

BASIC BIOLOGICAL FUNCTIONAL CAPACITIES OF CRICKET AND FOOTBALL PLAYERS

Ajinkya Uday Chavan¹, Gopa De²

Research Scholar; Swami Vivekanand University, Sagar (MP)¹

Research Guide (Physical Education) Swami Vivekanand University, Sagar (MP)²

Abstract: The purpose of the study is to determine the Basic biological functional capacities of Cricket and Football Players. Basic biological functional capacities functions measure through Breath Holding capacity (Both Inhalation and Exhalation) and Systolic and Diastolic Blood Pressure. Total , 300 Cricket and 300 Football players from Maharashtra participated in the study and their age ranged between 18-28 years who were regular participation in cricket and football tournaments .The blood pressure were measure through BP Monitor of Amron

The finding reveals that there was in No sig.(significant) difference was found in BHC (Inhale) cricket and Footballers. The finding reveals that there was in sig.(significant) difference was found in BHC (Exhale) cricket and Footballers. The finding reveals that there was No sig.(significant) difference was found in BP (Diastolic) cricket and Footballers. The finding reveals that there was in No sig.(significant) difference was found in B. P(systolic) cricket and Footballers.

Keywords: BHC (Inhale), BHC (Exhale),Football, Cricket

I. INTRODUCTION

Cricket and football are most popular team game in India . In which only a physically, mentally and technically strong person can participate. Cricket is a mind game in which the bowler wants a wicket on every ball and the batsman wants a boundary on every ball.

Today, cricket is considered to be the most famous game of the world . Cricket has also played an important role in keeping the country united. Today almost every child in the country wants to become a cricketer, today cricket of India is played in the streets .

The first cricket club in India was started in 1848. The name of the club was Oriental Parsi Cricket Club and it is believed that the first international cricket match was played in 1844 but international Test cricket officially started in 1877. At that time cricket was played only in England which is now played professionally in most of the Commonwealth countries. Cricket is a professional level outdoor game played by many countries at national and international level. In this outdoor game there are two teams of 11 players each. Cricket is played until 50 overs are completed. The rules and regulations related to this are governed and regulated by the International Cricket Council. This game is played in the form of test matches and one day and T20 international matches.

Football is the most popular ball game in the world, with the largest number of participants and spectators. Its main rules and required equipment are simple, the game can be played almost everywhere, from official football playing fields (pitches) to gymnasiums, streets, school playgrounds, parks or beaches.

Football's governing body, the Fédération Internationale de Football Association (FIFA), has estimated that there were approximately 250 million football players at the beginning of the 21st century and more than 1.3 billion people "interested" in football; In 2010, more than 26 billion combined television viewers watched the four-month-long World Cup finals, football's premier tournament.

II. METHODS

Sample Size

The 300 Cricket and 300 Football players from Maharashtra participated in the study and their age ranged between 18-28 years who were regular participation in cricket and football tournaments.

The research design refers to “the researcher’s overall plan for testing the research hypotheses”. This study involves a cross sectional, comparative study of two groups of players in a descriptive research. The study depends mainly on primary source of data..

Breath holding capacity after inspiration (BHC)

Before recording BHC after inspiration the respondent were instructed to stand erect with leg bended, after getting signal the respondent inhale air through his nostrils. The nose was locked or closed with nose clip. The total time of inspiration of the respondent was measured in the seconds.

Breath holding capacity (after expiration)

Before recording BHC after expiration the respondent were instructed to stand erect with leg bended, after getting signal the respondent exhale air through his nostrils. Then the nose was locked or closed with nose clip. The total time of inspiration of the students was measured in the seconds.

Blood Pressure :

The blood pressure were measure through BP Monitor of Amron

Statistical tools :

The data was checked for accuracy and completeness and was coded and put up into the SPSS Descriptive statistics for all studied variables, T-test, was considered statistically technique throughout the study. The level of significant was set-up at 0.05 level.

III. RESULTS AND DISCUSSION

The results concerning this are presented in the form of tables and also illustrated with the help of suitable figures where ever necessary.

