A study on influence sex variable on motor fitness of hockey players

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Abstract
The present study was an attempt to evaluate the degree of motor fitness variables between boys and girls players of hockey game. To carry out this study, 60 hockey players 60 (boys) were selected randomly from Vijayapur District of the Karnataka state. The age limit of players was ranged between 10 to 16 years. The samples were made to expose to assess the speed and agility factors as motor fitness variables. To assess the significance differences in means between the boys and girls t-test technique was applied.

Keywords: Speed, agility, hockey boys and girls players

Introduction
Motor ability is a combination of the innate acquired ability. Motor ability is general in nature and is made up of general abilities. It does not involve highly specialized skills instead it is made up of factors which may be more dynamic and changeable. This seems to imply that motor ability status would come about relatively slowly and over a period of time. Improvement would come about and be in proportion not only to one’s potential but also in the amount of time and practice devoted to activities also, as one approaches his potential, change would come about more slowly. Motor ability is the third classification of motor behavior. Sometimes, it is referred to as General athletic ability. Once a player has these abilities practiced, these dominant abilities would be enduring and persist over a long period of time, since they become a part of muscle memory. Lastly, there has been no common agreement on the factors that constitute motor ability.

Physical fitness may be conceived as the capacity to perform one’s daily tasks without fatigue. Motor fitness, also termed motor ability, refers to a person’s performance abilities as affected by the factors of speed, agility, coordination. Nowadays, the existing evidence is used to examine the relationship between age related differences and Sensorimotor system. The importance of age related differences is only identified when Somatosensory information is compromised and it is suggested that Somatosensory process in the maintenance of body posture is sensitive to age differences. The capacity of performing physical activity is named physical fitness or motor fitness, ability these terms are difficult to define” stated by Gall hue.

Problem
A Study on influence sex variables on Motor Fitness ability of Hockey

Hypothesis
1. There would be significant difference in the motor variables in the hockey players between Boys and Girls due to influence of demographical variables.
2. There is no influence of sex variables in producing difference in the motor variables of Hockey players of Karnataka

Objectives of the study
1. To compare the speed and Agility performance between boys and girls hockey players of Karnataka
2. To assess the influence of Sex variables on producing difference in their agility and speed variables of hockey players
Method and Procedure

Selection of subject
In the study to this study, 60 hockey players (60 boys). The age limit of players was ranged between 10 to 16 years. The sample was collected from Vijayapur district in Karnataka.

Selection of variables
1. Agility and Speed selected as Dependent variables.
2. Sex chosen as independent

Tools
To collect the requisite data pertaining to the Motor factors following test and tools were used
1. To measure Speed - 30 meter run test was conducted and stop watch was used
2. To measure Agility - Zig- Zag Run Test was conducted and time and number of fouls were counted

Statistical Techniques
Mean and standard deviation were calculated in order to study the motor fitness variables ie, speed and agility of the boys and girls hockey players hails from the Vijayapur district of Karnataka. And To assess of significance of differences between the means in “t”- test was applied. The level of significance was 0.05

Results and Interpretation
The Genetical make up And difference in the boys and girls effects the motor and posture abilities of the human and heredity environment also plays important role in producing the emotion and mental state of the players, hence it was assumed that physiological and structural changes could produce difference in their motor and fitness abilities among the hockey players of boys and girls, it was hypothesized that boys are having better speed ability than comparing to girls and whereas girls can notice better agility performance than boys.

Table 1: Table showing the Comparison of Motor fitness (speed and agility) Components between the Boys and Girls hockey players

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Game</th>
<th>Mean</th>
<th>S.D</th>
<th>S.E.D</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>30</td>
<td>Hockey (GP)</td>
<td>4.42</td>
<td>0.42</td>
<td>0.11</td>
<td>5.92</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Hockey (BP)</td>
<td>3.64</td>
<td>0.26</td>
<td>0.69</td>
<td></td>
</tr>
<tr>
<td>Agility</td>
<td>30</td>
<td>Hockey (GP)</td>
<td>15.31</td>
<td>1.27</td>
<td>0.32</td>
<td>3.09</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>Hockey (BP)</td>
<td>14.9</td>
<td>0.52</td>
<td>0.13</td>
<td></td>
</tr>
</tbody>
</table>

Significant at 0.05 level.

The findings of the study in relation to Speed showed that the hockey boy’s had better speed in comparison to the hockey girl’s players of Karnataka. This may be attributed to the fact that body posture and indigenous activities might be contributed to notice better speed performance among the boys comparing the girls of hockey players. The findings of the study in relation to agility showed that the hockey girl’s players of Karnataka had better agility in comparison to the football boy’s players of Karnataka. This may be attributed to the fact that gentical make up and living style and work and behavior expectation from the society by the girls might be contributed to notice difference in their agility performance comparing to boys of hockey players.