A comparative study of body mass index between P.G. diploma in yoga science, B.P.ED and M.P.ED students

Dr. Purshotam
Assistant professor, Vaish College, Rohtak, India

Abstract
The present study has been designed to investigate the body mass index of the different courses students in Department of Physical Education. For accomplish the study total 60 samples of different courses of Department of Physical Education were randomly selected as sample. All samples were selected from the Maharshi Dayanand University Rohtak. The age of the subjects was ranged from 18-28 years. One-way analysis of variance method was applied for analyzing the data obtained from the present study if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05. We find out significant difference in body mass index of PGDYC, B.P.ED and M.P.ED students. Body mass index of PGDYC students is low in comparison of two other disciplines. We can say that PGDYC students are having low fat comparison to B.P.ED and M.P.ED students.

Keywords: BMI, B.P.ED, M.P.ED, P.G. Diploma in yoga science (PGDYC)

Introduction
In the field of physical education students learn about the human body, exercise and nutrition. Graduates may become physical education teachers, personal trainers, health educators or fitness professionals. Keep reading to explore academic and career options in this field. The main purpose of the study is to know about the health consensus of the students of department of physical education. Body mass index is an easy-to-calculate measure of obesity based on the ratio of your weight and your height. It's convenient to use because it doesn't require expensive equipment or a clinical setting to measure just knowledge of your height and weight and it's useful for most people to get a general idea of your disease risk.

Purpose of the study
The main purpose of the study is to compare the body mass index between B.P.ED, M.P.ED and PGDYC students.

Hypothesis of the study
There would be no difference in body mass index between B.P.ED, M.P.ED and PGDYC students.

Methodology
The sample for the present study was 20-20 students of B.P.ED, M.P.ED and PGDYC from department of physical education MDU, Rohtak were randomly selected. The age of the subjects were ranging from 18-28 years.

Tool and techniques
For measure the body mass index we measure height in meter and weight in kg.

\[
\text{Body mass index} = \frac{\text{weight in kg}}{(\text{Height in meter})^2}
\]
Statistical method

The obtained data were analyzed by applying one way ANOVA in order to determine the body mass index between B.P.ED, M.P.ED and P.G Diploma in Yoga Science students if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. The level of significance was set at 0.05.

### Table 1: Body mass index

<table>
<thead>
<tr>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>96.36</td>
<td>2</td>
<td>48.18</td>
<td>6.32</td>
</tr>
<tr>
<td>Within Groups</td>
<td>434.56</td>
<td>57</td>
<td>7.62</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>530.92</td>
<td>59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An analysis of table -1 reveals that there is significant difference in body mass index between B.P.ED, M.P.ED and P.G Diploma in Yoga Science students. Because significant value is less than level of significance which is 0.05 since the calculated significance value is found significant, therefore to determine the pair mean difference among the selected courses students LSD post hoc test was computed and its shows in table no 2.

### Table 2: Mean difference between PGDYC, B.P.ED and M.P.ED in their body mass index

<table>
<thead>
<tr>
<th>Grouping Variable</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Sig(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGDYC B.P.ED</td>
<td>1.41</td>
<td>.87</td>
<td>.112</td>
</tr>
<tr>
<td>B.P.ED PGDYC</td>
<td>1.41*</td>
<td>.87</td>
<td>.001</td>
</tr>
<tr>
<td>M.P.ED B.P.ED</td>
<td>1.69</td>
<td>.87</td>
<td>.058</td>
</tr>
<tr>
<td>M.P.ED PGDYC</td>
<td>3.10*</td>
<td>.87</td>
<td>.001</td>
</tr>
</tbody>
</table>

The post-hoc test result revealed that there is significant difference between students of B.P.ED and M.P.ED students in their body mass index. Significant difference found between the PGDYC, B.P.ED AND M.P.ED students in their body mass index. The mean values clearly shows that PGDYC students having low body mass index in comparison to B.P.ED and M.P.ED students. The estimated mean value of the student’s body mass index is illustrated below in Figure no 1.

![Fig 1: Mean difference between PGDYC, B.P.ED and M.P.ED students in their body mass index](image)

Discussion on findings

The findings of the study showed that there was significant difference in the obtained value of body mass index between different courses students. Body mass index of PGDYC students are significantly better than the other two courses.

Conclusion

On the basis of result obtained from the study, following conclusions are drowning:-

The data showed that significant difference observed in body mass index of PGDYC, B.P.ED and M.P.ED students. Body mass index of PGDYC students is low in comparison of two other disciplines. We can say that PGDYC students are having low fat comparison to B.P.ED and M.P.ED students.

References