For the sake of convenience and methodological presentation of the results, following order has been adopted.

Table-1 MEAN SCORE STANDARD DEVIATION AND T-RATIO OF BHC (INHALE) IN PRE AND POST-TEST OF AGE GROUP CRICKET AND FOOTBALLERS.

<i>Physiological Variable</i>	<i>Test</i>	<i>Number</i>	<i>Mean</i>	<i>S.D.</i>	<i>t-ratio</i>
<i>BHC (Inhale)</i>	Cricket	300	44.56	8.34	NS
	Football	300	52.78	7.32	

* Sig.(significant)at 0.05 level.

As per Table –1 mean scores, standard deviation and t-ratio of BHC (Inhale) of cricket and Footballers.

The Mean scores, standard deviation of selected physiological variable with respect to BHC (Inhale) of cricket and Footballers have been presented through graphically in fiure-41

FIGURE-1

ILLUSTRATES MEAN SCORES AND STANDARD DEVIATIONS OF BHC (INHALE) OF CRICKET AND FOOTBALLERS

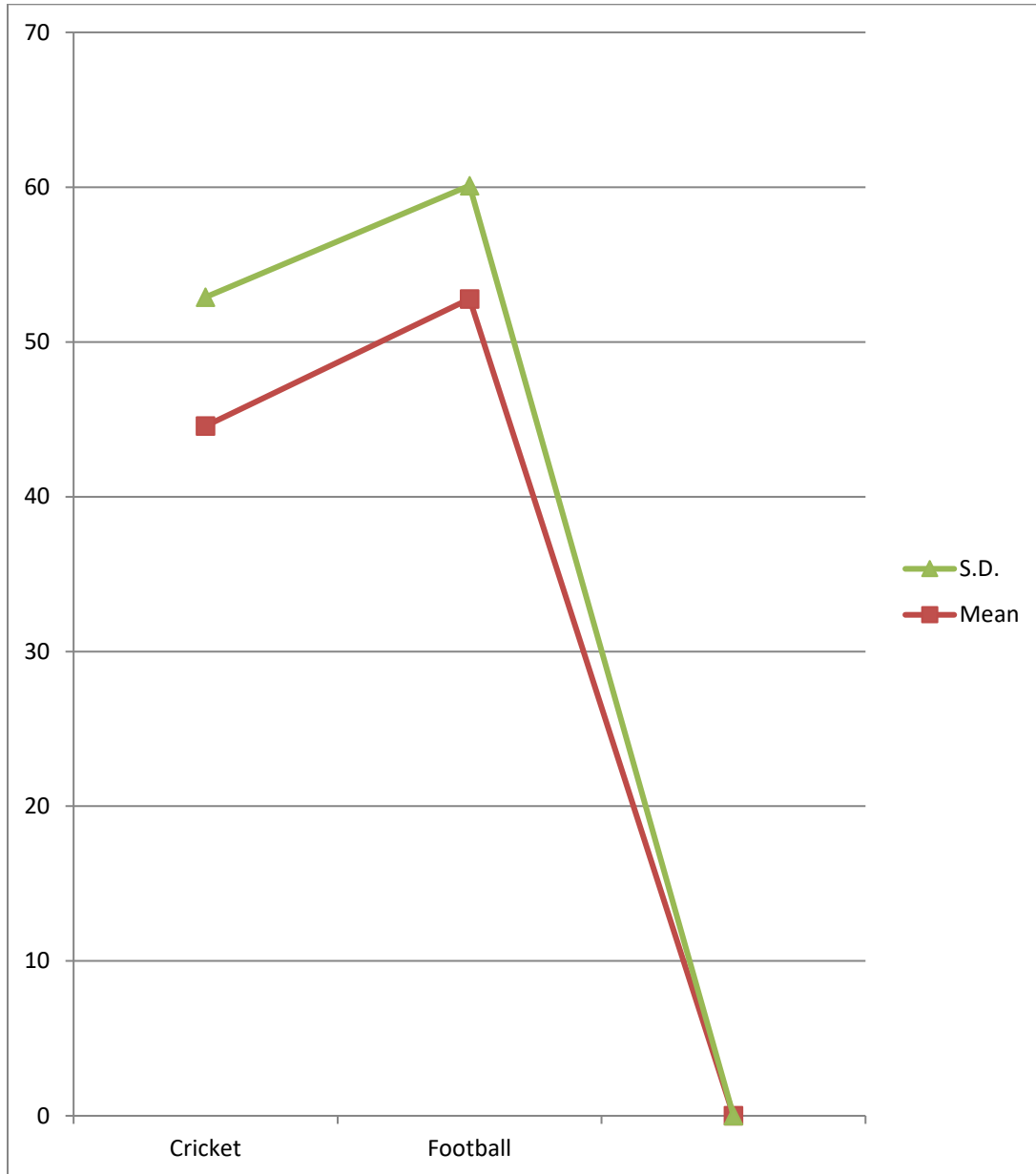


TABLE-2
MEAN SCORE STANDARD DEVIATION AND T-RATIO BHC (EXHALE) IN CRICKET AND FOOTBALLERS

Variable	Test	Number	Mean	S.D.	t-ratio
BHC (Exhale)	Cricket	300	51.67	6.76	NS
	Football	300	25.07	8.90	

Sig.(significant)at .05 level

Table- 2 Shows that mean scores, standard deviation and t-ratio of BHC (Inhale) in pre and post-test of **cricket and footballers** Players

The Mean scores, standard deviation of BHC(Exhale) of cricket and Footballers have been presented through graphically in figure-2.

FIGURE-2

ILLUSTRATES THE MEAN SCORES AND STANDARD DEVIATIONS OF BHC (EXHALE) OF CRICKET AND FOOTBALLERS.

