Abstract-
The present study assessed the motor coordinative ability of male kabaddi players on different playing surfaces i.e. clay and mat. To conduct the study, 50 male kabaddi players who took part in any national level kabaddi tournaments were selected randomly. The age range of the subjects was 18-25 years. The selection of subjects was done from players of such teams who stood in top four places of national tournament. To assess motor coordinative ability i.e. agility of the selected male kabaddi players, Shuttle Run test item of Cooper’s JCR test (1974) was used. This test is performed twice by a subject i.e. on clay and mat surface respectively. Paired sample ‘t’ test reveals that shuttle run timings of selected subjects was significantly less on clay surface as compared to mat. It was concluded that playing surface affect motor coordinative ability of male kabaddi players.

Introduction
According to reports of Amateur Kabaddi Federation of India (AKFI) that there was every possibility of kabaddi being included in the 2020 Olympic Games as the norm of at least 50 countries playing the game would be achieved by that time. In this report it was mentioned that 32 countries are playing in a professional manner. The game has changed dramatically over the years and the surface has become soft mat instead of traditional clay which is still used in India. It has changed the whole scenario as far as motor skills are concerned. This is due to surface friction often called the coefficient of friction or sliding coefficient, is used to measure a floor's ability to control the sliding of athletes on its surface. Whether Indian kabaddi players adaptation process is adequate from clay surface to mat, is investigated in the light of their agility. Although number of studies have been conducted which addressed kabaddi skills as well as kabaddi performance [Karve (2012), Mahdi Majlesi et al. (2012), Quadri and Dhonde (2012), Devaraju and Needhiraja (2013)], so far effect of clay and mat surface upon motor coordinative ability of Indian kabaddi players

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Received on: February 2014
Accepted after revision: March 2014
Downloaded from: www.johronline.com
has not been assessed, hence the present study was planned.  

**Hypothesis**  
Agility of male kabaddi players will be significantly different while playing on different surfaces i.e. mat and clay.

**Methodology :-**  
The following methodological steps were taken in order to conduct the present study.  

**Sample :-**  
To conduct the study, 50 male kabaddi players who took part in any national level kabaddi tournaments were selected randomly. The age range of the subjects was 18-25 years.

**Tools:**  
**Motor Coordinative Ability:**  
To assess agility of the selected subjects, Cooper’s JCR test (1974) was used. The agility of the selected subjects was assessed by shuttle run item of this test. This test is highly reliable and valid. The motor coordinative ability scores of subjects was ascertained by their shuttle run timings; hence lower the timing, higher the motor coordinative ability formula is used.

**Procedure:**  
Prior permission was obtained from coaches and team management to conduct the test. Shuttle run test was performed twice by a subject i.e. on clay and mat surface under the supervision of investigator. To compare agility of male Indian kabaddi players on clay and mat surface, paired sample ‘t’ test was used. Analysis of data is depicted in table no. 1.

**Analysis and Interpretation of Statistical Data**  
Table 1:Comparison of Motor Coordinative Ability (Agility) of Male Indian Kabaddi Players on Clay and Mat Surface

<table>
<thead>
<tr>
<th>Playing Surfaces</th>
<th>Mean</th>
<th>S.D.</th>
<th>‘t’</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay (N=50)</td>
<td>15.32</td>
<td>1.52</td>
<td>2.62</td>
<td>.01</td>
</tr>
<tr>
<td>Mat (N=50)</td>
<td>16.09</td>
<td>1.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the analysis of table 1, it is evident that motor coordinative ability of male Indian kabaddi players on clay surface (M=15.32) was found to be significantly better as compared to mat surface (M=16.09). The reported t=2.62, which is statistically significant at .01 level, confirms this statement.

**Result and Discussion**  
On the basis of analysis, it is observed that motor coordinative ability as measured by agility of male kabaddi players was significantly better on clay surface as compared to mat surface. This can be attributed to different coefficient of friction of two surfaces. When a kabaddi players switch from clay to mat, they are unable to adapt different playing surface because of change in coefficient of friction between shoe and surface.

**Conclusion**  
On the basis of results, it may be concluded that agility of Indian kabaddi players is compromised while playing on mat surface as compared to clay playfield.

**References**  