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## Comparison of batsmen and bowlers on physical fitness variable speed

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### Abstract

The present study was an attempt to investigate the significant mean difference between Batsmen and Bowlers on physical fitness variable Speed which are participating at District level. The sample of the study comprised of 20 batsmen and 20 bowlers of Jind district of Haryana state. All the players are male participants and their age ranges from 16 to 19 years. In order to test the significance of mean difference between the variables descriptive statistics was employed. The result indicates that there exists a significance difference between Batsmen and Bowlers on physical fitness variable speed. Batsmen were found to be better than Bowlers on this physical fitness variable.

**Keywords:** Speed, cricket, players

### Introduction

The Fitness is that state which characterizes the degree to which a person is able to function. Fitness is an individual matter. It implies the ability of each person to live most effectively with his potential. Ability to function depends upon the physical, mental, emotional, social, and spiritual components of fitness, all of which is related to each other and is mutually interdependent. The term fitness, physical fitness and motor fitness are often used interchangeably, but motor fitness is actually the broader concept, including both physical fitness and motor ability factors (Baumgartner and Jackson, 1991) <sup>[1]</sup>. Fitness has broader meaning which includes not only physical fitness but anatomical, psychological and physical fitness too. Thus fitness is neither a matter of merely muscles nor of physical capacity alone. But it includes the realign of mental, moral, social and emotional fitness as well.

### Speed

One of the most important factors influencing fitness is speed. Speed is an essential requirement for successful performance of many motor activities. Generally, Speed is considered to be natural as it heavily depends upon the composition of muscle fibres. The quantity of fast twitch fibres in a muscle defines the speed of an individual directly. In general, speed may be defined as the capacity of the individual to perform successive movements of the same pattern at a faster rate. As in all motor performance, there are factors limiting speed also. The rapidity of movement is affected by body weight, body density, muscle viscosity and such mechanical and structural features as length of limbs and flexibility of joints etc. Certainly speed plays an important role in sports specially cricket. It is required to a great extent in cricket involving efficient footwork and quick movements in batting, bowling and fielding.

### Methodology

For this study the investigator adopted survey method to collect data related to cricket players (batsmen and bowlers). The subjects of the study consist of 40 cricket players i.e. 20 batsmen and 20 bowlers. The age group of cricket players ranges between 16 to 19 years. All these cricket players are male participants and belong to district Jind (Haryana) only.

**Tools used:** 50-Yard Dash Test

**Purpose:** To measure Speed.

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**Facilities and Equipments:** Two 50-Yard Dash straight lanes on an athletic track with a starting and a finish line, two stopwatches, a measuring tape.

**Procedure:** The test was explained and demonstrated before the testing commenced. The subject assumed a standing start position behind the starting line. To obtain the best result two subjects were asked to run at the same time. The starter used the command- "Ready, Go"- accompanied by a downward sweep of the arm as a signal to the timer. The subjects started running towards 50-Yard finish line with maximum speed. Only one trial was permitted.

**Instruction:** Subjects were not allowed to cross the starting line on command 'Go'. They were supposed to run across the finish line as fast as they were capable of. They were not allowed to slow up until they had crossed the finish line.

**Scoring:** The score was defined as the elapsed time to the nearest tenth of a second between the starting signal and the moment the subject crosses the finish line.

**Validity:** Performance in 50-Yard Dash is a function of running efficiency as well as pure speed. The subjects were clearly told that slowing down before reaching the finish line would make the test invalid.

**Reliability:** The reliability co-efficient ranging from. 83 to. 95 has been reported.

**Testing personnel:** The help of one starter and one timer was taken to administer this test.

### Findings

The main objective of the study is to compare batsmen and bowlers on physical fitness variable speed. The data collected from cricket players was arranged, tabulated and statistically analyzed. The obtained data was processed for descriptive statistics i.e. Mean, S.D and Z-ratio.

**Table 1:** The main objective of the study is to compare batsmen and bowlers on physical fitness variable speed

Sr. No.	Variable	Batsmen		Bowlers		Z-ratio
		Mean	S.D	Mean	S.D	
1.	50Yard Dash	6.37	0.43	6.75	0.49	4.131**

\*\*Significant at.01 level of confidence

Table 1 shows the results of mean scores of 50 yard dash test of Batsmen and Bowlers which are 6.37 and 6.75 respectively. The Z-ratio of the mean difference is 4.131 in favor of Batsmen. It is significant at.01 level of confidence. Hence, the difference between the mean scores of Batsmen and Bowlers on 50 yard dash test is significant. The mean score of Batsmen is lower than that of Bowlers. It implied that the Batsmen have better speed ability as compared to Bowlers. It may be due to the medium body structure of majority of batsmen as compare to their counterpart Bowlers. They can move their body very fast and very easily but Bowlers can't perform that much easily and effectively due to their long height and stiff physique in most of the cases.

### Discussion of findings

The results suggested that the Batsmen have better speed ability than the Bowlers. It Hence, there exist a significance difference between Batsmen and Bowlers on physical fitness

variable speed.

### Conclusion

Based on the results of the present study the following conclusion is drawn:

There exists a significance difference between Batsmen and Bowlers on physical fitness variable speed. Batsmen were found to be better than Bowlers on this physical fitness variable.

### Implications

The findings of the study have a number of implications for coaches, physical education teachers, trainers and cricket players.

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