



# REVIEW OF RESEARCH

ISSN: 2249-894X

IMPACT FACTOR : 5.7631 (UIF)

VOLUME - 10 | ISSUE - 11 | AUGUST - 2021



---

---

## RELATIONSHIP OF SELECTED PHYSICAL FITNESS VARIABLES WITH SOFTBALL PERFORMANCE

**Mr. Kunwarjeet Singh Sehgal<sup>1</sup> and Dr. Sangeeta Gupta<sup>2</sup>**

<sup>1</sup>Research Scholar, Shri Venkateshwar University, Gajraula, U.P.

<sup>2</sup>Assistant Professor, Shri Venkateshwar University, Gajraula, U.P

### ABSTRACT

*The purpose of the study was to find out the relationship of selected physical fitness variables with softball performance. In this investigation a total of 20 boys from Nagpur District, who were participating in national level were selected as a subject for the study. The age of the subjects was between 18 and 25 years. Physical fitness variables were studied, which are arm and shoulder strength, abdominal muscle strength and endurance and agility. All the measurements were carried out as per standard methods. The softball performance was graded by a panel of experts on the basis of their skills, techniques and match result. To find the relationship of selected physical fitness variables with sports performance of softball players the Pearson Product Moment Coefficient of Correlation was applied. For testing the relationship between physical fitness variables with sports performance the level of confidence was set at 0.05. The results of our study the physical fitness contribute highly significantly to softball performance. From this study it was seen that physical fitness was good for everyone it was very important to improve players performance.*



**KEYWORDS :** physical fitness, softball performance.

### INTRODUCTION:

Physical fitness is very important in any sport. To perform a good sport in sports it is necessary to have physical fitness, muscular activities need to have their ability so that the sports performance of the players is the highest. Physical fitness is very essential for good health for boys and girls. Physical fitness can be achieved through daily exercise. Researchers have made it clear that the more physically fit a person is able to withstand fatigue for a longer period of time than the normal person, the better the physically fit person is to endure physical stress. A physically fit person has the ability to perform stronger and more efficient work which allows him to play more well during the game. But the curiosity to find out which component of physical fitness components affect sports performance has been done by the researcher.

### METHODOLOGY

In this investigation contain no. of 20 boys from Nagpur District, who were participating in national level were selected as a subject for the study. The age of the subjects was between 18 and 25

years. Following physical fitness variables were studied, which are arm and shoulder strength, abdominal muscle strength and endurance and agility. All the measurements were carried out as per standard methods. The softball performance was graded by a panel of experts on the basis of their skills, techniques and match result.

### Statistical Procedure

To find the relationship of selected physical fitness variables with sports performance of softball players the Pearson Product Moment Coefficient of Correlation was applied. For testing the relationship between physical fitness variables with sports performance the level of confidence was set at 0.05.

**Table-1: Mean and standard deviation of selected physical fitness and softball performance**

Variable	Performance	Arm and shoulder strength	Abdominal muscle strength and endurance	Agility
Mean	6.70	22.35	39.10	10.43
S.D.	1.38	3.27	6.77	0.89

The analysis of the data shows the results of the study of selected variables softball performance, arm and shoulder strength, abdominal muscle strength and endurance and agility. The mean  $\pm$  Standard deviation of softball performance in the test were (6.70 $\pm$ 1.38), arm and shoulder strength (22.35 $\pm$ 3.27), abdominal muscle strength and endurance (39.10 $\pm$ 6.77) and agility (10.43 $\pm$ 0.89) respectively.

**Table-2: correlation of selected physical fitness variables with softball performance**

Physical Fitness Variables	Co-efficient of Co-relation
Arm and shoulder strength	0.585
Abdominal muscle strength and endurance	0.628
Agility	-0.654

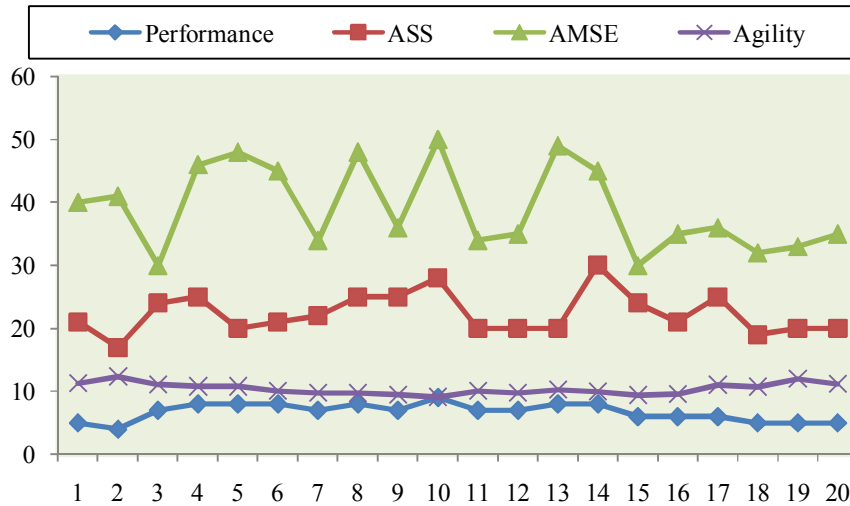
\*Significant at .05 level of confidence

r .05 (18) 0.444

An analysis as shown in table-2 indicated that softball performance had significantly correlation to arm and shoulder strength (r=0.585) were statistically significant as the value obtained were much higher than the tabulated value (0.444) required, to be significant at 0.05 level with 18 degree of freedom.

Table-2 showed that softball performance had significantly correlated to abdominal muscle strength and endurance (r=0.628) which statistically significant with higher value than the tabulated value (0.444).

Table-2 reveals that softball performance of softball players group was significantly correlated to agility (r= -0.654) which was statistically significant as the value obtained were higher value than the tabulated value (0.444) with 0.05 significant level.



**Graph-1 correlation of selected physical fitness variables with softball performance of players**

#### CONCLUSION:

By the light of the results of our study the physical fitness contribute highly significant to softball performance. Form this study it saw that physical fitness was good for everyone it was very importance to improve players performance.

#### REFERENCES:

- Jraeyaj N. and Gopinathan,P. (2014).Relationship of Selected Physical Fitness and Psychological Variables to Kabaddi Playing Ability.*Indian Streams Research Journal*, 4 (4), 41.
- Kumar, B. T. Nagendra and Raj, S. (2012).Relationship of Selected Physical and Anthropometrical Variables with the Game Performance of College Men Volleyball Players.*International Journal of Health, Physical Education and Computer Science in Sports*, 7 (1), 106-110.
- Mazumdar,Indu et.al.(2012). Comparative Relationship of Selected Physical Fitness Variables to Playing Ability in Basketball at Different Levels of Performance.*International Journal of Behavioral Social and Movement Sciences*, 1(2), 31.
- Nagar, Lakshya et.al.(2012). Correlation of Selected Anthropometric and Physical Fitness Variables to basketball Performance.*International Scientific Journal of Sport Sciences*, 1 (2), 91-95.
- Pourranjbar, Mohammad et.al.(2012). A Comparative Study on General Health Status of Athlete and Non-athlete Students in Kerman University of Medical Sciences.*Scholars Research Library, Archives of Applied Science Research*, 4 (1), 623-631.
- Ghosh,Mahaprasad and Kundu,Brajanath (2014).Physical, Physiological and Anthropometric Measures as Determinants of Performance in Kho-Kho Skills - A Correlational Study.*International Journal of Humanities and Social Science Invention*, 3 (8), 4-12.