUDY

The data revealed that physiological variables like pulse rate, blood pressure (systolic and diastolic) was observed and there was significant difference between Malnad and Coastal area male Football players.

## III. CONCLUSIONS

The data showed that the mean scores of Malnad male Football players for physiological variables (Pulse rate, Systolic and Diastolic (bold pressure) were better than coastal male Football players.

## REFERENCES

- [1] Bhomik Amit Kr. Comparison of Selective Physiological Parameters Between Soccer and Kabaddi Players, Unpublished Master's Dissertation Submitted to Jiwaji University, Gwalior, 1997.
- [2] Biddle SK, Mohan SJ. A Comparative study of Speed among Kabaddi and Kho-Kho Players of Osmania University. International Journal of Health, Physical Education and Computer Science in Sports. 2012; 6(1):70- 71.
- [3] Dhonge SR. Co-relation of Kho-Kho Playing Ability with Health Fitness and Motor Fitness of Boys. Golden research Thoughts, 2012; 1:1.
- [4] Kumar S, Singh S, Gore RS, Dhotre B. A Comparative Study On Selected Psycho-Physical Fitness Components Of Kabaddi And Kho-Kho Players Of Delhi Schools., International Journal of Research in Social Sciences And Humanities, ISSN: 2249-4642, (IJRSSH), 2011, 1(1).
- [5] Nallella S, Kumar SB. Physical Fitness and Its Significance on Physiological Aspects of Football Players in Kakatiya University. Asian Journal of Physical Education and Computer Science in Sports, ISSN 0975- 7732, July 2012 to 2012; 7(1):82-85.
- [6] Rao EP. The Complete Hand Book on Kabaddi. Jagadamba Publications. Vizianagaram (A.P.), 2002.
- [7] Ravikumar V, Srinivasa R. Comparative Analysis of Selected Anthropometric and Physical Fitness Variables among Football Players In Relation To Position Play. International Journal of Health, Physical Education and Computer Science in Sports, ISSN 2231-3265, 2012;6(1):89-93.
- [8] Tiwari LM, Singh M. Comparative Study of Selected Physical and Physiological Variables of Male Basketball Players at Different Levels of Competition. Asian Review of Social Sciences, 2012; 1(1):42-46.