
EFFECT OF YOGA ON VITAL CAPACITY OF FEMALE STUDANTS



Singh Kiran*



Pandey Sumant Kumar**

*Research Scholar, Dept. Phy. Edu., University of Lucknow, (U.P.)-INDIA.

**Research Scholar, S.S.S. University Bhopal, (M.P.)-INDIA.

E. Mail: shivsingh1314@gmail.com

Abstract:

The main objective of the present study was to find out the training effects of six weeks training programme of yoga Asana and Pranayama on vital capacity on female students. For the purpose of study, 20 female B.P.Ed students were randomly taken from the department of physical education; university of Lucknow. The subject age was ranged between 20 to 25 years. 10 subjects were selected for each group i.e. one experimental group and one control group. All subjects were, randomly divided into one experimental groups and one control group. The group-A was experimental group and received training program. The group-B served as a control group and continued participating in the normal program. Asana and Pranayama were considered as independent variable. Vital capacity was selected as dependent variable. findings revealed that F-value adjusted post-test means in relation to vital capacity was found to be significant at 0.05 level , since this value[5.385] was found higher than the tabulated value 4.45 at 1,17 df. On the basis of finding it was concluded that significant effect of six weeks training program of Asana and Pranayama on vital capacity of physical education female students.

Keywords: Yoga, Vital-capacity & Female Students.

Introduction:

Today, Yoga being a subject of varied interests, has gained worldwide popularity. It can serve as an applied science in a number of fields such as education, physical education and sports. Health and family welfare, psychology and medicine and also one of the valuable means for the development of human resources for better performance and productivity, however, there exists controversy in accepting yoga as medicine and therapy because it has generally been believed that yoga is a spiritual science having emancipation as goals and hence cannot be treated only as a therapy.

Yoga education trends have developed recently to incorporate a greater variety of activities. Introducing students to activities like walking, bowling or Frisbee at an early age can help students develop good activity habits that will carry over into adulthood. Some teachers have even begun to incorporate stress reduction techniques such as yoga and deep-breathing.

Teaching non-traditional asana to students may also provide the necessary motivation for students to increase their activity, and can help students learn about different cultures.

Objective of the Study:

The main objective of the present study was to find out the training effect of six weeks training programme of Asana and Pranayama on vital capacity during their normal daily routine.

Selection of Subjects:

For the purpose of the study 20 female B.P.Ed Students from the department of physical education, University of Lucknow was randomly selected as subjects for this study. The subject age was ranged between 20 to 25 years.

Selection of Variables:

The students reviewed the available scientific literature pertaining to the effect of six weeks training program of Asana and Pranayama on selected as independent variable and vital capacity was selected as dependent variable.

Experimental Design:

For the study pre test –post test randomized group design which consists of one control group and one experimental group was used. Equal numbers of subjects were assigned randomly to the groups. One group (Asana & Pranayama) served as experimental groups on which treatment was assigned and the another group served as the control group .

Criterion Measures:

Vital capacity was measured with the help of dry Spiro-meter and the score was recorded in 100ml.unit.

Treatment Procedure:

Training was given for 45-60 min. each asana perform for 2.30 min. rest and 2 rounds of each asana. First two week six asanas were perform and three Pranayama given of two rounds one and half min. for each Pranayama. After two weeks eight asanas were given each asanas perform for two and half min.30 sec. rest each asanas were two rounds .The Pranayama were performing same as first two weeks but time intensity was 30 sec increase .In beginning phase subjects were taught that how to perform the activities, all the precaution prose and cones and principals' of activities .in initiation phase repetition were less and as subjects were being familiar with activities no. of repetition were increase as fix schedule.

Collection of Data:

The data for proposed study was collected from 20 female B.P.Ed Students from the department of physical education, university of Lucknow. The data was collected by administration of standard tests for physical and physiological variables.

