

## **“Comparative Study Of Agility and Flexibility Parameters of Cricket and Soft Ball Players”**

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**Abstract:** The main purpose of this study was to find out the diurnal variations on selected Agility and Flexibility variables. For the present study the source of subjects were selected from Agility and Flexibility parameters, in Annamalai University. Forty (n=40) subjects were selected for this study. Twenty (n=20) subjects were taken from cricket game players, while the remaining twenty (n=20) were taken from softball game Players in Annamalai University. The data pertaining to each of the selected Agility and Flexibility variables were examined by the special statistical techniques viz. mean, standard deviation and ‘t’ test. The subjects were selected by using simple random sampling method. The result shows that there was significant difference of diurnal variations in the selected Agility, Trunk Flexibility variables of cricket and softball game players.

Key Words: Agility, flexibility, cricket and softball

### **Introduction:**

Physical fitness is now more or less a matter of concern for a nation. The strength of the democracy of the nation is the collective well being of the people. We live in the labour – saving society of the machines which is eliminating more and more physical exertion from our day to day life. Development of the industries is responsible for mechanical devices such as washing machines, water pumps, vacume cleaners, cooking gas, etc., which has reduced human labour for domestic work. Cable, Television, Dish Antenna, Radio, Internet, Tape Recorder etc., have reduced normal physical activity such as planning in the outfield like running, walking and other daily routine works. The less working capacity of humans has caused many health problems like weakness, illness, overweight, under weight, bad posture, chronic diseases etc.

Physical fitness is a general state of health and well-being and, more specifically, the ability to perform aspects of sports, occupations and daily activities. Physical fitness is generally achieved through proper nutrition, moderate-vigorous physical exercise, and sufficient rest.

### **Sports Physiology:**

The physiological parameters seem to play a very important role in the modern competitive sports in production of more excellent performance. For the physiological system of the body to be fit, they must function well enough to support the specific activity that the individual is performing. Moreover different activities make different demands upon the organism with respect to circulatory, respiratory, metabolic and neurological processes which are specific to the activity.. It is well known that the individual performance in any sports activities follows diurnal physiological parameters. Pattern method may be derived to condition the athletes to produce peak performance with change in diurnal physiological parameters.

### **Softball:**

The name softball was first used by Walter Hakanson, a Denver YMCA official, in 1926. He suggested it to the International Joint Rules Committee, and in 1934 it included the Amateur Softball Association.

Leo Fischer and Michael Pauley decided to organize softball on a more national basis. They brought thousands of softball teams together into state organizations and from there into one national organization. In 1934 membership on the Joint Rules Committee added the Amateur Softball Association. This helped to cement softball and its rules.

### **Cricket:**

Cricket is a bat-and-ball game played between two teams of eleven players on a cricket field, at the centre of which is a rectangular 22-yard-long pitch with a wicket (a set of three wooden stumps) sited at each end. One team, designated the batting team, attempts to score as many runs as possible, while as their opponents field. Each phase of play is called an innings. After either ten batsmen have been dismissed or a fixed number of over's have been completed, the innings ends and

the two teams then swap roles. The winning team is the one that scores the most runs, including any extras gained, during their one or two innings.

## METHODOLOGY

For the present study the source of subjects were selected from Annamalai University. Forty (n=40) subjects were selected for this study, in which twenty (n=20) subjects were cricketers and remaining twenty (n=20) subjects were softball players. The age of the subjects ranged between 18 to 23 years. The subjects were selected by using simple random sampling method. The subjects of the two groups were tested on selected criterion variables namely agility and flexibility by using standard tests namely 40 yard shuttle run and goniometer respectively.

## ANALYSIS AND INTERPRETATION OF DATA

The purpose of this study was to find out the diurnal variations on selected Agility and Flexibility variables. The data pertaining to each of the selected Agility and Flexibility variables were examined by the special statistical techniques viz. mean, standard deviation and 't' test.

