



## ANALYSIS OF THE PHYSICAL ATTRIBUTES OF DIFFERENT LEVEL CRICKET PLAYERS

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### ABSTRACT

*The purpose of the study was to compare the skill related physical fitness components of cricket players at different level of opposition. An institution of 40 subjects elderly 21-28 years participated in the study. The purposive sampling method turned into used to reap the objectives of the look at. They had been in addition divided into two groups of 20 each. The unpaired t-test becomes carried out to find out the widespread differences among college and university male cricket gamers. To test the hypotheses, the level of significance becomes set at 0.05. The results discovered massive variations among university and college male cricket gamers on the variables i.e. Reaction Time, Balance Power Speed agility and Coordination and university stage players completed higher than college gamers on all of the variables.*

**KEYWORDS:** *Physical fitness, components of cricketers*

### INTRODUCTION

Cricket is a sport where physical fitness has traditionally not been seen as being highly important. It is impossible to overstate the value of fitness in any kind of leisure. You may play better if you are more physically fit. However, one game that challenges your gaming skills, mental toughness, stamina, and physical endurance is cricket. The various test gambling nations have lately put a greater focus on health, and they are seeing the results. With the advent of someday cricket and more recently Twenty 20, the sport has seen significant modifications, and the physical demands placed on a cricketer's body have been significantly enhanced.

Depending on the kind of game being played and the player's role on the team, the importance of fitness will change. One-day cricket may be more demanding than a fitness test, and a fast bowler may have more particular fitness needs than an opening batsman. Cricket is a team sport, thus all of the players must be engaged. Bowlers need to have a lot of endurance to toss the ball quickly, accurately, and without overstepping. The fielders must always be on guard and vigilant. To stop the ball from crossing the goal line, they must race, pursue the ball, and dive to stop it. The batter should have the endurance to consistently run between the wickets and the power to perform powerful shots. The umpires also need a lot of flexibility and patience to carry out their job. But the wicket-keeper is unquestionably the "fittest" player in a game of cricket. A wicket-keeper must continuously be on his feet while chirping and hoping towards the back of the stumps. A wicketkeeper has a high level of physicality.

### Purpose of the Study

The primary goal of the current research was to examine several aspects of cricket players' physical fitness at various levels of competition at the university and college levels.

### METHODOLOGY

For this research, a total of forty (N=40) male individuals between the ages of 21 and 28 were chosen. The study's goals were met by using the purposive sampling method. After being informed of the research's goal and methodology, each participant voluntarily agreed to participate in the study and provided their permission. They were then split into two groups, each with 20 people. (i.e., N<sub>1</sub>=20; university and N<sub>2</sub>=20; college).

**Table 1: Details of physical fitness components, tests**

S. No	Physical Fitness Components	Tests	Unit of Measurement
1.	Reaction Time	Nelson hand reaction time test	in 1/10 <sup>th</sup> of sec
2.	Balance	Stork balance stand test	in 1/10 <sup>th</sup> of sec
3.	Power	Standing broad jump	Meters
4.	Speed	30 yard dash	in 1/10 <sup>th</sup> of sec
5.	Agility	Illinois agility test	in 1/10 <sup>th</sup> of sec
6.	Coordination	Eye hand coordination test	in 1/10 <sup>th</sup> of sec

## RESULTS

**Table 2: Mean, Standard Deviation, Standard Error of the Mean, t-value and p-value of cricket players at different level of competition**

Variables	Mean		SD		SEM		t-value	p-value
	University	College	University	College	University	College		
Reaction Time	0.21	0.23	0.023	0.009	0.005	0.002	2.13*	0.0394
Balance	27.45	24.10	5.48	4.81	1.23	1.08	2.05*	0.0469
Power	2.28	2.03	0.31	0.43	0.07	0.09	2.02*	0.0499
Speed	6.72	7.03	0.57	0.28	0.12	0.06	2.09*	0.0425
Agility	6.71	9.24	0.66	1.31	0.14	0.29	7.69*	0.0001
Coordination	22.45	28.75	3.90	3.90	0.87	1.19	4.28*	0.0001

### Reaction Time

According to the table, the average reaction time of college and university players was 0.21 and 0.23, respectively, while their standard deviations (SD) were 0.023 and 0.009, respectively. The crucial value of t at the 95% probability level is much less than the located value of t (2.13\*), at 1.697. The numbers do indicate that there are considerable differences in reaction times between college and university athletes.

### Balance

The table shows that the balance of college and university players changed to 27.45 and 24.10, respectively, while the same old deviation (SD) of balance of college and university players changed to 5.48 and 4.81, respectively. The 95% opportunity level essential value of t is much lower (1.697) than the located value of t (2.05\*). The data does suggest that there are significant differences between college and university athletes in terms of balance.

