



## Comparison of Selected Physical Fitness Variables of School Level Softball and Cricket Players

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### ABSTRACT

The purpose of the present study was to compare the selected physical fitness variables of school level football and cricket players. Total sixty four (32 from softball and 32 from cricket) male players from Central School, Junagadh, were selected for this study. Their age ranged between 14-18 years. AAHPER youth physical fitness test was utilized to measure selected physical fitness components of players. It was hypothesized that no significant difference would be found between selected physical fitness variables of school level football and cricket players. For analysis of the data Mean & SD were calculated and to examine the significance difference between the group mean of different physical fitness variables, 'T' test was applied, and level of confidence was set at .05 levels. Study concluded that significant difference found between the means of selected physical fitness variables such as speed and agility (shuttle run), explosive strength of legs (SBJ), speed of lower extremities (50mt. dash) and explosive strength, cardio-vascular endurance (12 min run & walk) and no significant difference found between the means of muscular strength (dynamic) and endurance of arm & shoulders (Pull-ups), muscular strength and endurance of trunk (bent-knee sit ups) of school level football and cricket players.

**Keywords :** Comparison, Physical Fitness. Variables Of School

### INTRODUCTION

Physical fitness refers to the organic capacity of the individual to perform the normal task of daily living without undue tiredness or fatigue having reserve of strength and energy available to meet satisfactorily any emergency demands suddenly placed upon him. Softball is a sport requiring high levels of physical fitness. It is one of those rare games which demands not only speed but agility, strength, power and endurance. Softball players need a combination of technical, tactical and physical skills in order to succeed. Improving aerobic capacity and overall fitness boosts performance on the Softball field. Cricket is a deceptively demanding sport; players spend a long day on their feet, there are periodic fast sprints when batting, chasing down a ball, and bowling, plus various dynamic movements such as leaping, throwing, and turning quickly. It really is vital that all players should increase their base levels of fitness because that will allow them to realize their potential. It will allow them to maintain their level of performance for longer, increasing their concentration and endurance, and that is something each player will have to do if they want to do themselves justice on the world's biggest cricketing stage.

Fitness is important at all levels of the game, whilst being essential for top level players; it is beneficial for beginners who will improve both their effectiveness and enjoyment through good standards of fitness. Fitness enables a player to cope with the physical demands of the game as well as allowing the efficient use of his various technical and tactical competencies throughout the match.

### Purpose of the study

Purpose of this study was to compare the selected physical fitness variables of school level Softball and cricket players.

### METHODOLOGY

#### Subjects

Total 64 subjects were selected for this study. 32 players from Softball and 32 players from cricket from various branches of Central School, Junagadh were taken as a sample when they were practicing for preparing the selves' to participate in C.B.S.E. Clusters. Their age ranged between 14- 18 years.

### 1 Variables

- : Pull-ups. Muscular strength (dynamic) and endurance of arm & shoulders
- : Bent-knee sit ups. Muscular strength and endurance (trunk)
- : Shuttle-run. Speed and agility:
- : Standing broad jump. Explosive strength of legs
- : 50 yards dash Speed. Of lower extremities and explosive strength
- : 12 min. run & walk. Cardio-vascular endurance

### TEST

For measurement of selected physical fitness variables of school level Softball I and cricket players AAHPER youth physical fitness test was utilized. Data of subject's were collected in the month of July-August 2012 to attain the objectives of the present study.

### Statistical Procedure

For analysis of the data, collected from 32 footballers and 32 cricketers from various C.B.S.E. Central School, Junagadh, Mean and Standard Deviation was computed. Comparison was made on the basis of activity i.e. football and cricket. For this purpose 'T' test was applied. For testing the hypothesis the level of confidence was set at.05 level of significance.

### DISCUSSION AND FINDINGS

Table 1 shows the comparison of means of selected physical fitness variables of school level Softball and cricket players. In pull-ups mean value of Softball players is 7.47 and cricket player is 8.08. In bent-knee sit ups mean value of Softball players is 29.34 and cricket player is 27.66. In shuttle-run -mean value of Softball players is 10.12 and cricket player is 10.48. In standing broad jump mean value of Softball players is 198 and cricket player is 175. In 50 yards dash mean value of Softball players is 6.58 and cricket player is 7.49. In 12 min. run & walk mean value of Softball players is 2410.22 and cricket player is 1980.48.

### 2Table-1

**Comparison of Means of Selected Physical Fitness Variables of School Level Softball and Cricket Players**

Components	Group	Mean	S.D.	t
Pull-ups (in count)	Softball	7.47	3.22	0.733
	Cricket	8.08	3.43	
Bent-knee sit ups (in count)	Softball	29.34	6.32	1.235
	Cricket	27.66	4.38	
Shuttle-run (in seconds)	Softball	10.12	0.42	2.976*
	Cricket	10.48	0.54	
Standing broad jump (in cm)	Softball	198	22.04	4.267*
	Cricket	175	21.07	
50 yards dash (in seconds)	Softball	6.58	0.54	6.495*
	Cricket	7.49	0.58	
12 min. run & walk (in meter)	Softball	2410.22	240	7.622*
	Cricket	1980.48	210	

\* Significant at .05 level

"T" value required to be significant at .05 levels with 62 degree of freedom is 1.98

There is significant difference found between the means of selected physical fitness variables {Speed and agility (Shuttle-run), Explosive strength of legs (Standing broad jump), Speed of lower extremities and explosive strength (50 yards dash), There is no significant difference found between the means of selected physical fitness variables {Muscular strength (dynamic) and endurance of arm & shoulders (Pull-ups), Muscular strength and endurance of trunk (Bent-knee sit ups)} Cardio-vascular endurance (12 min. run & walk)} of school level football and cricket players, as "t" value required

to be significant is 1.98 and calculated value is more compare to tabulated value. Of school level football and cricket players, as "t" value required to be significant is 1.98 and calculated value is less compare to tabulated value. Pate, R.R. (1990) also reported that physical activity and physical fitness are significantly, although moderately, associated in young children.

#### CONCLUSION

Significant difference found between the means of selected physical fitness variables such as speed and agility, explosive strength of legs, speed of lower extremities and explosive strength, cardio-vascular endurance of school level football and cricket players. Mean value indicates that in shuttle run (speed and agility) cricket players are better than Softball players, but in Standing broad jump (explosive strength of legs), 50 yards dash (speed of lower extremities and explosive strength), and 12 min. run & walk (cardio-vascular endurance) Softball players are better than cricket players. No significant difference found between the means of selected physical fitness variables {Muscular strength (dynamic) and endurance of arm & shoulders (Pull-ups), Muscular strength and endurance of trunk (Bent-knee sit ups)} of school level Softball and cricket players Mean value indicates that in Pull-ups (Muscular strength and endurance of arm & shoulders) cricket players are better than Softball players, but in Bent-knee sit ups (Muscular strength and endurance of trunk) football players are better than cricket players.

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