

## A study on speed and agility between santal and general school boys

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### Abstract

Speed and agility were the most important factors of physical fitness. Speed means maximum distance covered in shortest possible time. Agility is the ability to change direction quickly. Agility was also one of the most important factors of physical fitness and sports performance. Speed and Agility were the most important and related factors to do better performance in a game and physical activities. In this present study this aspects would be verified. 30 Santal and 30 general students from 12-15 years of age were selected as the subject of the study. Selected physical fitness parameter that is speed was measured by 50 m. dash and Agility, which was measured by 4×10 m. shuttle run. The data was analyzed statistically Mean, SD, and 't'-test for significant result. On the basis of the result following conclusion were drawn-

1. Santal school boys were faster than General school boys.
2. In agility Santal school boys and General school boys were more or less same.

**Keywords:** speed, agility, santal school boys, general school boys

### Introduction

The main objectives of comparative study of sports are the development of physical ability, which could be evaluated by assessing various components of physical fitness.

According to AAHPER "The state which characterized the degree to which the person is able to function. Fitness is an individual matter. It implies the ability of each person to live most effectively with his potential. Ability to function depends upon the physical, mental, emotional, social and spiritual components of fitness, all of which are related to each other and mutually independent. So physical fitness was defined as the ability to carry out everyday tasks with vigor and alertness, without undue fatigue and with ample energy to enjoy leisure time pursuits and to meet emergencies.

Speed and agility were the most important factors of physical fitness. Speed means maximum distance covered in shortest possible time.  $S=D/T$ . Speed appear in different forms in different sports. Speed was one of the most important components of physical fitness, which can be measured by 50m. dash. Sprinting speed is the maximum locomotion speed, with which an individual can run. According to Hardayal Singh, "Some of, which are mobility of the nervous system, directions."

Agility is the ability to change direction quickly. Agility was also one of the most important factors of physical fitness and sports performance, which can be measured by 4×10m. Shuttle run.

Speed and agility were the most important & related factors to do better performance in a game and physical activities. In the present study these performance aspects would be verified. But obtaining the correlation between speed and agility, it would be assumed how far these two parameters were related to each other.

### Purpose of the Study

The purpose of the present study was to compare the speed and agility between Santal and General School boys.

### Methodology

#### Subject

The subjects of the present study were 30 Santal school boys and 30 General school boys aged 12 to 15 years. The subjects were selected randomly from class VII & IX from two different schools, those were Routhmoni R.C. High School (HS), Routhmoni, Kharagpur, Paschim Medinipur and Khutia-Gokulpur Vivekananda Vidyapith, Gokulpur, Kharagpur Paschim Medinipur.

### Personal Data

1. **Age:** Age of the subjects ranged 12 to 15 year. The age was collected from the school register.
2. **Height:** The height of the subjects was measured by an anthropometric rod.
3. **Weight:** The weight of the subjects was taken from a standard weighing machine.

### Criteria Measure

Speed and Agility were the criteria. Speed was measured by 50m. Dash and Agility was measured by (4 x 10m.) shuttle run to compare the two groups.

### Procedure of Collecting Data

#### A) Speed

The subject were instructed to sprint a distance of 50m on a natural grass surface at the field. The subject had taken standing start position behind the starting line. The starter indicated the starting signal by a clapper and after being

clapped they ran as fast as possible to complete 50m distance. **Scoring:** The time taken to cover 50 m. was recorded in 1/100<sup>th</sup> of a second. The timing was recorded of 50 m. dash.

**B) Agility**

The subject was instructed to sprint a distance of 4X10m. on the natural grass surface at the field. The subject had taken standing start behind the starting line. Two blocks of wood 2X2X2 cubic inches were used. The blocks were placed behind one of the lines, the subjects started from behind the other or starting line. The test consists of running to the blocks and made 180° turn and bringing them to the starting line one at a time and placed them behind the starting line.

**Scoring:** Two trials were allowed with some rest in between. Record the time of the better of the two trials to the nearest 10<sup>th</sup> of a second.

The data was analyzed statistically Mean, SD, and ‘t’-test for significant result at 0.05 level.

**Result and Discussion**

The collected data were classified and presented in this chapter in tabular form. The raw scores were arranged according to design of the study. Appropriate statistical computations were made and computed scores were presented in this chapter.

**Personal Data**

**Table 1:** Mean, SD & Range of personal data of the subjects

Variables	Santal			General		
	Mean	SD	Range	Mean	SD	Range
Age (yrs)	13.27	0.70	12-15	13.53	0.52	13-14
Height (cm)	148.57	11.84	129-162	154.29	9.18	142-166
Weight (kg)	40.73	6.29	31-50	45.4	7.36	32-56

**Table 2:** Mean & SD of Speed and Agility of the Groups

Variables	Santal		General	
	Mean	SD	Mean	SD
Speed	6.91	0.77	7.83	0.50
Agility	10.67	0.85	10.93	0.78

**Table 3:** Mean, SD and t-value of the Groups

Variables	Mean & SD		t-value	Remarks
	Santal	General		
Speed	6.91±0.77	7.83 ±0.50	3.63	**
Agility	10.67±0.85	10.93 ±0.78	0.505	N.S.

N.S.=Not Significant

\*\*Significant at 0.05 level

**Analysis of Variables**

From table-II & table-III, analysis of data was made on different criterion measures as follows:

**Speed**

It was observed that mean & SD of Santal and General school boys group in speed (50m dash) were 6.91 ±0.77 sec. and 7.83 ±0.50sec. respectively. t-Value was calculated and found 3.63 which indicated that Santal school boys were significantly better than that of General school boys in speed.

**Agility**

In case of agility the mean of Santal and General school boys were 10.67 ±0.85 sec. and 10.93 ±0.78 sec. respectively. The t-ratio was calculated and found 0.05 which was not significant in both level.

So from the table it was observed that there was no significant difference in agility between the Santal and General boys of that age group. From the mean difference it was found that both the groups were same in their performance.

**Conclusion**

From the above findings of the present study we may concluded that:

1. Santal school boys were faster than the General school boys.
2. In agility Santal school boys and General school boys were more or less same.

**5. References**

1. Singh Hardayal. Science of Sports Training DVS. Publication, New Delhi, 1991.
2. Garrett, Henry E. Statistics in Psychology and Education, Paragon International Publication, New Delhi, India.
3. Yadav Amit Kr. *et al.* A Study on Speed and agility between rural and urban school boys.