**Table No. 1**

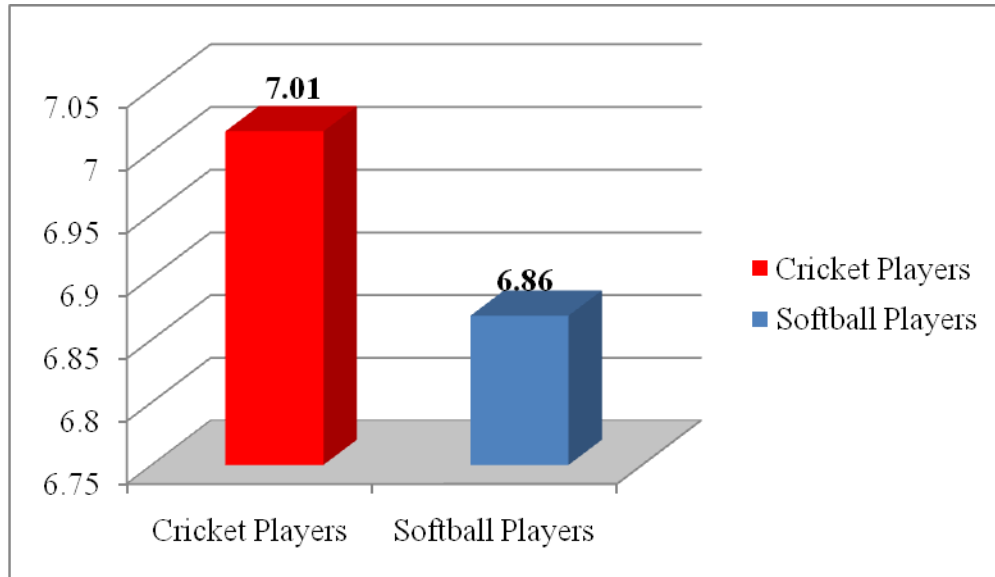
**Comparison of Mean Value of Agility of Cricket and Softball Player in College Level**

Game	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Cricket	7.016	0.48	0.14	0.085	58	1.72	2.02
Softball	6.86	0.42					

Table No.1 reveals that there was significant difference between means of cricket and softball players because mean of cricket players is 7.016 which is greater than the mean of softball players which is 6.86 and therefore mean difference is 0.14. To check the significant difference between cricket players and softball players data was analyzed by applying t' test. Before applying 't' test, standard deviation was calculated between cricket players and soft players which is 0.48 and 0.42 respectively and then the calculated value of 't' is found as 1.72, is lesser than tabulated 't' which is 2.02 at 0.05 level of significance. This shows that softball players have more agility than cricket players. This is presented graphically in graph No.1.

**Graph No.1**

**Graphical representation means value of Agility of College Level Cricket and Softball Players**



**Table No. 2**

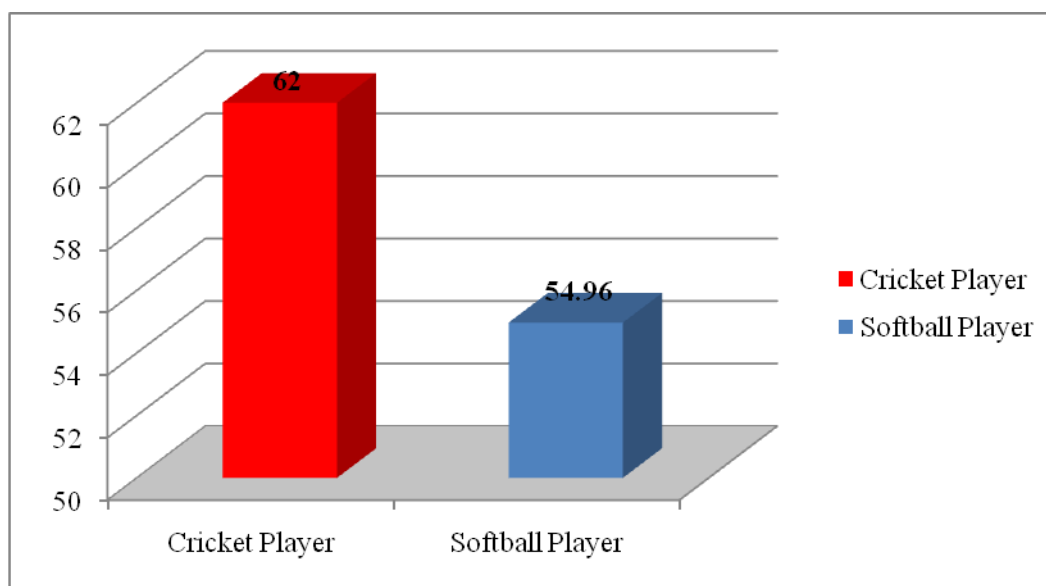
**Comparison of Mean Value of Flexibility of Cricket and Softball Players in College Level**

Game	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Cricket	62	3.48	7.033	0.88	58	7.96	2.02
Softball	54.96	2.61					

Table No.2 reveals that there was significant difference between means of cricket and softball players because mean of cricket players is 62 which is greater than the mean of softball players which is 54.96 and therefore mean difference is 7.033. To check the significant difference between cricket players and softball players data was analyzed by applying t' test. Before applying t' test, standard deviation was calculated between cricket players and softball players which is 0.48 and 2.61 respectively and then the calculated value of 't' is found as 7.96, is greater than tabulated 't' which is 2.02 at 0.05 level of significance. This shows cricket players have more flexibility than softball players. This is presented graphically in graph No.2.

**Graph No. 2**

**Graphical Representation of Mean Difference of Flexibility of College Level Cricket and Softball Players**



**Conclusion:**

The researcher compared Cricket and Softball Players, within the limitations of the present study and on the basis of findings it was concluded that there was significant difference in Agility and Flexibility between cricket players and softball players.

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