



A Comparative Study on Physical Fitness among State Level Footballers And Volleyball Players

KEYWORDS

Dr. Sandip Sankar Ghosh

Assistant Professor, State Institute of Physical Education for women, Hastings House, Alipore, Kolkata-700027, West Bengal, India

ABSTRACT The purpose of the present study was to compare the physical fitness among state level footballers and volleyball players. Methods: Total forty (N=60) male state level performer, i.e. twenty footballers (n=30) and twenty volleyball players (n=30) were selected at randomly from Howrah District. Age limit of the subjects was from 17 years to 19 years. AAPHERD 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; standing board jump; medicine ball throw; shuttle run and sit ups etc. All the tests were analysed by t-test and significant was set at 0.05 level of confidence. Results: The results found that the t-test was significant at 0.05 level of confidence among footballers and volleyball players in 50 yard dash, 600 meters run and walk, standing broad jump, shuttle run and medicine ball through but no significant difference was found in sit-up among footballers and volleyball players at 0.05 level of confidence. Conclusions: Footballers was superior to volleyball players in 50 yard dash, 600meters run and walk and shuttle run and volleyball players were superior to footballers in standing board jump and medicine ball throw but no superiority was observed among footballers and volleyball players in sit-ups test.

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 as One's ability to perform daily task with efficiency, without undue fatigue and reserve ample energy to enjoy vigorous leisure time activities and to meet unforced 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 volleyball players 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. Athletes 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 volleyball players (n=30) were selected at randomly from Howrah 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; standing board jump; medicine ball throw; shuttle run and sit ups etc. All the six tests were analysed by t-test and significant was set at 0.05 level of confidence.

ANALYSIS OF DATA:

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

RESULTS AND DISCUSSION:

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

Variables	Groups	N	Means	S.D	t-ratio
50 Meters Dash (Sec)	Football	30	6.12	0.11	9.31
	Volleyball	30	6.94	0.33	
600Meters Run and Walk (Min)	Football	30	1.15	0.03	2.60
	Volleyball	30	1.47	0.07	
Medicine Ball Throw (m)	Football	30	16.61	0.54	4.61
	Volleyball	30	17.75	0.34	
Standing Board Jump(m)	Football	30	2.18	0.06	5.42
	Volleyball	30	2.59	0.17	
Sit-up (no. of executed sit-ups in 1 minute)	Football	30	46.43	3.32	0.009
	Volleyball	30	44.33	3.37	
Shuttle Run (sec)	Football	30	8.98	0.40	5.49
	Volleyball	30	10.76	0.43	

Significant at 0.05 level of confidence

Table-I, represent the mean values of 50 yard dash; 600 meters run and walk; medicine ball throw; standing board jump; sit ups and shuttle run of football group were 6.12, 1.15, 16.61, 2.18, 46.43 and 8.98 respectively and the mean values of 50 yard dash; 600 meters run and walk; medicine ball

throw; standing board jump; sit ups and shuttle run of volleyball group were 6.94, 1.47, 17.75, 2.59, 44.33 and 10.76 respectively. The t-values between football group and volleyball group in 50 yard dash; 600 meters run and walk; medicine ball throw; standing board jump; sit ups were 9.31, 2.60, 4.61, 5.42, 0.009 and 5.49 respectively. The t-values of football group and volleyball group in 50 meter dash, 600 meter run and walk, medicine ball throw, standing broad jump and shuttle run were significant at .05 level of confidence but the t-values of football group and volleyball group in sit-up were not significant at 0.05 level of confidence. Significant at 0.05 level of confidence, t-values should be greater than 2.03.

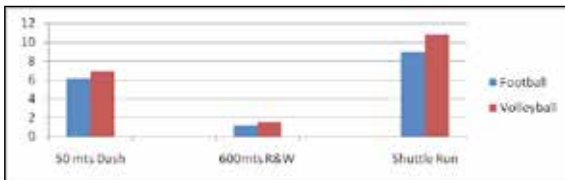


Fig. 1: A comparison of means between Football and Volleyball players in 50 meters dash, 600meters run & walk and shuttle run.

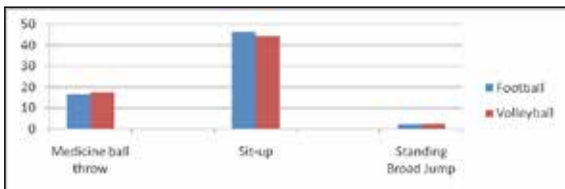


Fig. 2: A comparison of means between Football and Volleyball players in Medicine ball throw, Sit-up and Standing ball throw.

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 game whereas it plays by legs but volleyball play by hand and it is not running game. 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, football was superior to volleyball 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 for vertical jump and shoulder and hand strength for spiking or smash the volleyball. 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:

1. Footballer group were superior to volleyball players in 50 meters dash, 600meters run and walk and shuttle run.
2. Volleyball players were superior to footballers in medicine ball throw and standing broad jump.
3. No superiority was observed among footballers group and volleyball players group in sit-up test.

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