### Power

According to the table, the implied power of college and university players was 2.28 and 2.03 respectively, while their respective standard deviations (SD) of power were 0.31 and 0.43. The observed value of  $t$  is 2.02\*, however the critical value of  $t$  at the 95% opportunity level is much lower (1.697). The reality does seem to indicate that there are significant disparities in energy levels between college and university athletes.

### **Speed**

While the standard deviation (SD) of velocity for university and college players was 0.57 and 0.28, respectively, the table shows of velocity changed to 6.72 and 7.03, respectively. The 95% probability stage essential price of  $t$  is much lower (1.697) than the actual value of  $t$  (2.09\*). The evidence does suggest that there are significant speed differences between players at the collegiate and varsity levels.

### **Agility**

According to the table, college and university athletes' mean agility scores were 6.71 and 9.24, respectively, while their corresponding standard deviations (SD) were 0.66 and 1.31. The 95% opportunity level's essential value of  $t$  is much lower (1.697) than the price at which it was judged to be (7.69 \*). The data does suggest that there are considerable disparities in agility between college and university athletes.

### **Coordination**

According to the table, the average degree of coordination among college and university players is now 22.45 and 28.75, respectively, while their standard deviations (SD) are now 3.90 and 3.90, respectively. The critical value of  $t$  at the 95% chance level is much lower (1.697) than the actual value of  $t$  (4.28\*). The data does indicate that there are significant coordination differences between collegiate and university athletes.

## **DISCUSSION**

Since ancient times, people have felt that having a healthy physique is essential for success, particularly in sports. It has always been challenging to evaluate the performance of the human body based on its size, shape, and form. The success of national and international competition in sporting activities has been greatly influenced by physical and physiological aspects. Similar to many other ball sports, team cricket calls for a high level of physical fitness in addition to technical and tactical prowess.

Cricket players' sports performance was correlated with physical fitness factors, and an analysis of the data revealed high-quality full-size relationships for the sub-variables abdominal strength persistence, agility, explosive leg strength, speed, and cardiovascular staying power. Shoulder electricity was noticed, however there was no correlation between sports performance and the motor health sub-variable. The nice sizable dating suggests that factors affecting motor health have a role in above-average cricket performance. An outstanding cricket player needs a high degree of physical fitness in addition to other factors to produce a high level of performance.

The fact that cricket performance is a complicated phenomenon and directly bio-made of motor actions is presumably what led to the study's conclusion. Therefore, a high level of agility, explosive leg force, speed, and cardiovascular endurance is necessary to execute the cricketing abilities effectively with the necessary elegance, precision, and sustained length. Since shoulder strength persistence is also a crucial factor in cricket performance, particularly

for pace bowlers, the present study was conducted on batsmen, all-rounders, and spin bowlers, which may have hampered the association between these two variables. The results showed a negligible correlation between the motor fitness component, shoulder power persistence, and cricket performance. The current results are consistent with those that previously shown a strong relationship between motor fitness and the playing ability of cricket players.

### CONCLUSION

According to the results, it can be deduced that university athletes had greater levels of general skill-related physical fitness than their college counterparts since they performed better on tests of reaction time, balance, power, velocity, agility, and coordination.

It has been shown that among cricketers, stronger overall sports performance is correlated with better physical fitness. A negative aspect that contributes to greater overall performance in cricket is physical fitness enhancers. As a result, it is advised that coaches, sports trainers, and athletes involved in the system of sports education take the utmost care of physical improvement in their athletes since it has already been established through a number of studies that the variable in question is an essential component for advanced sports performance.

### REFERENCE

- [1]. **MANSOOR AHAMED AND C.P. SINGH (2010)** *Comparison of selected physical fitness variables of 18 year old male cricket players, Volume No.3, Issue No.1, PP No.1-4.*
- [2]. **Suresh Kumar ET AL (2019)** *Analysis of relationship between motor fitness and sports performance among high performer cricketers, Volume 4, Issue 1, ISSN: 2456-0057*
- [3]. **BALJINDER SINGH ET AL (2014)** *A Comparative Study of Muscular Strength and Muscular Power among Cricket Players Volume No.2, Issue No.10, PP No.1-5, ISSN 2320– 9011.*
- [4]. **NARINDER CHIB (2018)** *Comparative study of physical fitness training programme on cricket playing ability of Jammu and Kashmir Cricket players, Volume No.3, Issue No.4, PP No.148-150, ISSN: 2455-4197.*
- [5]. **NAJIBULHOQUE (2018)** *Game Specific Fitness Profile of Male Cricket Players from Kerala, Volume No.5, Issue No.6, PP No.34-42, ISSN: 2347-6737.*