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## Analysis of selected general motor ability variables, agility, speed, power and strength of different areas school students

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### Abstract

The purpose of the study was to analyze the Agility, Speed, power and Strength of different areas school boy's athletes of Mansa district of Punjab state and Fatehabad district of Haryana State. The study was carried out on 60 subjects, 30 subjects from Mansa district and 30 subjects from Fatehabad. To achieve the objective of study, the only those sports person were selected from school of rural and urban areas of Mansa district and Fatehabad district, who had minimum participated at district and state level competitions in volleyball, handball, kabbadi, football and kho-kho events. Only four motor ability variables were measure to collect the data i.e. Agility, Speed, Power and Strength. The Zig-Zag Run and Standing Broad Jump test were used to measure the selected motor ability variables of the players. T-test was used to compare these variables. The age limit of the selected subjects ranged from 15 to 18 years.

**Keywords:** Motor ability, Speed, Mansa, Fathehabad, Haryana.

### 1. Introduction

Traditionally, motor ability has been viewed as a combination of factors that are basic to all movement. In past this quality has been evaluated by presenting motor problems that are new to the students. Traditionally, this has been done through stunt activities are given activities involving performance of unfamiliar motor patterns. A student who possesses a high level of this quality is generally called "natural", and responds to teaching and coaching quickly. As discussed in the motor fitness, this aspect of human performance is ascribed to quality; by birth itself this quality encompasses human motor development. The meaning of term motor ability has been interpreted in different ways. The components of motor fitness, physical fitness and motor ability are almost same. Even though, their components are more or less same, they have different motor performances. Since motor ability is looked as a mosaic comprised of many components, then each of these components must contribute independently to a successful performance of a movement skill. However, there is no common agreement on what these components are.

General motor ability has been considered as one's level of ability in a wide range of activities. It has been thought of as an integrated composite of such individual traits as strength, endurance, power, speed, agility, balance, reaction time, and co-ordination traits underlying performance in many motor complexes. In successful motor performance, these traits function in a coordinated manner and in effective sequence to achieve an accurate and efficient movement, whether it be a single effort, as in the golf drive, or in a series of complex and rapidly changing movements, as in basketball. General motor ability in itself does not permit a sportsperson to be excellent performer in any particular activity. It only furnishes the base from which excellence can be achieved by becoming proficient in those skills, which are specific to that particular sport. Some of the components have rather large potential while others have limited potential for development.

### 1. Purpose of the Study

Analysis of Selected General Motor Ability Variables, Agility, Speed, Power and Strength of Different Areas School Students

### 2. Objective of the study

The main objective of the study and sub objective which are listed below:

- To Analyzed the Agility and Speed (zig-zag run) between Mansa district of Punjab state

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- and Fatehabad district of Haryana state players.
- To Analyzed the Power and Strength (Standing broad jump) between Mansa district of Punjab state and Fatehabad district of Haryana state players.

**3. Hypothesis of the study**

- Null hypothesis was framed for the study.

**Methodology**

**5.1 Selection of the subjects**

To achieve the objectives of the study total 60 students 30 from Mansa district (Punjab) and 30 subjects from Fatehabad district (Haryana) were selected for the study.

**5.2 Selection of Variables**

The Variables selected for this study were as follows:

- Agility and Speed
- Strength and Power

**5.3 Tool used to measure the Motor ability**

The following tests were selected and scores were considered as criterion measure for the study.

- Zig-Zag Run (To measure Agility and Speed )
- Standing Broad Jump (To measure Strength and Power)

**5.4 Statistical Technique**

To analysis the study ‘t’-test was used.

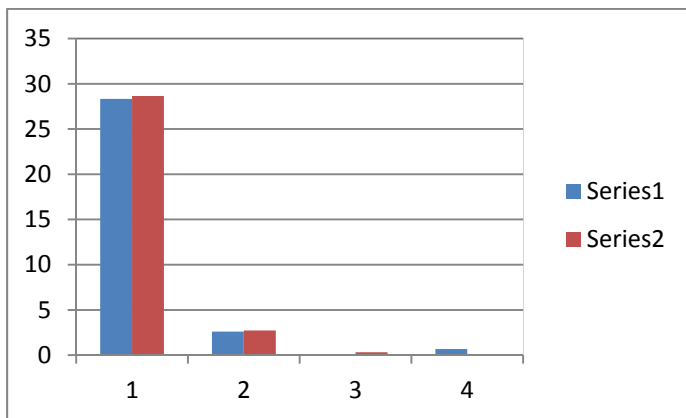
**5.5 Result and Discussion**

**Table 1:** To Analysis the Agility and Speed (zig-zag run) between Mansa district of Punjab state and Fatehabad district of Haryana state players.

Area	N	Mean	S.D.	S.E.D.	T
Mansa (Punjab )	30	28.33	2.61		.67
Fatehabad (Haryana)	30	28.64	2.73	.33	

Significant at the 0.05 level

**Table .1** shows that the mean value of Agility and Speed in case of Mansa District (Punjab) and Fatehabad district (Haryana), player is 28.33 and 28.64 respectively and S.D. is 2.61 and 2.73 and their SED is .33. The ‘t’ value obtain was .67 there exist significant difference at the 0.05 level. It means that Mansa district (Punjab) Players better than Fatehabad district (Haryana) players in Agility and Speed.



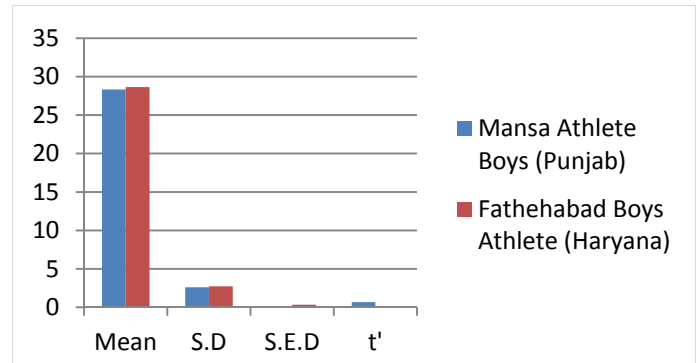
**Graph 1:** Graphical Representation of Agility and Speed (zig-zag run) between Mansa district of Punjab state and Fatehabad district of Haryana state players

**Table 2:** To Analysis of Power and Strength between Mansa district of Punjab state and Fatehabad district of Haryana state players.

Area	N	Mean	S.D.	S.E.D.	t
Mansa (Punjab )	30	78.08	5.33	.67	
Fatehabad (Haryana)	30	78.89	5.52		.18

Significant at the 0.05 level

**Table 5.2** shows that the value of Power and Strength in case of Mansa District (Punjab) and Fatehabad district (Haryana), player is 78.08 and 78.89 respectively and S.D. is 5.33 and 5.52 and their SED is .67. The ‘t’ value obtain was .18 which was significant difference at the 0.05 level. It means that Fatehabad district (Haryana) Players better than Mansa district (Punjab) players in Power and Strength.



**Graph 2:** Graphical Representation of Power and Strength between Mansa district of Punjab state and Fatehabad district of Haryana state players.

**Conclusion**

The obtain result show that, Mansa district (Punjab) players was better than Fatehabad district (Haryana) in Agility and Speed and Fatehabad district Haryana Players was better than Mansa district (Punjab) players in Power and Strength.

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