Comparison of selected coordinative ability between male and female hockey players at university level

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Abstract
A study was conducted at M.D.U Rohtak aiming to achieve the main objective of comparing the coordinative ability male and female hockey interuniversity players. It also includes the rhythmic ability, differentiation ability and orientation ability between male and female hockey interuniversity players. The study concludes that male interuniversity players possessed better rhythmic ability. It also concludes that there was no difference in terms of differentiation and orientation ability between male and female interuniversity hockey players.

Keywords: Rhythmic ability, differentiation ability, orientation ability, sportsperson, hockey

1. Introduction
A high level of physical fitness is desirable for a healthful, productive life. Sedentary living habit and poor physical fitness have a negative impact on both health and daily living (Uppal, 1996) [1] (Bernard (1966) reported that physical fitness improves in those who take regular physical exercises. Regular participation in games significantly contributes to higher level of performance and greater degree of physical fitness amongst the players.

Coordination is the ability to integrate separate motor system with varying sensory modalities into efficient movements. Co-ordination means working of a specific muscles group of the body in union for a particular movement. It is of utmost importance in executing any movement with a predetermined objective, between the muscle groups.

2. Statement of the problem
“Comparison of selected Co-coordinative abilities between Male and Female Hockey players at University Level”

3. Objectives of the study
This study is aimed to achieve the main objectives to compare the co-ordinative ability variable of Hockey players. The main objectives of the study and sub objectives which are listed below:

1. The objective of the study is to compare the rhythmic ability of male and female Hockey inter-university players.
2. The objective of the study is to compare the differentiation ability of male and female Hockey inter-university players.
3. The objective of the study is to compare the orientation ability of male and female Hockey inter-university players.

4. Hypothesis
The main hypothesis of the study states that there will not be significant difference between the co-ordinative ability variables of male and female hockey players. This main hypothesis of the study is further divided and stated as below:

1. There would be no significant difference between male and female hockey inter university players in their rhythmic ability
2. There would be no significant difference between male and female hockey inter university players in their differentiation ability.
3. There would be no significance difference between male and female hockey inter-university players in their orientation ability.

5. Limitation of the study
Due to non-availability of sophisticated instruments for the collection of data was considered as the limitation of the study.

6. Delimitations of the study
The present study is persuading in the following constraints:
1. The present study is persuading to be conducted on 15 male and 15 female inter university hockey players.
2. The study is confirmed on the subjects of interuniversity hockey players.
3. Only three co-ordinative ability variables such as rhythmic ability, differentiation ability and orientation ability are taken into account.
4. The study confined on the subjects of M.D. University Rohtak.

7. Definition of the term used
The terms which of tenly occur in the study are defined as follows to make the nomenclature of these terms simple to understand.

8. CO-Coordinative Ability
The ability of the body of maintain the balance of the body to differentiate the various movements of various body parts to do a given activity economically and with lesser efforts is the defined as the co-coordinative ability.

9. Significance of the study
1. The study may help physical education teachers and coaches to scan prospective of male and female hockey players.
2. A comparative analysis about the selected co-ordinative abilities of interuniversity male and female and state level male and female hockey players from this study.
3. This Study may also in further comparing the co-ordinative abilities required in other sports and games for maximum performance.
4. Result of the study may give the knowledge about particular type of co-coordinative ability needed in hockey.

10. Method and Procedure
As per objectives of the study, the investigator has to plan the entire process of research work in terms of research design suited to the present study. The design is systematically presented under four heads:
- Sample
- Tools & Techniques used
- Collection of Data

Sample
A sample is a miniature picture of the entire group or aggregate from which it has been taken. A sample in other works is a small representation of larger whole. The sample of the study was 15 male hockey player and 15 female hockey interuniversity players of M.D.U.

Tools & Techniques Used
Test No.1: Sprint at the given rhythm test
Purpose: To measure Rhythmic Ability.
Test No.2 - Backward Medicine ball throw test.

Purpose: To measure differentiation ability.
Test No.3: Numbered medicine ball run test
Purpose: To measure the orientation Ability.

11. Administration and data collection
The data was collected on the subjects cited above by the investigator by personality approaching the student when interuniversity tournament held in mdu.

The test battery selected was used to collect the data. The investigator took the help of Coaches to collect the data. Clear instructions were imparted to the subjects before the implementation of tests.

A trial chance was also given to each and every subject before the start of every event. The subjects were also motivated to do the proper warming up before the start of these tests. After the implementation of the test the data was recorded in a tabulated from.

12. Statistical Procedure
For analysis of the data ‘t-test’ was used.

13. Findings of the study

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<tr>
<th>Respondents</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>t-value</th>
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<td>8.99</td>
<td>.71</td>
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<tr>
<td>female</td>
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<td>10.63</td>
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</table>

**Significance Difference between Mean orientation ability of interuniversity male and female hockey players**

In relation to rhythm ability significant difference was found between interuniversity male and female hockey players. Interuniversity male hockey players are far better in respect of rhythmic ability as compared to female hockey players

<table>
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<th>Mean</th>
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<td>11.40</td>
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**Significance Difference between Differentiation ability of interuniversity male and female hockey players**

Significant difference was not found between interuniversity male and female hockey players with regard to differentiation ability. It indicates that there is not much difference between male and female interuniversity hockey players in their differentiation ability.

<table>
<thead>
<tr>
<th>Respondents</th>
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<th>Mean</th>
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<th>t-value</th>
</tr>
</thead>
<tbody>
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</table>

**Significance Difference between Mean orientation ability of interuniversity male and female hockey players**

Orientation ability showed significant difference was not found between interuniversity male and female hockey players. It indicates that there is not much difference between male and female interuniversity hockey players in their orientation ability.
14. References
7. Gaber Hamid. To identify the effect of the Coordination ability exercises on muscular power for Youth Athlete, 2012.