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An Exploratory Comparison of Speed and Strength Variables in State-Level Baseball and Softball players

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Abstract

The ambition of this study is to compare Speed and Strength variables between Baseball and Softball State level male players of Patiala district. For achieving the purpose of the study, data was collected on total 60 players (Baseball -30 and – softball- 30). The age of all players will be ranging from 14 to 17 years. No physical training will be given before taking all measurements. The study was delimited to following variables: Speed and Strength. To compare Speed and Strength variables between Baseball and Softball male players at state level mean, standard deviation and t-test were employed with the help of statistical package of SPSS. To test the hypothesis the significance level was set at 0.05 percent. The result exposed that there was a significant difference betweenBaseball and softball state level male players for their Speed and strength variables.

Key words: Speed, Strength, Baseball and Softball

Introduction

Sports scientist and allied research have made the field of sports a highly competition and specialized in nature. Today therefore every sport including Baseball and softball is played in very organized manner with specificity of playing and preparation of participant in various international events (Meenu and Parul,2009). Meyers (1974) defined speed as the capacity of an individual in the rate of making successive movement of the same kindStrength the force that a muscle or group of muscles can exert against resistance in one maximum effort, (Mathew and Fox, 1976)

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. Baseball is a deceivingly 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 (Meswaniya, 2006).

Physical fitness is an inseparable part of sports performance and achievements. The quality of its utilization value is directly proportional to the level of performance. That means the greater the level of fitness, the greater will be the ability of a person to attain higher level of performance. Players are required to have good physical fitness that will enable successful performance at the competitive level. The sport specific technical skills in sports are predominant factors. The physical fitness of a player however can be a decisive determinant of success during competition (Smekal et al., 2001).

Purpose of the Study

To compare Speed and Strength variables between Baseball and Softball State level players of Patiala district.

METHOD AND PROCEDURE:

Selection of subjects

The subjects for the present study consist of Baseball and softball players. Baseball and Softball players who had participated in state level competition. Total 60 players have been selected for the research (Baseball -30 and – softball- 30). The data was obtained from the schools of Patiala district only. The age group ranging from 14 to 17 years.

Selection of variables

In consultation with the experts of the field, minutely going through the literature available and especially the availability of equipment's the following Physical Fitness variables selected: Speed– Speed was measured by applying a standard test of 50 m. dash. (International Physical Fitness Test, 1977) and Strength-Strength was measured by applying a standard test of Softball throw. (AAHPER, 1958).

Criterion measures:

1. Speed was measured in terms of time taken by the subject to run a distance of 50 yard recorded to the nearest of 1/10th of a second.
2. Throw the softball and maximum distance cover in meters.

RESULT AND FINDING

Table No. 1.1: Mean and Standard Deviation of Speed Variables betweenBaseball and Softball State Level Players

Variable	Group	N	Mean	Standard Deviation	Standard Error of mean	t-value
Speed	Baseball players	30	8.787	1.163	0.212	2.305
	Softballplayers	30	8.140	1.002	0.089	

't'-value at .05(2.00)

Table &Figure 1.1 statistically represent that the mean and standard deviation with regard to state level Baseball players is 8.787 and 1.163 where as in case of state level Softball players is 8.140 and 1.002 respectively. The calculated t-value (2.305) which is more than the tabulated t-value (2.00) at 0.05 levels.

So, it indicates that there is significant difference between Baseball and Softball State level players for their Speed variable.

Figure No. 1.1: Mean and Standard Deviation of Speed Variables between Baseball and Softball State Level Players

