A comparative study on agility and strength between basketball and netball male players

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Abstract
Explosive strength and agility are the important motor components that requires in every game for improvement of performances. Agility is the quality of being agile. Agile refers to the ability to move quickly and easily, either physically or mentally. The purpose of the study was compare agility and strength between basketball and netball school going district male player. This study was conducted on 60 male players age ranging from 12 to 15 yrs of which 30 were basketball and the 30 were netball players. The test to measure the variable undertaken was 4x10 meters shuttle run which was measured in seconds for agility and standing broad jump was measured in centimeters for strength. The statistical procedure applied for the said study was t test and the level of significance was set at 0.05. Basketball players showed higher agility and strength in comparison to Netball players at 0.05 level of significance.

Keywords: Agility, strength

Introduction
As all we know that team sports like basketball and netball have been widely accepted as a highly competitive sports throughout the world. Explosive strength and agility are the important motor components that requires in every game for improvement of performances. Agility is the quality of being agile. Agile refers to the ability to move quickly and easily, either physically or mentally. Agility is also the ability at the body to quick change direction from one place to another. Agility is one of the components at physically fitness. These sports dealing in great demand of explosive strength of legs, jumping (standing or running), side turning, fast break etc. we need some motor qualities to do the action and reaction in efficient manners rapidly. Brace “the ability which more or less general and inherent and which permits an individual to learn more skills and be proficient in them.” Motor abilities contribute independently and interdependently for successful performance of skill (Barrow And Mcgee, 1979) [1].

Statement of the Problem:
Strength and agility are such components of physical fitness that requires in every sportive activity including the games basketball and netball. Therefore the researcher was highly interested to find out the extent of strength and agility criteria of the basketball and netball players and the problem stated as “A Comparative study on strength and agility between basketball and netball male players”.

Objectives of the Study
- To assess the strength and agility ability of the school level basketball players;
- To assess the strength and agility ability of the school level netball players;
- To compare the strength and agility between the basketball and netball players separately.

Delimitations
- The present study was delimited to
- Area – The study was conducted on the student of North 24 Paraganas district.
- Age – 15 to 17.
- Sex – Only school level male players was selected.
- Number of subject – 60 players (30 players from basketball and 30 player netball.)
- Standing broad jump for measuring strength and for agility 4x10m. Shuttle run have selected for this study.

Significance of the Study
- The study may help to the coaches and physical educators to know the status of motor components of the basketball and netball players.
- The study may suggest to the coaches to prepare their training schedule as per the need of the game.
- This study will be helpful to the concerned players to perform better.
- The study may highlight by providing information for further investigation in the field of physical Education and sport.

Limitations
- The Study could not control the underlying variables such as injuries, sickness or tiredness.
- Daily routine, dietary habits, socio-economic condition, physical and the social environments were considered as the limitation of the study.

Methodology
The main purpose of this study was to compare the strength and agility between basketball and netball players, at school level. The methodology for this study would be presented in the following section subjects, ethical consideration, variables and test, criterion measures, testing techniques, collection of data, reliability of data statistical techniques.

- Study Area: School level students
- Subjects: 60 men players (30 from basketball and 30 from netball.)
- Age- (15 - 17)
- Criterion Measure: Strength- Standing broad jump
  Agility - 4 ×10 m Shuttle run

Statistics
To obtain the mean performance of the subject’s descriptive statistics and to determine the significance of difference between the group means of the criterion measures t-test was employed.

Results
Comparison of strength and agility between basketball and netball player

<table>
<thead>
<tr>
<th></th>
<th>Strength</th>
<th>Agility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basket Ball</td>
<td>Net Ball</td>
</tr>
<tr>
<td>Mean</td>
<td>2.1017</td>
<td>1.8723</td>
</tr>
<tr>
<td>SD</td>
<td>.22729</td>
<td>.24372</td>
</tr>
<tr>
<td>S.EM</td>
<td>.04150</td>
<td>.04450</td>
</tr>
<tr>
<td>t value</td>
<td>3.769</td>
<td></td>
</tr>
</tbody>
</table>

Discussion of Finding
The finding of the study clearly stated that there were significant differences between basketball and netball school level player in standing broad jump and 4x10 meter shuttle run. This significant result may be due to the reason that the subjects were coming from different economical background and there food habits are different as well as their nutritional status also were different. Basketball player were involved in so many competition and physical activity more than the Netball players. So, Basketball player’s standing broad jump and 4x10 meter shuttle run is better than Netball school level player. This study is in consonance with the finding of Singh, Pawiter (2015) [5].

Conclusions
Within the limitation of the study the investigation may be concluded as-The mean performance in standing broad jump and 4x10 meter shuttle run basketball player was significantly better than the netball school level players. Physical fitness profile of basketball players provides essential information for identification of talent and preparation of a team at any level. Success of any basketball team directly depends upon the physical fitness of players. Novice and feasible techniques of assessing physical fitness have to be adopted by coaches and sports trainers to constantly uplift the standard of their teams.

References