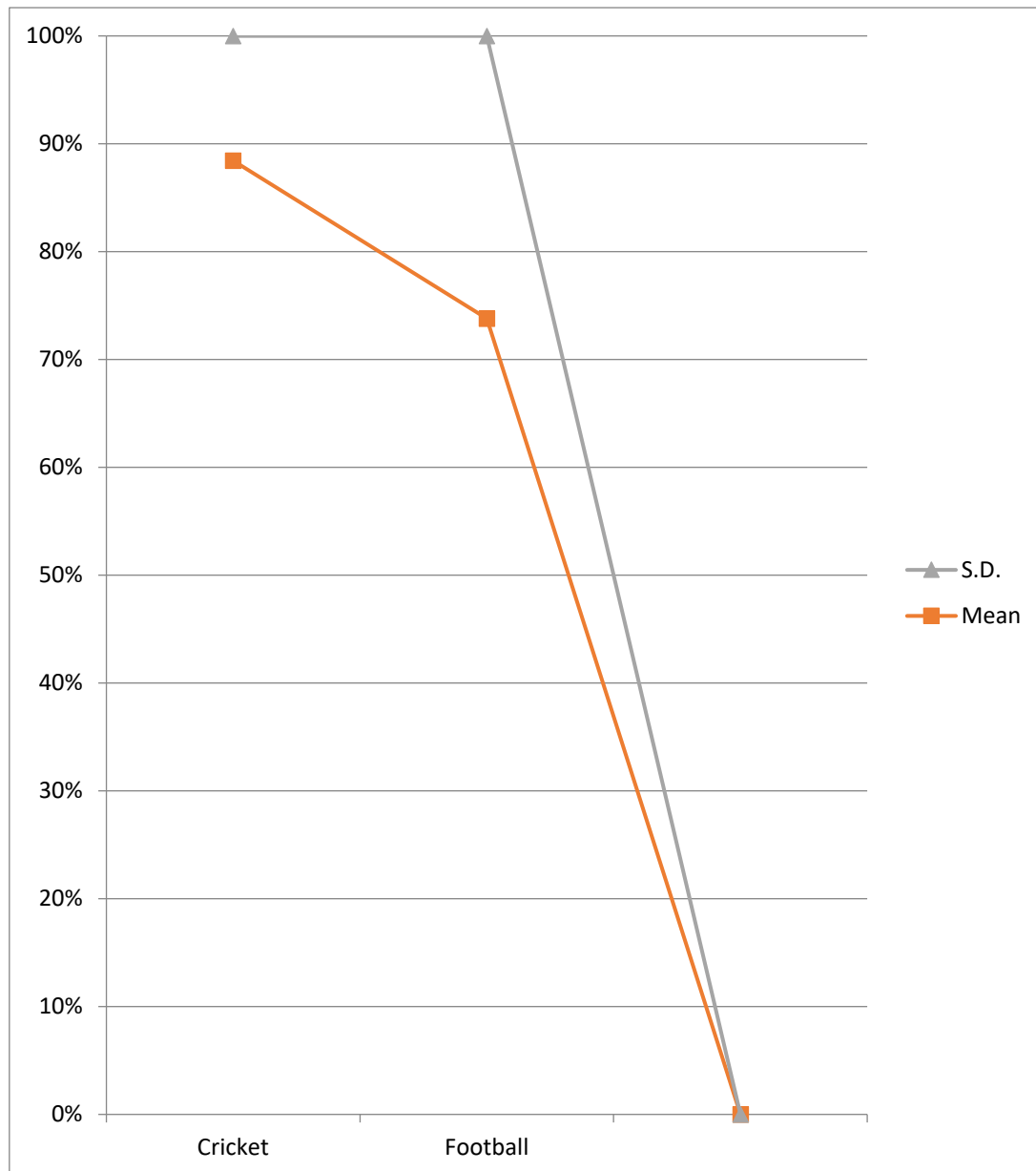


TABLE- 3

MEAN SCORE STANDARD DEVIATION AND T-RATIO OF BP (DIASTOLIC) IN PRE AND POST-TEST OF CRICKET AND FOOTBALLERS.

Variable	Test	Number	Mean	S.D.	t-ratio
BP(Diastolic)	Cricket	300	82.12	9.31	NS
	Football	300	81.89	9.34	

NS= Not significant.

Table- 3 Shows that mean scores, standard deviation and t-ratio of BP(Diastolic) in cricket and Footballers.

The Mean scores, standard deviation of selected physiological variable with respect to BP(Diastolic) of cricket and Footballers have been presented through graphically in figure-3.

FIGURE-3
ILLUSTRATES THE MEAN SCORES AND STANDARD DEVIATIONS OF BP (DIASTOLIC) OF CRICKET AND FOOTBALLERS.

