



## AN ASSESSMENT ON THE LEVEL OF SELECTED MOTOR ABILITY OF TENNIS AND VOLLEYBALL PLAYERS (BOYS)

### KEYWORDS

Tennis, Volleyball, Sit ups , Shuttle Run, 12 minute run and Walk, 50 yard dash.

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**ABSTRACT** Motor fitness is the basis of all the activities of individuals to perform them efficiency and effectively. The purpose of the study was to compare the selected Motor ability of tennis and volleyball players (age 16-18 years). Thirty (30) Tennis and Thirty (30) volleyball players were randomly selected for the study. To measure the level of motor ability of tennis and volleyball players, five test items of AAPHER Youth fitness test battery were used. For statistical analysis and Interpretation of data 't' test was conducted. It was observed that there was significant difference in sit ups, standing broad jump, shuttle run, 50 yard dash and 12 minute run and walk. Result showed Tennis players are better in all test items in comparison to Volleyball players except Agility.

### INTRODUCTION

Motor ability means the ability to perform fundamental motor skills involving all basic performance traits including co-ordination or arm eye, and foot eye, muscular power, agility, muscular strength, cardio-respiratory endurance, flexibility and speed.(H.Harrison Clarke,1976). Many researchers in the field of Physical Education and Sports have emphasized the importance of Motor ability, technical and tactical ability, physical and mental efficiency, for achieving top performance. Tennis and Volley ball are most popular game in the world and require high-level of motor ability, strength, speed agility, endurance .balance, co-ordination and skillful bodily movement. In the pre-historic times, Physical fitness was the key element of the survival of human beings. Physical fitness is the pre-requisite of the ability to perform any motor tasks in day to day life as well as in sport. It has been considered as one of the most important aspects of human existence. Physical fitness is that state of body in which a person can carry his daily duties and responsibilities efficiently and with the energy left he can enjoy hobbies and other recreational activities and can meet the unusual. In other words Physical fitness can be defined as the state of body in which a person can do work for a longer duration without undue fatigue. Physical fitness not only a state of younger's but is the reality for all ages. Physical fitness is the product of physical exercises and exercise is very much related to health and wellbeing. But development of science and technology discouraging the human beings from doing vigorous activities as a result of which various physical and mental diseases are flourishing at a great speed throughout the world. The findings of the present study will encourage the youth of the nation to participate in Games and Sports.

### METHODOLOGY

Thirty (30) Tennis and Thirty (30) Volleyball players (age 16-18 years) were selected from Nine (9) Higher Secondary Boys School in Purba Medinipur. Tennis and Volleyball players are those boys who regularly used to go for physical activities willingly and took part in District level matches and tournaments. The random group design was used for the study. Random sampling method was employed. Five test items of the AAPHER youth fitness test battery were administered to measure motor ability of the Tennis and Volleyball players. After collecting the data to observe the difference among the group the raw data were converted to the percentile scores according to the normative scale of this battery.

Bend knee sit-up was used to measure abdominal strength

of the subjects. To measure explosive strength and power of the subjects Standing broad jump was employed. Shuttle run was administered to measure agility of the subjects. To measure the speed of the subjects 50 yard dash was used and 12 minute run & walk was administered to measure endurance of the subjects.

Tools used for the present study were Measuring –Tape, Stop Watch, Mat, Clapper, Wooden block and Whistle. Age of the subject was taken from their school record. Both the groups were same in age.

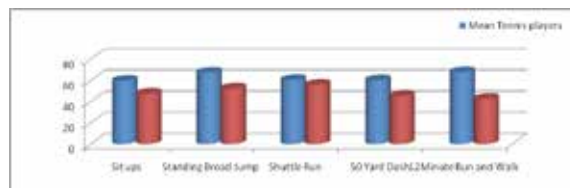
### RESULTS AND DISCUSSION:

For statistical analysis and Interpretation of data 't' test were conducted. The results are presented in tabular form as given here under.

**Table-1**  
Mean and t-ratio of various fitness test for Tennis and Volleyball players

Sr No	Variables	Mean Tennis players	Mean Volleyball Players	Mean Difference	t-ratio
1	Sit ups	59.67	47.50	12.17	2.50*
2	Standing Broad Jump	67.17	52.50	14.47	2.38*
3	Shuttle Run	60.50	56.00	4.50	0.79NS
4	50 Yard Dash	60.17	45.33	14.84	2.58*
5	12Minute Run and Walk	67.67	42.50	25.17	6.86**

\*Significant at 0.05 level, \*\*Significant at 0.01 level, NS is Not Significant.



**Fig. 1: Graphs Showing Motor ability Test between Means of Tennis and Volleyball players**

Table-1 give information regarding selected Motor ability variables of Sit ups, Standing Broad Jump, Shuttle Run, 50 Yard Dash and 12 minute Run and Walk of Tennis and Vol-

leyball players. Table shows that there were significant differences in all the variables of Tennis and Volleyball players. The Mean Difference of Sit ups, Standing Broad Jump, Shuttle Run, 50 Yard Dash and 12 minute Run and Walk of Tennis and volleyball players were 12.17, 14.47, 4.50, 14.84 and 25.17 respectively. t-test was applied and t-value of Sit ups, Standing Broad Jump, Shuttle Run, 50 Yard Dash and 12 minute Run and Walk were 2.50, 2.38, 0.79, 2.58 and 6.86 respectively.

#### CONCLUSION:

Based on the result of the present study and within the limitation, following conclusions may be drawn.

- Tennis players are better in abdominal strength in comparison to Volleyball players
- Tennis players are better in explosive strength in comparison to Volleyball players
- Tennis players are slightly better in agility in comparison to Volleyball players but it was not statistically significant.
- Tennis players are better in speed in comparison to Volleyball players
- Tennis players are better in endurance in comparison to Volleyball players

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