

# Effect of yoga training on lecturers physical fitness

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Received : 30.06.2015; Revised : 01.08.2015; Accepted : 05.09.2015

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■ **ABSTRACT**

The purpose of the study was to find out the effect of yoga training on lecturers physical fitness. The study was conducted on 100 female lecturers from various senior college of Amravati city (Maharashtra). There age ranging 30 to 40 years. They were divided into two equal groups. Group – A underwent one year of yoga training particular asanas and pranayam practices, group B- is control group did not undergo any type of training. The necessary data were collected by various scientific and reliable equipments. The one year yoga training programmed should beneficial effects on physical fitness components and physiological variables, age group. The data were analysed by the statistical techaqul ANOVA for interpretation and significant difference among the fat, B.M.I., strength and agility cardio-vascular capacity, hemoglobin, systolic blood pressure, dysholic blood pressure and pulse rate. The yoga training had significant ( $p < 0.05$ ) effect on selected physical fitness and physiological variables of lecturers.

■ **KEY WORDS** : Asana, Pranayam, B.M.I., Systolic, Diastolic blood pressure, Pulse rate

■ **HOW TO CITE THIS PAPER** : Saulkar, Santoshi (2015). Effect of yoga training on lecturers physical fitness. *Internat. J. Phy. Edu.*, 8 (2) : 72-76.

The ancient Indian discipline yoga provides or stable and sustaining body system for air sports persons yogic techniques and practices aim at selective as well as wholesome shaping of human body and mind. Programmed of yoga education not only calls for muscular activity but also make constant demands upon the participants physical, mental social and emotional reactions which are highly important in heir intellectual social and moral development.

Yoga is a systematic and methodical process to control and develop the mind and self realization. Yoga practice helps to cure several diseases and to develop He concentration of mind and eases stress and tension.

**Purpose of the study :**

The main purpose of the study is to find out the

effect of yoga training on lecturers of physical fitness.

■ **METHODOLOGY**

To achieve this purpose the investigator has selected 50 female lectures on random sample technique from the College of Vidayabharti Mahavidyalaya and Shivaji art Mahavidyalaya Amravati (M.S.). The selected subjects have been divided into two equal groups namely: experimental group and control group.

**Criterion measures :**

- |                            |   |  |
|----------------------------|---|--|
| Fat per cent               | - | Skin fold caliper                              |
| B.M.I.                     | - | Stedimeter (height), weighing machine (weight) |
| Explosive strength agility | - | J.C.R. test                                    |

- Cardio-vascular capacity - Hardward step test
- Blood pressure - Spigmomonometer
- Hemoglobin - Sahalis himglobinometer
- Pulse rate - Watch

**Administration of the test :**

I have been given six month yoga training to the experimental group and then analised the result. Again six month training was arrange for same group and then analised the result. Before enrolling their training programmer pre and post 1 and post 2 test were administered to measure physical fitness and physiological variable.

**Analysis of data :**

To evolve concrete evidence, ANOVA statistics tool have been applied to extract he significant difference if any, among he experimental and control group.

**■ OBSERVATIONS AND DISCUSSION**

All he subject of experimental group involved in this

study were undergene regular yoga training programme for a period of one year. From the table it was evident that in the case of physical fitness and physiological variables true were significant changes noticed offer one year regular yoga training programmed.

From the findings the yoga training helps the subjects to positive effect.

Calculated value is 10.36 is greater than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 1 and Fig. 1).

Beard lesli self (1988), physical fitness programmed and Aerobic training is significantly effective present body fat.

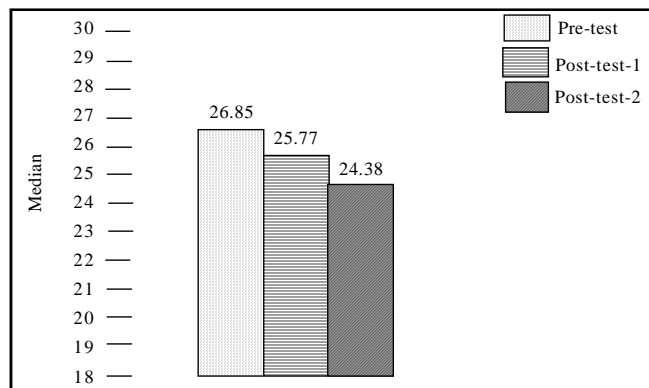
The calculated value is 0.60 is lower than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 2 and Fig. 2).

Kumara *et al.* (2011) there was significant decline in the body weight, BMI and significant increase in total antioxidant level after yoga practice.

