



## "A COMPARATIVE STUDY OF MOTOR VARIABLE BETWEEN OF BATSMEN AND PITCHER OF SOFTBALL PLAYERS"

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### **ABSTRACT**

**T**he present study was an attempt to investigate the significant mean difference between Batsmen and pitcher on physical fitness variable agility which are participating at All india Inter University Playres. The sample of the study comprised of 20 batsmen and 20 pitcher of different university playres . All the players are male participants and their age ranges from 18 to 25 years. In order to test the significance of mean difference between the variables descriptive statistics was employed. The result indicates that there exists significance difference between Batsmen and Pitcher on physical fitness variable agility. Batsmen were found to be better than Pitcher on this physical fitness variable.

**KEYWORDS:** *Agility, Batsmen, Pitcher, Softball game.*

### **INTRODUCTION:**

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). Fitness has broader meaning which includes not only physical fitness but anatomical, psychological and physical fitness too. Thus fitness is

neither matter of merely health related components of muscles nor of physical capacity alone. But it includes the realign of mental, moral, social and emotional fitness as well. Motor fitness is defined as "a readiness or preparedness for performance with special regards to big muscle activity without undue fatigue. The motor fitness component of speed, power, agility, balance and coordination are generally considered to be the performance or skill related components of fitness. These differ considerably from the

health related components of fitness that they are genetically dependent, resistant to major environmental modifications, and relatively stable.

### **Agility**

One of the most important factors influencing movement is agility. This factor is revealed by the ability of the body or parts of the body to change directions rapidly and accurately. It is connected with the motor qualities in a different way. Each simple motor action



demands agility. The sportsperson requires it when action are to be combined or when movement has tube performed by changed and unaccustomed conditions. Agility is the ability to change the direction of the body rapidly and accurately. Certainly agility plays an important role in sports specially Softball. It is required to a great extent in Softball involving efficient footwork and quick changes in body position

For this study the investigator adopted survey method to collect data related to Softball players (batsmen and Pitcher). The subjects of the study consist of 40 Softball players i.e. 20 batsmen and 20 Pitcher. The age group of Softball players ranges between 18to 25 years. All these Softball players are male participants and belong to All India Inter University Playres only.

**Tools Used:** Zigzag run test

**Purpose:** To measure Agility ability between pitcher and Batsmen players

**Equipments:** a stopwatch, 5 wooden sticks, a measuring tape, a scoreboard and outdoor Ground area (20 feet X 25 feet)

#### **Procedure:**

The test was explained and demonstrated before the testing commenced. The subject assumed a standing start position behind the starting line. On the signal 'Go', the subject started running around the sticks in the designated manner as fast as possible. The path of running was in the shape of the figure of 'Eight'. Three rounds were completed in this fashion and bathe finish of the third round the time keeper stopped the stopwatch. If any subject made a foul or failed to run the prescribed course, he would be asked to run again.

#### **Instruction:**

While running, the subjects were neither allowed to touch any stick throughout the run nor could they misplace them in anyway.

#### **Scoring:**

When the subject completed three laps in a prescribed course. The nearest tenth of a second was recorded as the score of the subject.

#### **Validity:**

Test validity is .736 based on a comparison of the test with a composite of 29 tests measuring eight different components of motor ability.

#### **Reliability:**

The reliability of the test is .795. The test objectivity comparing two cases is .996. Testing personnel: The help of one trained person was taken to conduct the test.

#### **Findings:**

The main objective of the study is to compare batsmen and Pitcher on physical fitness variable agility. The data collected from Softball players was arranged, tabulated and statistically Analyzed. The obtained data was processed for descriptive statistics i.e. mean S.D and Z-ratio.

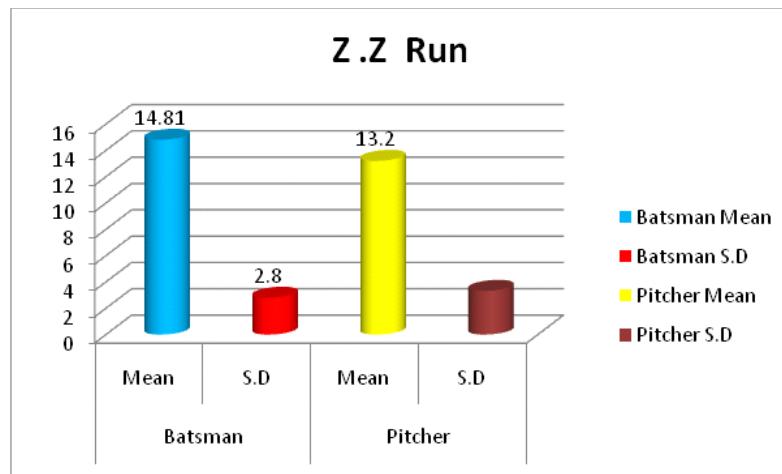
#### **showing the mean, SD and Z ratio scores of Zigzag run test of Batsmen and Pitcher**

Variable	Batsman		Pitcher		Z-ratio
	Mean	S.D	Mean	S.D	
Z .Z Run	14.81	2.80	13.20	3.32	3.45**

Significant at .015 level of confidence

Table 1 shows the results of mean scores of Zigzag run test of Batsmen and Pitcher which are 14.81 sec. and 13.20 sec. respectively. The Z-ratio of the mean difference on Zigzag run test is 3.45 in favor of Batsmen. It is significant at .015 level of confidence. Hence, the difference between the mean scores of Batsmen and Pitcher on Zigzag run test is significant. The mean score of Batsmen is higher than that of Pitcher. It implied that the Batsmen have better agility components as compared to Pitcher. It may be due to the medium body structure of majority of batsmen as compare to their counterpart Pitcher. They can move their body very fast and very easily but Pitcher can't perform that much easily and effectively due to their long height and stiff physique in most of the cases.

**Graph showing the mean and SD scores of Zigzag run test of Batsmen and Pitcher**



#### DISCUSSION OF FINDINGS:

The results suggested that the Batsmen have better agility than the Pitcher. Hence, there exist a significance difference between Batsmen and Pitcher on physical fitness.

#### CONCLUSION:

Based on the results of the present study the following conclusion is drawn: There exists a significance difference between Batsmen and Pitcher on agility variable. Batsmen were found to be better than Pitcher on this motor fitness variable.

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