Comparison of Speed among Athletes and Hockey Players
Female of Under 16 Years in District Panipat, Haryana

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Abstract
The aim of the present study is to compare the speed among Female Athletes and Female Hockey Players of Panipat. The 40 female samples between the age group of 14-16 years i.e. 20 female athletes and 20 Female Hockey Players of Panipat who have taken part in the District sports and games during the year 2013-14 were taken for the study. The 50 meter run test was used to assess the speed among Athletes and Hockey Players. The results of the study show that the Athletes are having very good speed compare to the Hockey Players. It is recommended that athletes and Hockey players must be given good speed training to enhance the performance.

Keywords: Speed, athletes, hockey players etc.

1. Introduction
Track and field is one of the oldest of sports. Athletic competitions were often taken in conjunction with religious festivals, as with the Olympic Games of ancient Greece. Course and field as a modern sport started in England during the 19th C. English public school and University students dedicated the sport impetus through their inter class meets, or meetings. In 1849 the Royal Military Academy at Sandhurst held the first organized track and field meet of modern times. Not until the 1860s, however, did the sport flourish. In 1866 the first English championships were held by the newly formed Amateur Athletic Club, which opened the competition to all "gentlemen amateurs", specifically, athletes who received no financial compensation for their efforts. Although meets were held along the North American Continent as early as 1839, track and field first gains popularity in the late 1860s' after the establishment of the New York Athletic club in 1868. The Amateur Athletic Union of the United States, an association of track and field clubs' formed in 1887 and has governed the sports in the United States since then [1, 2].

In 1896 the first modern Olympic Games were staged. Although initially of limited appeal the Olympics captured the imagination of athletes and grew steadily, making tracking and field an International sport for the first time. In 1913 the International Amateur athletic Federation was formed by representatives from 16 countries [3].

Field hockey also called hockey, outdoor game played by two opposing teams of 11 players each who use sticks curved at the striking end to hit a small, hard ball into their opponent’s goal. It is called field hockey to distinguish it from the similar game played on ice [4].

Hockey is believed to date from the earliest civilizations. The Arabs, Greeks, Persians, and Romans each had their own versions and traces of a stick game played by the Aztec Indians of South America have been found. Hockey can also be placed with other early games, such as hurling and Shinty. During the Middle Ages a French stick game called *hoquet* was played, and the English word may be derived from it [5].

The game recreates by two teams of 11 players on a rectangular basis. The airfield is 100 yards (91.4 meters) long and 60 yards (55 meters) wide, and it is set with a center line and two 25-yard lines. The goals are 4 yards (3.66 meters) wide and 7 feet (2.13 meters) high. For a goal (which counts for one point) to be scored, the ball must go into the goal and, while within the shooting circle (semicircle), must have been touched by the stick of an attacker. The ball was originally a cricket ball (cork center, string-wound, and passed over with leather), but plastic balls are also sanctioned. It is approximately 9 inches (23 centimeter) in circumference. The stick is usually 36 to 38 inches (approximately 1 m) long and weighs 12 to 28 ounces (340 to 790 grams). Only the flat left side of the stick may be used to strike the ball [6].
2. Methodology
2.1 Aim: To find out the speed among Athletes and Hockey Players (female) under 16 years in Dist. Panipat, Haryana, India.

2.2 Sample: The samples for the present study consists of 20 girls athlete and 20 girls Hockey Players between the age group of 14 to 16 years who have taken part in the District Panipat sports and games during the year 2013-14. Tools: 50 meter run is used to collect the data for speed.

2.3 Delimitations: The study is delimited to 20 girls athlete and 20 girls hockey players of district Panipat. To measure the speed 50 meter run is used. The athlete is from sprint run events in athletics.

2.4 Procedure of data collection: The athletes and Hockey Players are made to run 50 m in each batch of two members. The timing is taken by qualified Technical officials of athletics at Shivaji Stadium, Panipat, India.

3. 50 meter run
3.1 Purpose: The aim of this test is to determine acceleration and speed.

3.2 Equipment required: measuring tape or marked track, stop watch cone markers, flat and clear surface of at least 70 marks.

3.3 Procedure: The test involves running a single maximum sprint over 50 meters by the time recorded. A thorough warm up should be given, including some practice starts and acceleration. Start from a stationary standard position (hands cannot touch the ground) with one foot in front of the other. The front foot must be behind the starting line. Once the subject is ready and motionless, the starter gives the instructions ‘Set’ then ‘go’. The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs, and the participant should be encouraged not to slow down before crossing the finish line.

3.4 Scoring: Two trials are allowed and the best time is recorded to the nearest 2 decimal places. The timing starts from the first movement (if using a stopwatch) or when the timing system is triggered and finishes when the torso crossed the finish line and/or the finishing time gate is triggered.

Table 1: Showing the speed between Female Athletes and Hockey Players

<table>
<thead>
<tr>
<th>Test Items</th>
<th>Group</th>
<th>No.</th>
<th>Mean</th>
<th>S.D.</th>
<th>t</th>
<th>df</th>
<th>sig (2 - tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 m Run</td>
<td>Athletes</td>
<td>20</td>
<td>8.13</td>
<td>0.413</td>
<td>8.641</td>
<td>38</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Hockey Players</td>
<td>20</td>
<td>9.86</td>
<td>0.734</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05 level

4. Result and discussion
Table 1 indicates that the mean value of the speed of Athletes is 8.13 and Hockey players are 9.86. There is a difference of 1.73 seconds. The result shows that Athletes are having good speed compare to the Hockey players. S.D. of athletes is 0.413 and 0.734 respectively, whereas the t - value is 8.641. The difference is mean score is significant at 0.05 level.

5. Conclusion
It is concluded that Athletes (female) are having good speed compare to the Hockey players (female).

6. Recommendations
It is recommended that Athlete and Hockey players must be given better training for speed to enhance the performance. Similar studies can be conducted in different sports and games.

7. Acknowledgement
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8. References