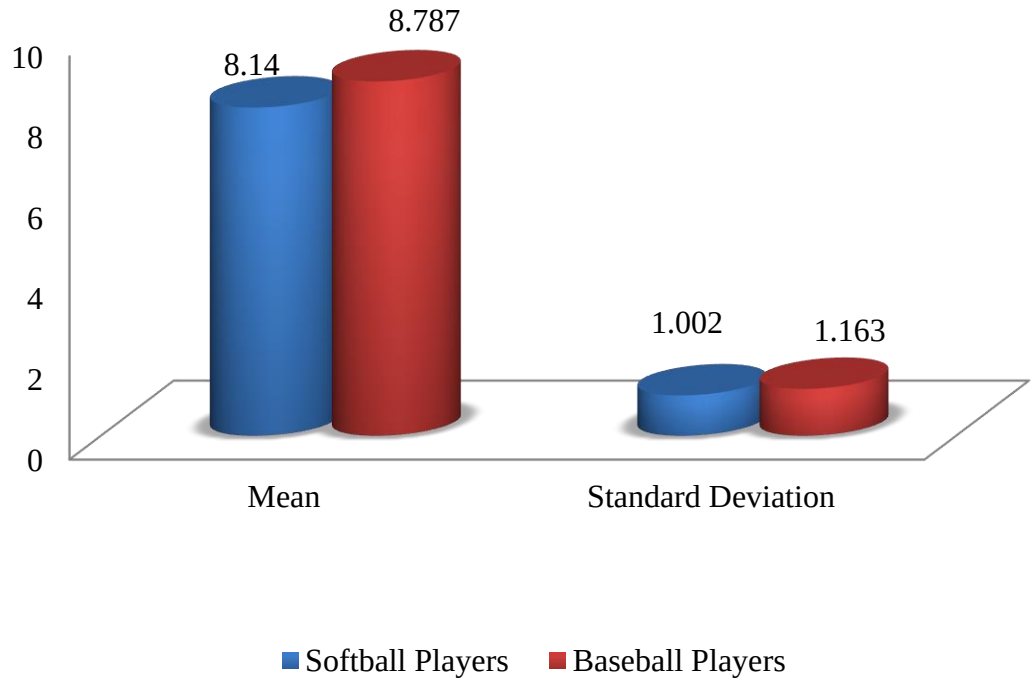


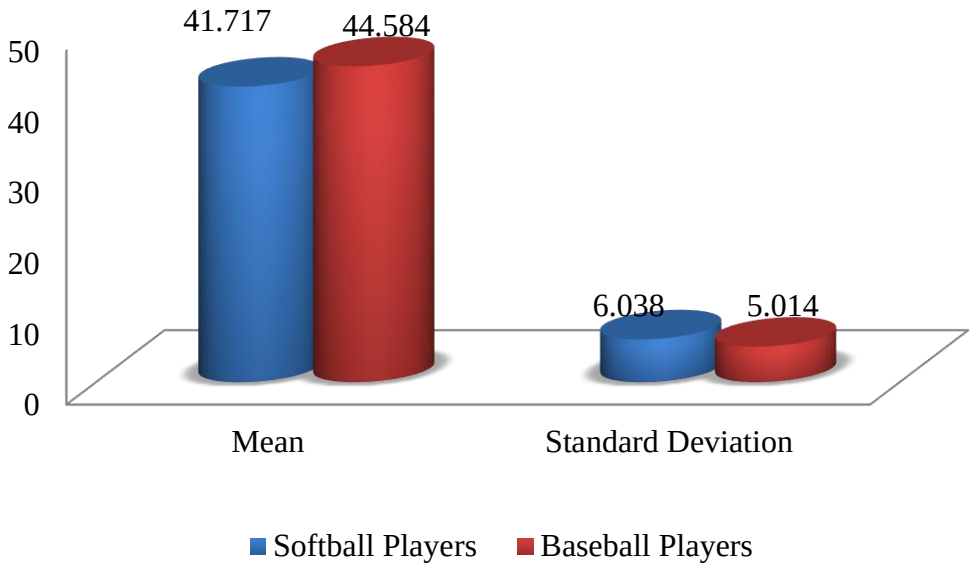
Table No. 1.2: Mean and Standard Deviation of Strength Variables betweenBaseball and Softball State Level Players

Variable	Group	N	Mean	Standard Deviation	Standard Error of mean	t-value
Strength	Baseball players	30	44.584	5.014	0.915	2.0004
	Softball players	30	41.717	6.038	1.102	

't'-value at .05(2.000)

Table &Figure 1.2: statistically represent that the mean and standard deviation with regard to state level Baseball players is 44.584 and 5.014 where as in case of state level softball players is 41.717 and 6.038 respectively. The calculated t-value (2.0004) which is more than the tabulated t-value (2.000) at 0.05 levels. So, it indicates that there is significant difference between Baseball and softball playersfor their Strength variable.

Figure No.1.2: Mean and Standard Deviation of Strength Variable betweenBaseballand Softball State Level Players.



CONCLUSIONS

1) Significant differences were found between Softball and Baseball state level Players for their Speed.
2) The results substantiate that, significant differences were observed between Softball and Baseball state level players for their Strength.

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