Comparative study of skin fold measurements of cricket and hockey male players

Pawiter Singh
Director of Physical Education,
Govt. S.S.S Gulahar Patiala,
Punjab, India

Abstract
In recent years, there has been increasing awareness of the importance of physical activity for reintegrating handicapped individuals into society, as well as for the promotion of competitive sports activities for such individuals. The purpose of the study was to compare some selected skin fold measurements of intercollegiate players of Cricket and Hockey of Punjab. The present study was conducted on 20 subjects of each discipline. The subjects, who were male, had the age group of 18 to 27 years. All measurements were taken with subjects in the standing position and on the right side of their body. The statistical techniques of mean, standard deviation and t-ratio were used to analyze the data. In the conclusion of the study, it is also found that there is significance difference of skin fold measurement between cricket and hockey male players. Cricket players have more biceps, triceps, sub scapular, thigh and calf skin fold measurements than hockey players.

Keywords: Biceps, triceps, sub scapula, thigh and calf

Introduction
Physical activities benefit many health conditions. However, the specific amounts and types of activities on the conditions may vary. In the development of public health guidelines, the challenge is to integrate scientific information across all health benefits and identify the beneficial range of physical activities. One consistent finding from research studies is that once the health benefits from physical activity begin to occur, additional amounts of activities are included to provide additional benefits.

Today physical educators and trainers are more interested in Kinanthropometry as it helps in the selections of the subjects in the field. Kinanthropometry is a branch of anthropometry. The application is used in the measurement of human body size, shape, proportion, composition, maturation and gross functions. Its purpose is to understand human movements in the context of growth, exercise performance and nutrition, Ross and N. Wilson (1978) [3]. It not only helps us in estimating the biological age of the sportspersons but also contributes in making the predictions of their performance level in specific sports events. In rehabilitation centers, regular kinanthropometric examination is made which helps physicians in regaining the physical fitness of athletes. Hence it can be said that kinanthropometric is a handy tool for the development and assessment of athletes for and during sports performances.

Objective of Study the Following are the objective of the present study
To determine difference in the skin fold measurements between hockey and cricket players

Methodology
In the present study, the investigator used random sampling technique to select the samples. The study was to compare some selected skin fold measurements of intercollegiate players of cricket and hockey of Punjab state. The present study was conducted on 20 subjects of each discipline. The male subjects were between the ages of 18 to 27 years. All measurements were taken with subjects in the standing position and on the right side of their body. The statistical techniques of mean, standard deviation and t-ratio were used to analyze the data.
Results and discussions

The finding of the various parameters is discussed as under: - biceps, triceps, sub scapular, thigh and calf skin fold measurements.

Table 1: Comparison of Skin folds Measurements between the Cricket and hockey Players

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cricket</th>
<th>Hockey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Biceps Skin fold</td>
<td>3.765</td>
<td>0.483</td>
</tr>
<tr>
<td>Triceps Skin fold</td>
<td>5.475</td>
<td>0.224</td>
</tr>
<tr>
<td>Sub scapular Skin fold</td>
<td>6.340</td>
<td>0.228</td>
</tr>
<tr>
<td>Thigh Skin fold</td>
<td>6.525</td>
<td>0.245</td>
</tr>
<tr>
<td>Calf Skin fold</td>
<td>7.185</td>
<td>0.480</td>
</tr>
</tbody>
</table>

Significant at 0.05%

Table no-1 (Row-1) the biceps skin fold mean score (3.76+_0.483) of cricket players is more than the mean score (3.290+_1.59) of volley ball players. However, the t-ratio is 4.1815. This is being extremely statistically significant. It means that there significant difference between cricket and hockey male players on level of biceps skin fold measurements. Cricket players have more Biceps skin fold measurements than hockey players.

Table no-1 (Row-2) the triceps skin fold mean score (5.475+_0.224) of cricket players is more than the mean score (4.570+_0.236) of Hockey players. However, the t-ratio is 12.4142. Which is significant at 0.05 levels. It means that there is significant difference between cricket and hockey male players on level of triceps skin fold measurements. Cricket players have more triceps skin fold measurements than hockey players.

Table no-1 (Row-3) the sub scapular skin fold mean score (6.340+_0.228) of cricket players is more than the mean score (5.395+_0.157) of hockey players. However, the t-ratio is 15.2588. This is significant at 0.05 levels. It means that there is significant difference between cricket and hockey male players on level of sub scapular skin fold measurements. Cricket players have more sub scapular skin fold measurements than hockey players.

Table no-1 (Row-4) the thigh skin fold mean score (6.525+_0.245) of cricket players is more than the mean score (5.980+_0.553) of hockey players. However, the t-ratio is 4.0301. Which is extremely statistically significant. It means that there is significant difference between hockey and cricket male players on level of thigh skin fold measurements. Cricket players have more thigh skin fold measurements than hockey players.

Table no-1 (Row-5) the calf skin fold mean score (7.185+_0.480) of cricket players is more than the mean score (6.885+_0.315) of volley ball players. However, the t-ratio is 2.3353. Which is significant at 0.05 levels. It means that there is significant difference between cricket and hockey male players on level of calf skin fold measurements. Cricket players have more calf skin fold measurements than hockey players.

Conclusion

In the conclusion of the study it is found that there is significance difference of skin fold measurements between cricket and hockey male players. Cricket players have more biceps, triceps, sub scapular, thigh and calf skin fold measurements then hockey players.

References