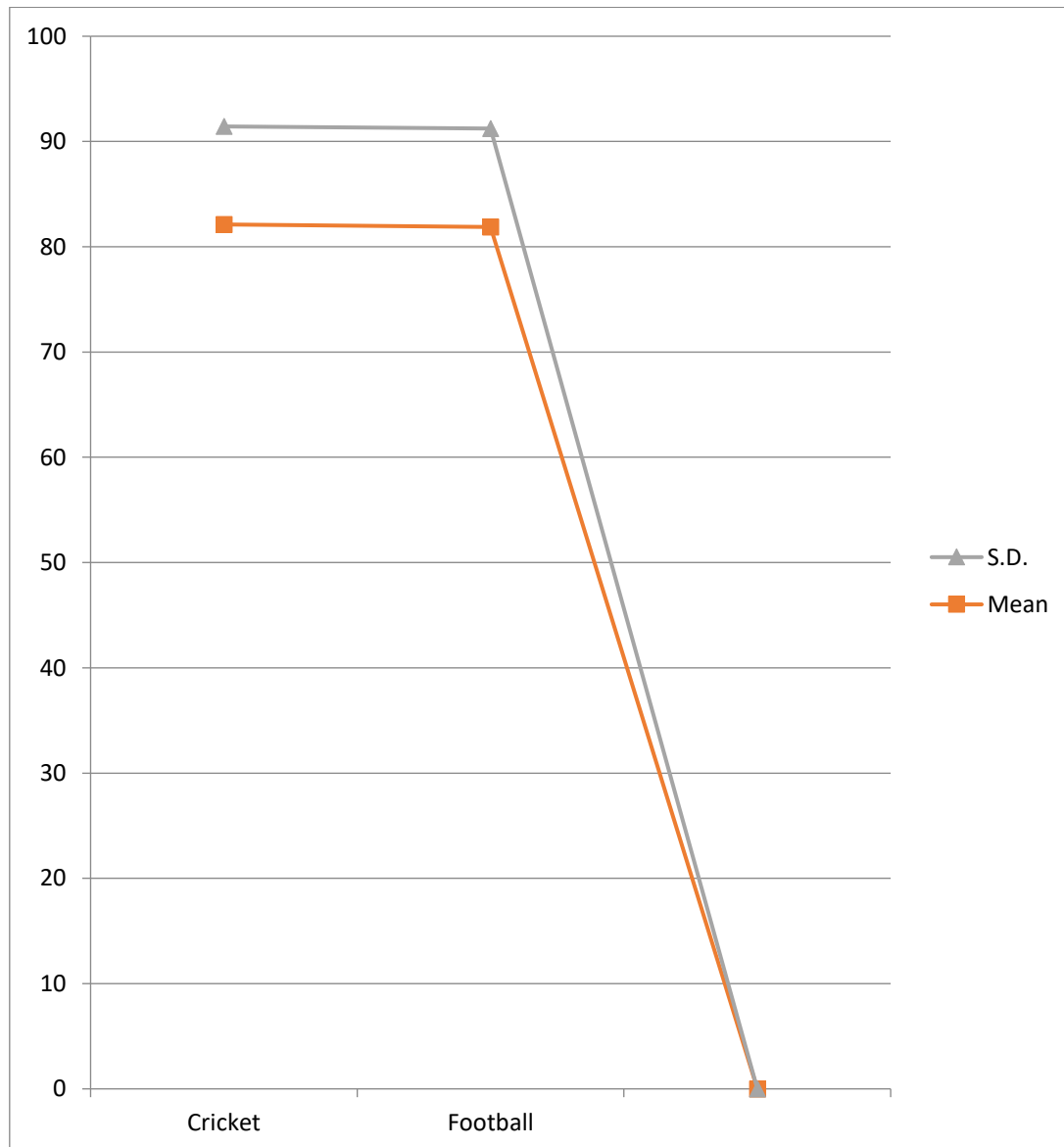
