An assessment study of comparison of body fat percentage between professional and non-professional students

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Abstract

Aim: The aim of the present study was to compare the bodily fat percentage between B.B.A., and B.P.Ed. students.

Method: For the purpose of this study a total of 40 male subjects (20 B.B.A., and 20 B.P.Ed. students) were selected from Degree College of Physical Education, Amravati, Maharashtra. The mean age of the subjects were 22 years. Bodily fat percentage of the subjects was assessed through skinfold measurement. Four sites i.e., biceps, triceps, supra-iliac and sub-scapular were measured with the help of skinfold calliper. For the assessment of fat percentage tables made by Durenin and Rehman was used. For the analyzing of data, t test was used.

Result: It showed that there was a significant difference between B.B.A., and 20 B.P.Ed. students.

Conclusions: It is concluded that B.B.A. students (non-professional) have more amount of body fat percentage in comparison of B.P.Ed. (Professional) students.

Keywords: Body fat percentage, skinfold measurement, biceps, triceps, etc.
Procedure for administration of test
For the administration of the test, the subjects B.B.A., and B.P.Ed., students were assembled on the ground of Degree College of Physical Education, Amravati. They were acquainted with the specific purpose of the present study. The tester had performed test trials on different subjects to ensure the tester reliability. The calliper was applied to measure the body fat percentage of the subjects. The subjects were asked to remove the clothes of upper body. The measurement for body fat was taken from four sites i.e., triceps, biceps, supre-iliac, subsacapular. The investigator followed standardized testing procedure for measurement. The side on triceps and biceps was marked at mid acromialeradiale and measurement was taken and at the supra-iliac region the measurements were taken in the line of naval at side of the body. The subscapular fat measurement was taken at proper site. Care was taken that subject maintained an ideal anatomical position at the time of measurement.

Statistical technique
Descriptive statistics and independent ‘t-test’ as a statistical technique for the data analysis were used.

Result

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>DM</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.B.A.</td>
<td>20</td>
<td>17.44</td>
<td>3.52</td>
<td>5.99</td>
<td>6.45*</td>
</tr>
<tr>
<td>B.P.Ed.</td>
<td>20</td>
<td>11.45</td>
<td>2.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at .05 level
t.05 (38) = 2.0244

It is evident from Table 1 that there is significant difference between B.B.A., and B.P.Ed., students on body fat percentage, test means in the body fat percentage where the calculated t ratio was 6.45, which was greater than tabulated t value 2.0244 at .05 level.

Discussion
The aim of the present study was to compare the body fat percentage of B.B.A., and B.P.Ed., students. The results of the study indicated that there is a significant difference in the mean values of two groups in fat percentage; this significant difference may be attributed to the nature of training course programme generally followed by the B.B.A., and B.P.Ed., students. While the energy expenditure in terms of physical activities by B.B.A., student is less than in comparison with the B.P.Ed., students. During B.P.Ed., course the amount of physical work done by them is quite more than the B.B.A., students.

Conclusions
The aim of the present study was to compare the result of the study indicated that there is a significant difference in the mean values of two group in body fat percentage. This significant difference may be attributed to the nature of the programme generally followed by the B.P.Ed. (Professional) students and not by B.B.A. (Non-Professional), students. It is also concluded that B.B.A., students have more amount of body fat percentage in comparison of B.P.Ed., students.

References