Physiological variables of medalists and non-medalists of inter-university kho-kho players

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Abstract

Kho-Kho is primarily an outdoor team sport popular in Asia's tropical regions. Several nations, including Pakistan, Nepal, Bhutan, Bangladesh, Sri Lanka, the Maldives, Malaysia, England, and many others, have adopted these native games of India. This study compared the physiological characteristics of male South-Zone Inter-university medalist and non-medal winners in kho-kho. For the purpose of the study, information was gathered from 60 players who competed in the South-Zone Inter University Kho-Kho Tournament, 30 of whom won medals and 30 of whom did not. The participants' ages ranged from 19 to 29. T-test statistical analysis was used to analyse the data and determine whether there were any statistically significant differences between the selected physiological variables of the South-Zone Inter-university.

Keywords: Physiological characteristics, kho-kho, medals, south-zone, inter-university

Introduction

The physiological capacities of the athlete, motor control and biomechanics, perceptual and visual skills, tactical intelligence, and psychological elements are among the topics studied in studies of skilled players in team sports. Sports and sports-related activities are present in every civilization in the world. The physiological factors are the mainstay of science and a crucial component of the investigation. Records and great athletic accomplishments require the highest level of performance and unwavering resolve to meet those standards. Through training and competition, those with exceptional physiological potential, excellent knowledge of their sports' techniques and strategies, and a track record of success are continually pushing the boundaries of physiological performance.

A player should be subjected to the highest training loads possible to build physiological performance at the best possible level. Yet, in order to achieve this, the player must adjust his way of life to the demands of his sporting pursuits in a way that will best enable him to enhance his performance. As a result, training becomes an essential component of the player's lifestyle and, at critical points in life, might be the deciding factor. The players should be included in the organisation of the training.

Kho-Kho, an ancient game from pre-divided India, was presumably inspired by the many tactics and strategies used in the "Kurukshetra" war in the Mahabharata. When the fighting was raging, zigzag paths were pursued.

Kho-Kho, which is founded on natural physical development principles, encourages a healthy combative attitude of word understanding and develops all of a person's motor skills. A team is made up of 12 players, a manager, a coach, and other staff members. The match will, nevertheless, kick off with 9 players on the field. There are two innings in the game. Chasing and defending turns, which last 9 minutes each for junior boys and girls and men and women, make up an innings. The time limit for sub junior boys and girls is seven minutes. Each game will have two innings. For Men, Women, Junior Boys/Girls, and Sub Junior Boys, there shall be a 6 minute break after an inning and a 3 minute rest between two turns.

Throughout the game, which is won by the team scoring the most points, controlled sprinting, evading, diving, post diving, taping, covering, and post turning are just a few of the talents displayed (one point is awarded for every Defender who is out). Any surface that is appropriate for open Field sports can be used to play the game. It is currently played on turf-prepared fields. It goes without saying that the National Championship's use of synthetic fields was quite successful.
Objectives of the study
The major goal of this study was to evaluate the physiological characteristics of male medalists and non-medal winners in the South-Zone Inter-University Kho-Kho competition in terms of skeletal muscle and visceral fat.

Methodology
Data from sixty players, of which thirty (30) are from medalists and thirty (30) are from non-medalists, was gathered to fulfil the study's objectives. These were chosen as subjects from the universities of Kuvempu, Mysore, and Mangalore. The subjects for the data collection were chosen at random. The participants' ages ranged from 19 to 29.

Statistical technique
To achieve the purpose of the study data collected was analyzed by using statistical technique ‘t’-test with the help of SPSS 28th version.

Results
Data collected were put into statistical treatment and results are presented in the following tables.

Table 1: Shows the Mean, Standard deviation, T-value of skeletal muscle of the Medalists and Non-Medallists of Inter-University Kho-Kho Male Players

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Subjects</th>
<th>N</th>
<th>Mean Value</th>
<th>Std. Dev.</th>
<th>‘T’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medalists</td>
<td>30</td>
<td>27.46</td>
<td>2.34</td>
<td>0.552</td>
</tr>
<tr>
<td>2</td>
<td>Non-medalists</td>
<td>30</td>
<td>27.88</td>
<td>2.94</td>
<td></td>
</tr>
</tbody>
</table>

*Level of significance 0.05.

The above table shows that the skeletal muscle of the medalists and non-medallists of inter-university Kho-Kho male players. The obtained t-value is 0.552 which is lesser than the table value 2.04 (DF = 29) at 0.05 level of significance. So, there was no significant difference in skeletal muscle between medalists and non-medallists of inter-university Kho-Kho players. When mean values are compared non-medallists are having more skeletal muscle than the medalists.

Table 2: Shows the Mean, Standard deviation, T-value of Visceral Fat of the Medalists and Non-Medallists of Inter-University Kho-Kho Male Players

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Subjects</th>
<th>N</th>
<th>Mean Value</th>
<th>Std. Dev.</th>
<th>‘T’ VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medalists</td>
<td>30</td>
<td>4.26</td>
<td>2.16</td>
<td>1.142</td>
</tr>
<tr>
<td>2</td>
<td>Non-medalists</td>
<td>30</td>
<td>5.06</td>
<td>2.94</td>
<td></td>
</tr>
</tbody>
</table>

*Level of significance 0.05.

The above table reveals that, the obtained t-value is 1.142 which is lesser than the table value 2.04 (DF = 29) at 0.05 level of significance. There was no significance difference in Visceral Fat between medalists and non-medallists of inter-university Kho-Kho male players Visceral Fat of non-medallists are more than the medalists Kho-Kho game.

Findings of the study
The above results show that there was no significant difference in the selected physiological variables of South-Zone Inter-University medalists and non-medallists of Kho-Kho game.

When mean values of the variables compared Non medalists Kho-Kho players are having more Skeletal Muscle than medalists. In Visceral Fat Non medalists Kho-Kho players are having more Visceral Fat than medalists.

The above results found because of the training plan, diet and biological reasons of each individual. To test the authenticity of the result further study is recommended on more number of subjects.

References