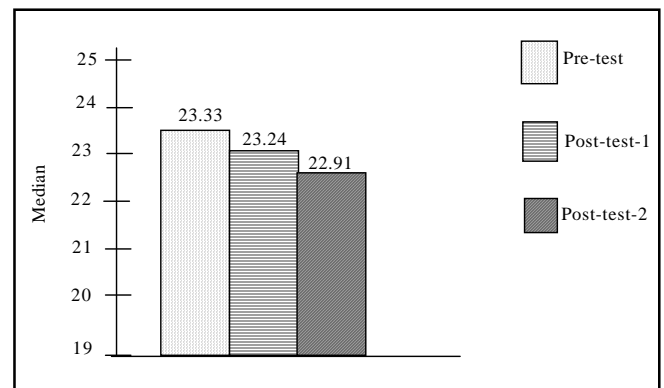
The calculated value is 0.75 is greater than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 3 and Fig. 3).

Table 1 : Pre-test and post-1 and post-2 of fat %				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	154.09	2	77.04	-
Within groups	1093.15	147	7.44	10.36
	1247.24	149	84.48	

Table 2 : Height and weight				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	4.85	2	2.42	-
Within groups	589.56	147	4.01	0.60
	594.41	149	6.44	



**Fig. 1 : Pre-test and post 1 and 2 test of fat in percentage**



**Fig. 2 : Pre-test and post 1 and 2 in height and weight**

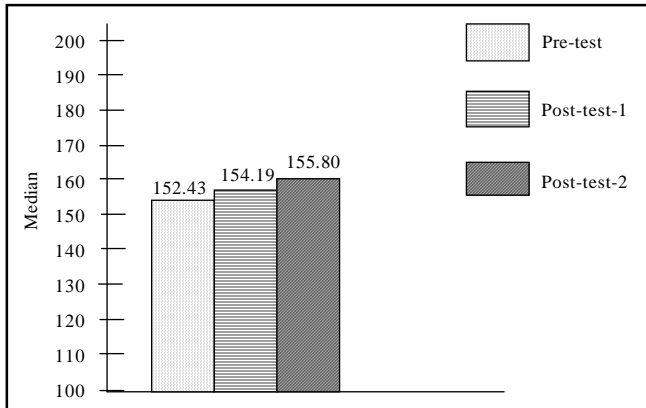


Fig. 3 : Pre-test and post 1 and 2 test in strength and agility

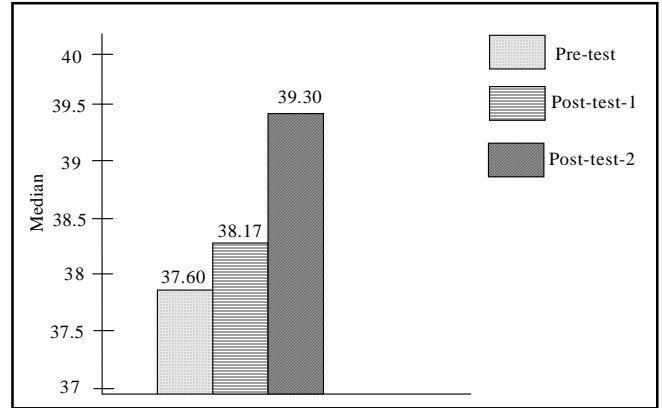


Fig. 4: Pre-test and post 1 and 2 test in cardio-vascular capacity

Kript (1989), six week of squat and pole metric training and power production significantly effective explosive strength.

Bobo and Yarbruta (1999), no significant improvement in Agility after administrating the long term Aerobic dance activity.

The calculated value is 3.67 is greater than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 4 and Fig. 4).

Dekbroh *et al.* (1985), Aerobic dance on physical work capacity is significantly effective cardio-vascular capacity.

The calculated value is 60.27 is greater than

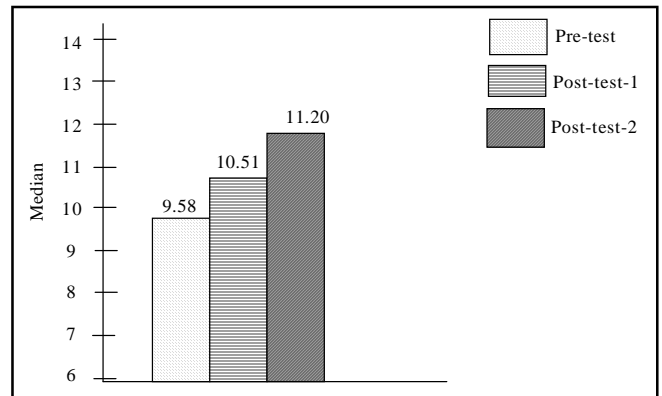


Fig. 5 : Pre-test and post 1 and 2 test of hemoglobin

Table 3 : Strength and agility				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	284.20	2	142.10	-
Within groups	27897.91	147	189.78	0.75
	28182.11	149	331.88	