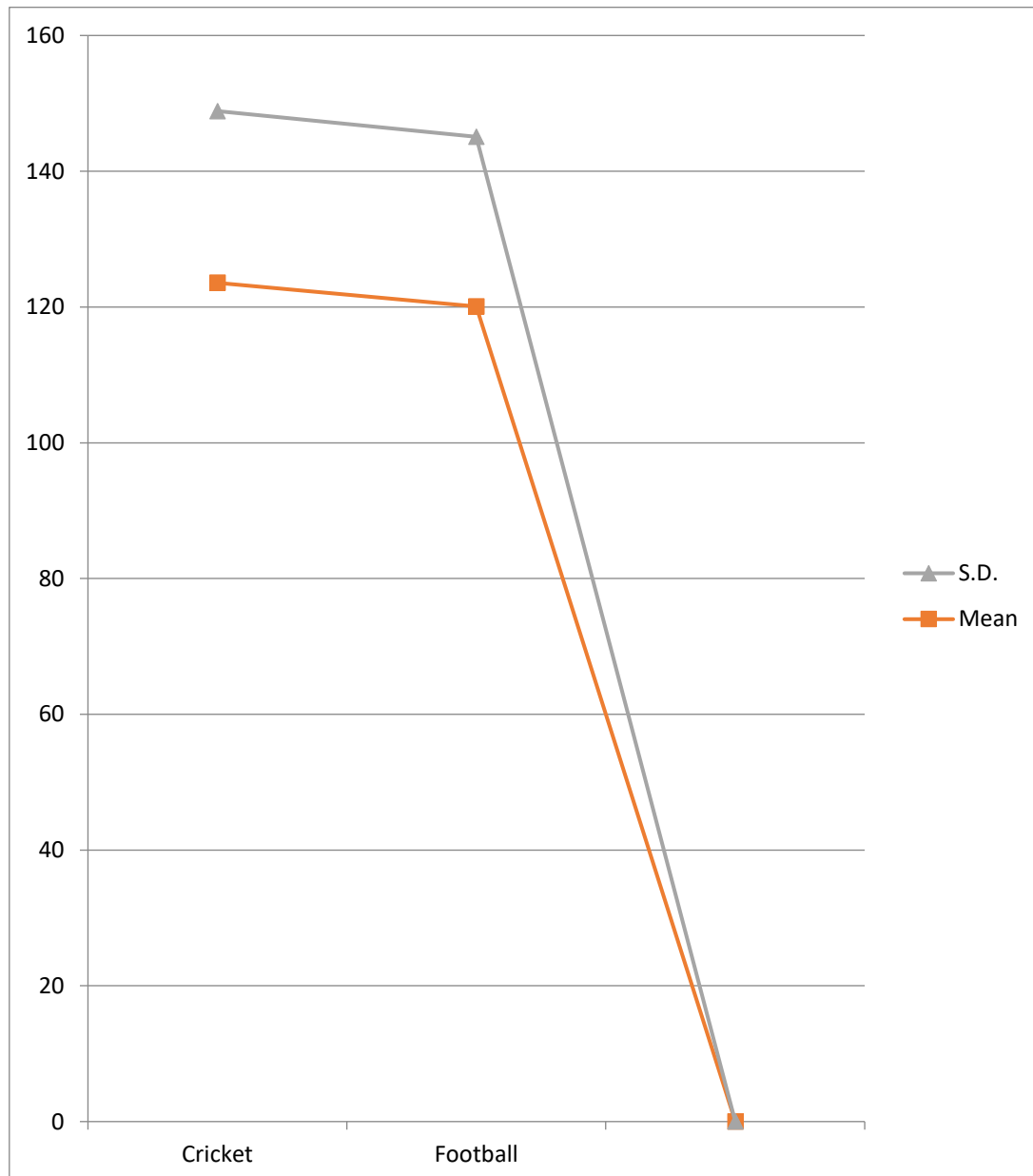


