Effects of yogic practice on body mass index parameter of young adult females

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Abstract
The objective of the study was to find out the effect of yogic practice on Body Mass Index parameter of young adult females. The investigator collected the data of twenty (N=20) young adult female of Department of Physical Education, Punjabi University, Patiala (Punjab) between the age group of 21-28 years were selected. The Statistical Package for the Social Sciences (SPSS) version 19.0 was used for all analysis. Student t test for paired samples was applied to compare the means of the pre-test and the post-test. The level of significance was set at 0.05 percent. It is evident from results that significant differences were noted on Body Mass Index parameter between pre-test and post-test of young adult females.

Keywords: Body mass index (BMI), yogic practice, asana

Introduction
Yoga is an antiquated arrangement of self-improvement which offers an all-encompassing way to deal with man through its philosophy and procedures. Yoga is a science and its training blends the body and mind (Nayak and Shankar, 2004) [5]. Yoga is massively helpful for advancing aggregate well-being. Yoga is an elective type of physical movement which may help with accomplishing suggested levels of physical action for a few people (Raub, 2002) [7]. Thus, yoga incorporates several elements of exercise that is beneficial for human health. Yoga leads to reduce the oxygen consumption and metabolism, thereby balancing the homeostasis (Hart and Tracy, 2008) [8]. Various other researches confirmed the role of yoga and meditation against diabetes, hyperthyroidism, obesity, respiratory problems, mental stress, and oxidative stress. According to Katch and Katch (1984) [4] “Body Mass Index (BMI) is a simple index of weight-for-height that is commonly used to classify underweight, overweight and obesity. It is defined as the weight in kilograms divided by the square of the height in meters (kg/ m²). For example, an adult weight 70 kg and height 1.75 m will have BMI=70(kg)/1.752(m²) = 22.9”.

Methods and Materials
The purpose of this study was to find out the difference of pre-test and post-test on Body Mass Index of young adult female of Punjabi University. The young adult females were subjected to a 4-weeks yogic training programme. The training was consisting of a variety of asana: Surya Namaskar, Anjaneyasana, Matsyasana, Bhujangasana, Phalakasana, tadasana ardha-chakrasana, Pavanamuktasana & Savasana. Pranayama: Kapalbhati, Anulom Vilom & Bhramari a Santih patha.

Selection of subjects
For the purpose of the present study, twenty (N=20), young adult females of Department of Physical Education, Punjabi university, Patiala (Punjab) between the age group of 21-28 years were selected as a subjects

Design of the Study
The present study was single group pretest and posttest randomized group design was used to find out the effect of yogic practice on BMI parameter of young adult females.
**Statistical technique**

After collecting the relevant data descriptive statistics and Student t-test for paired samples was utilized to compare the means of the pre-test and the post-test. The level of significance was set at 0.05 percent.

**Analysis of results**

**Table 1:** Descriptive statistics (Mean & Standard Deviation) and paired sample t-test of Body Mass Index parameter of young adult females

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>T value</th>
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<tbody>
<tr>
<td>Pre test</td>
<td>24.045</td>
<td>2.081</td>
<td></td>
</tr>
<tr>
<td>Post test</td>
<td>23.100</td>
<td>1.606</td>
<td></td>
</tr>
</tbody>
</table>

$t_{0.05}(19) = 1.729$

A glance at Table 1 shows the Mean and Standard Deviation values of Body Mass Index of pre-test and post-test of female was $24.045 \pm 2.081$ and $23.100 \pm 1.606$ respectively. The t-value and p-value in case of female was 3.4404 and 0.0027.

The outcome represents that significant difference in pre and posttest of Body Mass Index parameter of young adult females.

**Discussion of the outcome**

The propensity of expanding weight or obesity is being pervasive step by step in all age individual. Yoga practice is comprised of various asana, Pranayama and such as prayer; Results show the significant improvement of BMI. Yogic practice is helpful in maintaining good health by regulating BMI. Our results support the findings which stated that the yoga practice improve BMI Patel, S. & Kumar, K. (2016), Chauhan, et al. (2017) [1], Satyanarayana, et al. (2013) [8]. What’s more, all members were found to accomplish great wellbeing, positivist, and imperativeness subsequent to performing yoga.

**References**