Table 4 : Cardio-vascular capacity				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	74.64	2	37.32	-
Within groups	1494.01	147	10.16	3.67
	1568.65	149	47.48	

Table 5 : Hemoglobin				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	65.78	2	32.89	-
Within groups	80.22	147	0.55	60.27
	146.01	149	33.44	

Table 6a: Systolic blood pressure				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	1173.05	2	586.53	-
Within groups	8104.92	147	55.14	10.64
	9577.97	149	641.66	

Table 6b : Systolic blood pressure				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	537.64	2	268.82	-
Within groups	5243.62	147	35.67	7.54
	5781.02	149	304.49	

Table 7 : Pulse rate				
Sources of variance	Sum of squares	d.f.	Mean squares	F
Between groups	723.77	2	361.89	-
Within groups	4282.90	147	29.14	12.42
	5006.67	149	391.02	

tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 5 and Fig. 5).

Purohiti *et al.* (2013), In conclusion the improvement in hemoglobing concentration and MCHC without increase in number of RBC and hameatocrit indicats cardirotretant and antistrss effect yoga

The calculated value is 10.64 is greater than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 6a and Fig. 6a). The calculated value is 7.54 is greater than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 6b and Fig. 6b).

Mandlik (2008) ([www.yogapoint.com](http://www.yogapoint.com)), also reported by the practise of yoga we will contarol blood pressure, systolis and daistolic blood pressure.

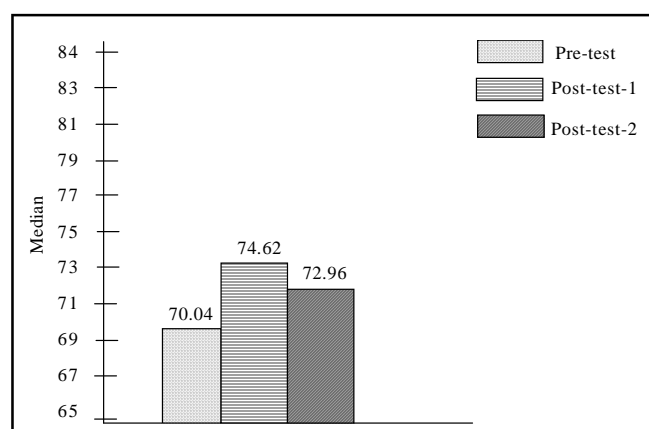


Fig. 6b: Pre-test and post 1 and 2 of systolic blood pressure

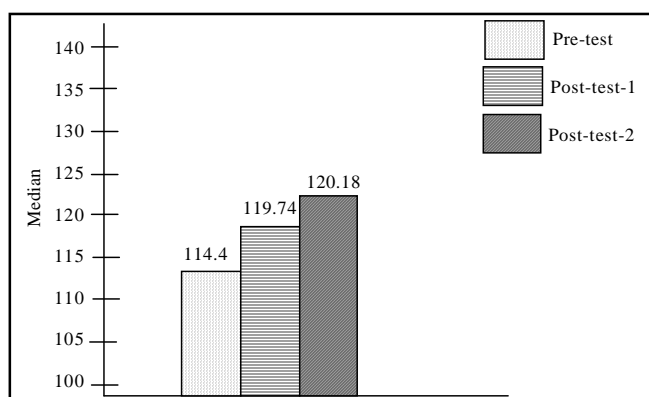


Fig. 6a: Pre-test and post 1 and 2 of systolic blood pressure

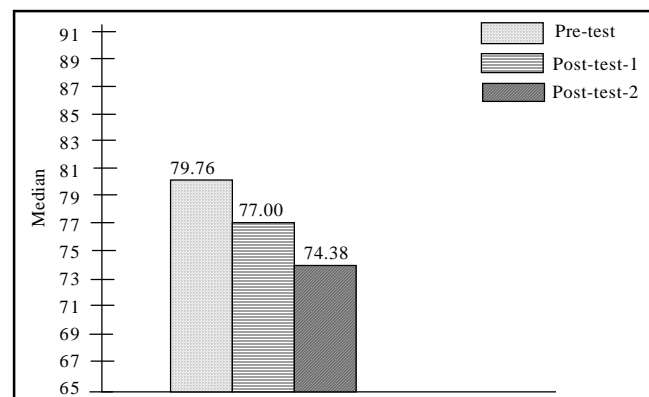


Fig. 7: Pre-test and post 1 and 2 of pulse rate

The calculated value is 12.42 is greater than tabulated value 3.06 at the level of significance at 149 degree of freedom (Table 7 and Fig. 7).

Mayer (1980), also reported significant difference was found in case of pulse rate after administering the yoga breathing practice involves breathing exclusively the right nostril.

Participation in one year yoga training resulted in significant difference on physical fitness and physiological variables.

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8<sup>th</sup>  
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