Statistical Technique:

The data was collected from 20 female B.P.Ed Students of university of Lucknow. The data was analyzed to the significant effect of Asana and Pranayama on physical and physiological variables with the help of Analysis of covariance (ANCOVA) statistical technique. The level of significance was set at 0.05.

Table No-1
Descriptive Statistics of Experimental Group and Control Group in Relation to Vital Capacity

Group	Mean	Std. Deviation	N
Experimental group	3200.00	633.772	10
Control group	2640.00	450.184	10
Total	2920.00	607.280	20

From the Table -I, Mean of experimental group was 3200.00 with the SD of 633.772, the mean of control group was 2640.00 with the sd. of 450.184. Further the adjusted Post test means of experimental group and control group in relation to vital capacity are presented in the Table - II.

Table No- II
Analysis of Covariance of Comparison of Adjusted Post Test Means of Experimental Group and Control Group in Vital Capacity

	Sum of squares	DF	Mean square	F	Significant
Contrast	759344.993	1	759344.993		
Error	2397359.956	17	141021.173	5.384	.033

Significant at level 0.05. F value required to be significant at 1, 17 df =4.45

Table -II revealed the obtained 'F' value of 5.384 was found to be sig. at 0.05 level, since this value was found higher than the tabulated value 4.45 at 1, 17 df. This result indicate that treatment was given to subjects it is improve the vital capacity of subjects at significant level.

Discussion of the Findings:

In the similar lines significant effect of six weeks training program of asana and Pranayama was also found on vital capacity of physical education students. This can

be attributed to the fact that, breathing is directly related to the degree of difficulty that has posed for the physical education students while performing asana and Pranayama, which might have increased the efficiency of lungs and ability of students to exhale the air out of body with the greater force and caused possible improvement in capacity.

Conclusion:

On the basis of finding it was concluded that significant effect of six weeks training program of Asana and Pranayama on vital capacity of physical education female students.

References:

Books:

- Sandhu, Gurbaksh Singh (1982), volleyball: basic and advance, Chandigarh: publishers of sports literature.
- Singh Hardayal (1991).sports training: general theory and methods Delhi, D.V.S. PUBLICATIONS.
- Todoya, H. (1971) Training theory for volleyball in japan Scarborough:Canadian volleyball association publication.
- Brown, Lee E, Ferrigno, Vance A., and Santana, Juan Carlos.(2000).Training for speed , agility and quickness.USA.
- Hockey, Robert (1973). Physical fitness: The Pathway to Healthful Living. St.Louis the C. Vmosby COMPANY.
- Matthew's, Donald K. (1973).Measurement in physical education. Philadelphia; W.B. Saunders Company.

Journals and Periodicals:

- Singh, S. Vishaw,G. and Prakash,V.(2011). Effects of a six week nadi-shodhan pranayama training on cardio-pulmonary parameters. Indian Journal of physiology and pharmacology,3(2);13-17.
- Bhimani, N.T.,Kulkarni, N.B.,Kowale, A. and Salvi, S.(2011). Effect of Pranayama on stress and cardiovascular autonomic tone & Reactivity. Journal of education and sport science,2(1),19-24.
- Kasundra,P.M.,Thumar,P.B.& Mungra,J.D.(2010). Impact of Pranayama on selected components of blood; an analytical study. Journal of Advanced Development of Research, 1(1), 41-44.
- Bal,B.S.(2010).Effect of Anulom-Vilom and Bhastrika Pranayama on the vital capacity and maximal ventilator volume. Journal of physical education and Sports management, (1),11-15.
- Verma,P. & Kapri,B.C. (2012). Effect of Pranayama on intensity of pain and Haemoglobin level during Menstruation phase of females. Published paper, Akash, Journal of physical education & yogic Science, Greater Noida.
- Ankad, R.B., Herur,A.,Patil, S.,Shashikala, G. V.& Chinagudi ,S. (2011). Effect of short term pranayama and meditation on cardiovascular functions in healthy individuals.Journal of Alternative and Complementary Medicine, 12(2)58-62.