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## Comparison between players of ball and racket games in their psychomotor components

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### Abstract

The purpose of the study was to compare the psychomotor components of ball (Volleyball) and Racket (badminton) games. The sample of the investigation fifty players were selected for the collection of data which include twenty five volleyball and twenty five badminton players from college of Yavatmal District (Maharashtra State). All the players age ranges from 18 to 20 years. The subjects were tested on eye foot coordination test and electronic visual hand reaction time test. To compare the coordination and reaction time between the ball (volleyball) and Racket (badminton) games players, student t-test were calculated. The level of significance was set at 0.05 level. It was concluded that ball (volleyball) and racket (badminton) games players significant difference in hand reaction time but did not differ on eye foot coordination.

**Keywords:** Ball and racket games, psychomotor

### Introduction

Psychomotor this is mainly related to physiological functions and their control. When performed in a general way, such behavior is called a general action and when highly specific tasks occur, indicate a skill. Psychomotor functions are usually used in controlling an object, satisfying or controlling the body, eye coordination, eye-foot coordination and many functions or moving parts of the body.

Sports are very important and simple way to improve physical and mental wellbeing. Due to which psychomotor skills are also improved, and the player can be strengthened physically and mentally to improve the game performance. There are certain psychological principles that have to be applied so that the player can maximize his performance. Along with maintaining health and wellness of the body through sports, we can also create a better future in sports.

### Methodology

The sample of the investigation fifty players were selected for the collection of data which include twenty five volleyball and twenty five badminton players from college of Yavatmal District (Maharashtra State). All the players age ranges from 18 to 20 years. The subjects were tested on the following variables.

### Psychomotor components and test used

1. Eye foot coordination: Eye foot coordination was measured with the help of eye foot coordination test.
2. Hand reaction time: Hand Reaction time was measured with the help of electronic visual hand reaction time test.

### Statistical analysis

To compare the coordination and reaction time between the ball (volleyball) and Racket (badminton) games players, student t-test were calculated. The level of significance was set at 0.05 level.

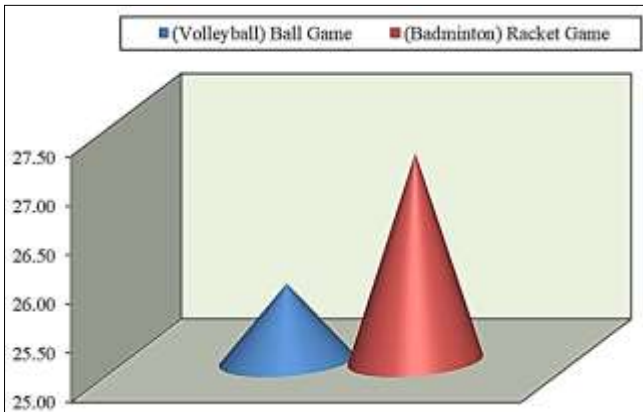
In table-1 the mean and standard deviation and t-ratio of the eye foot coordination have been presented.

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**Table 1:** Mean and standard deviation and t-ratio of the eye foot coordination of ball (Volleyball) and racket (Badminton) games players

Group	N	Mean	SD	SE	MD	Ot	df	Tt
(Volleyball) Ball Game	25	25.78	2.79	0.82	1.33	1.616	48	2.01
(Badminton) Racket Game	25	27.11	3.01					

It may be observed from the above table that no significant difference was found between ball and racket games on eye foot coordination as the obtained value of 't' (1.616) has been found 0.05 which is less than the tabled value of 't' (2.01) at 0.05 level of confidence with 48 degree of freedom.

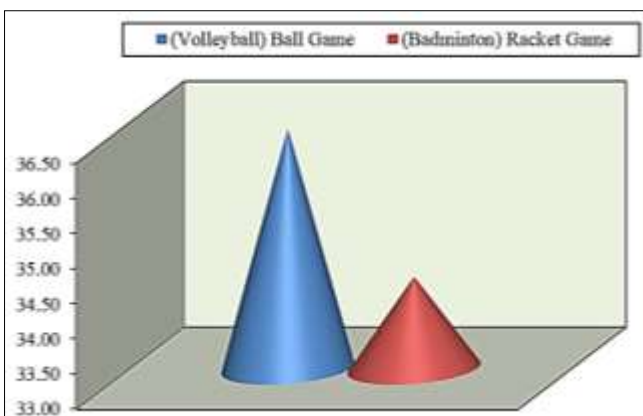


**Fig 1:** Mean of the eye foot coordination of ball (Volleyball) and racket (Badminton) games players

**Table 2:** Mean and standard deviation and t-ratio of the hand reaction time of ball (Volleyball) and racket (Badminton) games players

Group	N	Mean	SD	SE	MD	Ot	df	Tt
(Volleyball) Ball Game	25	36.41	3.72	1.00	2.10	2.092	48	2.01
(Badminton) Racket Game	25	34.30	3.37					

In table-2 the mean and standard deviation and t-ratio of the hand reaction time have been presented. It may be observed from the above table that significant difference was found between ball and racket games on hand reaction time as the obtained value of 't' (2.092) has been found 0.05 which is considerably more than the tabled value of 't' (2.01) at 0.05 level of confidence with 48 degree of freedom.



**Fig 2:** Mean of the hand reaction time of ball (Volleyball) and racket (Badminton) games players

**Conclusion**

On the basis of the results obtained from the present observed investigation it may be concluded that ball (volleyball) and racket (badminton) games players significant difference in hand reaction time but did not differ on eye foot coordination.

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