# A COMPARATIVE STUDY ON SELECTED PHYSICAL FITNESS COMPONENTS AMONG STATE LEVEL FOOTBALLERS AND VOLLEY BALLERS

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### INTRODUCTION

Though there is controversy regarding the definition of fitness particularly regarding its fulfilling all the requirements in criteria. Physical fitness is a general concept defined in many ways by differing physical educationist. One's ability to perform daily task with efficiency, without undue fatigue and reserve ample energy to enjoy vigorous lisure time activities and to meet unforces emergency. Here two major categories are considered: general fitness defined as a state of health and well-being, and specific fitness is a task-oriented definition based on the ability to perform specific aspects of sports or occupations. Physical fitness is generally achieved through correct nutrition, exercises, hygiene and rest. Physical fitness is a set of attributes that are either health- or skill-related. The degree to which people have these attributes can be measured with specific tests. These definitions are offered as an interpretational framework for comparing studies that relate physical activity, exercise, and physical fitness to health. According to Roger Bannister, "Physical Fitness is a state of mental and physical harmony which enables some one to carry on his occupation to the best of his ability with greatest happiness". A number of effective football fitness training drills can be applied to the average person to get into great physical shape. Football is one of those sports that require the athlete to be fit in all areas. Strength, speed, agility and stamina are all qualities and abilities that a football player must possess. As such, football training drills are designed to get the football player in optimal shape. On the other hand, volley ball is one of the competitive sports in the world. Performance and achievement of volleyballers depends upon the optimum level of fitness. Singh, D. N and Vays, R (2012) studied on physical fitness on college level kho kho and handball players and significant difference was observed among the groups. Kirtania and Biswas (2013) studied on some physical fitness components among 12-14 years athletes and non-athlete. Athlete were selected as subject from SAI in different centre and significant difference was observed among the groups.

## **METHODS**

Total sixty (N=60) male state level performer, i.e. thirty footballers (n=30) and thirty volleyballers (n=30) were selected at randomly from Murshidabad District. Age limit of the subjects was from 17 years to 19 years. Physical fitness test was employed for all the subjects of both the groups in twice and best performance was taken. In this test six test items consist. These test items are 50 yard dash; 600 meters run and walk; shuttle run; medicine ball throw; standing board jump and sit ups etc. All the six tests were analysed by t-test and significant was set at 0.05 level of significance.

### ANALYSIS OF DATA

The data of physical fitness tests such as 50 yard dash; 600 meters run and walk; shuttle run; medicine ball throw; standing board jump and sit ups were analysed by t-test and the significant was set at 0.05 level of significance.

### RESULTS AND DISCUSION

Table-I Mean, SD, t-value of Physical Fitness Parameter of State Level Male Football and Volleyball players

Variables	Groups	Means	Std Deviation	t-ratio
50 Meters Dash	Football	6.08	0.07	3.12
	Volleyball	6.68	0.31	
600Meters Run and Walk	Football	1.15	0.02	6.92*
	Volleyball	1.46	0.11	
Shuttle Run	Football	8.99	0.39	4.7*
	Volleyball	10.52	0.71	
Medicine Ball Throw	Football	16.56	0.53	5.2
	Volleyball	17.65	0.54	
Standing Broad Jump	Football	2.18	0.06	3.31
	Volleyball	2.57	0.18	
Sit-up	Football	46.7	3.54	0.006
	Volleyball	44.4	3.38	

Significant at 0.05 level

Table-I, represent the mean values of 50 yard dash; 600 meters run & walk; Shuttle run; medicine ball throw; standing board jump and sit ups of football group were 6.08, 1.15, 8.99, 16.56, 2.18 and 46.43 respectively and the mean values of 50 yard dash; 600 meters run and walk; shuttle run, medicine ball throw; standing board jump and sit ups of volleyball were 6.68, 1.46, 10.52, 17.75, 2.57 and 44.4 respectively. The t-values between football group and volleyball group in 50 yard dash; 600 meters run and walk; shuttle run; medicine ball throw; standing board jump and sit ups were 3.12, 6.92, 4.7, 5.2, 3.31 and 0.006 respectively. The t-values between football group and volleyball group in 50 meter dash, 600 meter run & walk, Shuttle run, medicine ball throw and standing broad jump were significant at 0.05 level of significance. Significant at 0.05 level of significance t-values should be greater than 2.03. The t-values of football group and volleyball group in sit-up were not significant at 0.05 level of significance.

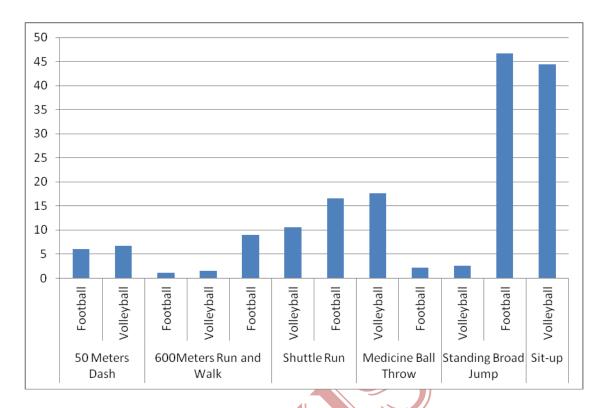


Fig. no. 1: Mean values of different physical fitness variables of Football and Volleyball players

Every person has a different level of physical fitness which may change time, place of work and situation. In the field of games and sports, physical fitness varied on sportsmen in different sports. Actually physical fitness depends upon their movement in limbs which involves in sports and games. In the present study, football and volleyball both are team game but their nature of skills are different. Football is endurance type very fast game whereas mainly it plays by legs so it is necessary to strengthen the lower limb of footballers but volleyball player play by hand and it is not running game but leg explosive strength also necessary here. Table-I showed the significant difference between the mean of 50 meters dash, 600meters run & walk and shuttle run of football and volleyball. Figure-1 showed that the footballers were superior to volleyballers in 50 meters dash, 600meters run & walk and shuttle run. Table-I represents the significant difference mean values of medicine ball throw and standing broad jump of football and volleyball. Figure-2 showed that volleyball group was superior to football group in medicine ball throw and standing broad jump. Volleyball players are very essential skill to develop vertical jump and shoulder and hand strength for spiking or smash the ball in volleyball game. So findings of the present study are relevant to volleyball game. No significant difference observed among football and volleyball in sit-up. Figure-2 showed that no superiority was found among football and volleyball in sit-up test. Sandhu S. S(1983), Choudhary, A (1998), Mehtap Ozdirenc, Nihal Gelecek (2005) corroborates with the present study.

### **CONCLUSION**

Within the limitations of the present study, the following conclusions are enumerated: Football group were superior to volleyball group in 50 meters dash, 600meters run and walk and shuttle run.

Volleyball group were superior to football group in medicine ball throw and standing broad jump. No superiority was observed among football group and volleyball group in sit-up test.

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