



ISSN: 2456-0057
IJPNPE 2019; 4(1): 1950-1951
© 2019 IJPNPE
www.journalofsports.com
Received: 18-11-2018
Accepted: 20-12-2018

Kohinoor Banu
Research Scholar, Bharathiar
University, Coimbatore, Tamil
Nadu, India

Dr. Amit Banerjee
Assistant Professor, Post
Graduate Government Institute
for Physical Education, Banipur,
West Bengal, India

Effect of yogic training on body composition variables of college women

Kohinoor Banu and Dr. Amit Banerjee

Abstract

The aim of the study was to compare the Body composition variables namely body fat percentage (BMI) of college women. For the purpose of the study 80 college women students were selected as the subject. The age group of the subjects was ranged from 18-21 years. They were selected randomly. The subjects were further sub-divided into two groups namely Experimental Group-1, and Control Group-2. Each group consists of 40 subjects. Body Composition is the component part of the body on otherwise it release to fat and muscle weight. Fat is the most variable tissue in the body fat and is distributed throughout the body primarily under the skin & in the abdominal comity. Skin fold thickness gives an fatty perfect of total body fat. In as much as fatty perfect of total body fat lies immediately under the skin. For the comparison, analysis of covariance was used and the significant level was set at 0.05 level of confidence. The study revealed significant decrease in body fat percentage. The result shows significant decrease in the experimental groups as a result of 16 weeks progressive yogic training programme

Keywords: Body composition, body fat percentage.

Introduction

The body composition refers mainly to the relative proportion of the three principle tissue components of the human body (i.e) muscle, bone and fat. A small amount of body fat serves several physiological functions including the protection of vital organs-heart, liver, pancreas, lungs, intestines etc. It provides large stores of potential energy and also acts as storage source of fat-soluble vitamins. The excess fat, which represents stored energy in adipose cells just below the skin surface and around internal organs, is not only unhealthy but also lowers the ability to do exercise, engage in strenuous work and perform well in sports. When you exercise, your muscles puff up and become strong and there is hardly any fat deposit under your skin, as a result you look well built; on the contrary when you continue to take in more calories than you burn, you put on weight and muscle, thereby altering your body composition. A high percentage of body fat is a condition known as obesity, which now signifies higher fat percentage rather than higher amount of weight. The ideal weight condition is one at which the individual is healthy, feels well, and is quite happy with his personal appearance. Traditionally height - weight tables were referred to categorize individual as under-weight or over-weight and predicting percent body fat from skin fold measurements was also a common practice. "Body composition is also considered an important measure of health fitness. A high percentage of body fat relative to bone and muscle has been shown repeatedly to be a predictor of risk for a wide range of degenerative diseases".

Objective of the Study

The purpose of the study was to find out the effects of yogic training on body composition variables of college women.

Methodology

In this section the procedure for selection of subjects, selection of variables criterion measures, experimental design, procedure for administration of tests, administration of training programme and the statistical technique employed for analysis of data have been describe.

Correspondence
Kohinoor Banu
Research Scholar, Bharathiar
University, Coimbatore, Tamil
Nadu, India

Selection of the Subjects

For the purpose of the study eighty college women free from deformities and ailments were selected randomly from Siddhinath Mahavidyalaya, Medinipur, and West Bengal. The requirements of the project were explained to the entire subject and all of them agreed voluntarily to undergo the testing and training programmes.

Selection of the Variables

The research scholar had gone through both critical as well as allied literature related to the problem. Keeping in the mind, the availability of equipment's acceptability to the subjects and the legitimate time that would be devoted for test in relation to the treatment (experimental variables) requirements and to keep the entire study unitary and

integrated, the following Body composition variables were selected.

Body Composition Variables

1. Body fat percentage

Criterion Measures

Body fat percentage was calculated from Skinfold measurements at four sites of the body i. e, Biceps, Triceps, Sub-scapular and Supra-iliac.

Statistical Procedure

In order to investigate the comparative effect of yogic training the analysis of covariance statistics was used. The level of significance was set at 0.05 levels.

Table 1: Anova table for the body fat percentage experimental Group -1 and control group -2 during training

Source	Sum of squares	Df	Mean square	F	Sig
Pre	28.576	1	28.576	99.259	.000
Training	2.523	1	2.523	8.763	.004
Error	22.168	77	.288		
Corrected total	55.997	79			

Shows the f-value [f(1,77)=8.763] for comparing the adjusted means of the criterion variables in two yogic training groups (experimental group-1, and control group-2). F statistics computed for Yogic training was significant because p-value associated with it was .004 which is less than .05. Thus, the null hypothesis of no difference among the adjusted means for the data on criterion variable in two training groups may be rejected 5% level.

Since f- statistics was significant, post-hoc comparison has been made for adjusted means of the two training groups, which is shown in table.

Group	Pre-test mean	Post test mean	Adjusted mean
Ex.grp.1	28.49	28.5	28.577
Cont.grp.2	28.71	29.01	28.935

Body Fat Percentage

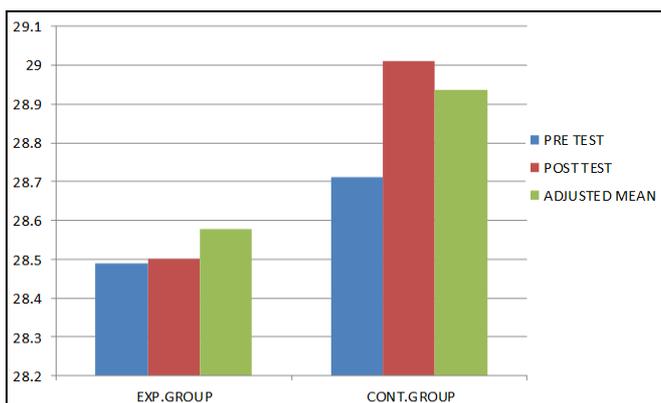


Fig 1: Pre, Post and Adjusted Mean of the Exp.Grp-1 and Cont.Grp2

- 1) There was no significant difference between the adjusted means of criterion variable in experimental group -1 and Control group-2.

Discussion of Findings

The performance of yogic Training was developed significantly by Yogic Training of Experimental groups. The Body fat percentage was decreased significantly by Yogic training of experimental groups.

Conclusions

On the basis of the findings of the study, the following conclusion may be drawn

The sixteen weeks of yogic training employed in the present study indicated favourable effects in decreasing the body fat percentage levels.

Reference

1. Kanta Prasad pukhariya and kamakya kumar, A study of the effect of hatha yogic practices On body weight of the human subjects, Academician: An international Multidisciplinary research journal. 2013; 3(2):257-261.
2. A Pal N, Srivastava S, Tiwari NS, Verma VS, Narain GG, Agarwal SM *et al.* Kumar, Effect of yogic practices on lipid profile and body fat composition in patients of coronary Artery Disease, complementary Therapies in Medicine. 2011; 19(3):122-7.
3. Ajay singh, Ruhall Rakesh Bhandari, Ranjan Chakravarti, Effect of kapalbhati on selected Body Composition Variables, British journal of sports Medicine, 2010, 44-70.
4. Suchetha Kumari N, Damodara Gowda KM, sukesh N, Madhu LN, Kathyayani Effect of yoga therapy on Body mass index and oxidative status," Nitte University Journal of Health Science. 2011; 1(3):10-14.
5. Kesavachandran C, Bihar V, Mathur N, Can physical Activity Maintain Normal Grades of Body Mass Index and Body Fat Percentage ? International journal of yoga. 2009; 2(1):26-29.