TABLE-4
MEAN SCORE STANDARD DEVIATION AND T-RATIO OF BP (SYSTOLIC) IN PRE AND POST-TEST OF CRICKET AND FOOTBALLERS.

Variable	Sample	Number	Mean	S.D.	t-ratio
B. P(systolic)	Cricket	300	123.56	25.30	0.07
	Football	300	120.08	25.01	

Table- 4 Shows that mean scores, standard deviation and t-ratio of B. P(systolic) in cricket and Footballers.

THE MEAN SCORES, STANDARD DEVIATION OF SELECTED PHYSIOLOGICAL VARIABLE WITH RESPECT TO B. P(SYSTOLIC) OF CRICKET AND FOOTBALLERS FIGURE-4



IV. DISCUSSION

It is agreed by most of the sports scientists that besides developing the physical and physiological aspects of the players i.e. power, strength, endurance, agility and speed as well as providing the best type of the training, unit and unless the players and athletes the mentally prepared for contest, they cannot win in any competition or attain their peak performance which is considered the optimum objective of the modern sports.

In respect to, BHC (Inhale) of cricket and Footballers they have obtain the mean value of 44.56 and 52.78 respectively which are given in the Table – 1, reveals that there was in sig.(significant) difference was found in BHC (Inhale) cricket and Footballers. In respect to, BHC (Exhale) of cricket and Footballers they have obtain the mean value of 51.67 and 25.07 respectively which are given in the Table – 2, reveals that there was in sig.(significant) difference was found in BHC (Exhale) cricket and Footballers.

In respect to, BP (Diastolic) of cricket and Footballers they have obtain the mean value of 82.12 and 81.89 respectively which are given in the Table – 3, reveals that there was No sig.(significant) difference was found in BP(Diastolic) cricket and Footballers. In respect to, B. P(systolic) of cricket and Footballers they have obtain the mean value of 123.56 and 120.08 respectively which are given in the Table – 4, reveals that there was in No sig.(significant) difference was found in B. P(systolic) of cricketers and Footballers.

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