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## Effect of yogicasana practice on VO<sub>2</sub> Max parameter among college female students of Uttar Pradesh

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### Abstract

The purpose of the present study was to compare the effect of yogicasana Practice on VO<sub>2</sub> Max Parameter among College Female Students of Uttar Pradesh. To achieve the purpose of the study thirty college female students were selected from college affiliated to Mahatma Jyotiba Phule Ruhelkhand University Bareilly. The subject are range from 18-24 years. The selected player divided into two equal groups each group consisting 15-15 students. One is experimental and one is control group. Experimental group underwent a yogicasana practice programe for eight weeks. The control group was not taking part in the yogicasana practice. Vo<sub>2</sub> max was taken as criterion variable in this study. The selected subjects were tested on vo<sub>2</sub> max was measured through Astrand-Rhyming Nomogram. Pre-test was taken before the training period and post-test was measured immediately after the six wee, training period. Statistical technique 't' ratio was used to analysis the means of the pre-test and post-test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to yogicasana practice given to the experimental group on Vo<sub>2</sub> max when compare to control group.

**Keywords:** Eye hand coordination, arm muscle strength, basketball players, hand held dynamometer

### Introduction

People in the 21st century do not have enough time to exercise in order to live appropriate, healthy lives due to sedentary lifestyles. In fact, a lot of people have grown so sedentary that their way of life has started to pose a severe risk to their health, and their lack of exercise has started to cause an increased decline in human health, which frequently results in early disease and death.

Yoga has numerous advantages for people of all ages. The study of yoga, which is described as the total realization of the essential character of the Supreme Being, is attractive to people with a philosophical mindset. It is an integrative subject that considers the entire being of man and is a practical holistic philosophy intended to achieve a profound condition. The goal of yoga is to come up with strategies for improving mental and emotional focus. Yoga means coming together, connecting with, or uniting with our inner selves. Asana is a term used to describe a stable condition of being. Stop and find comfort in your body and mind.

### Methodology

The purpose of the study was to find out the effect of yogicasana practice on Vo<sub>2</sub> max among college female students. To achieve this purpose of the study, thirty college female students were randomly selected. The age range between from 18-24 years. The selected subjects were divided into two equal groups 15-15 subjects each, such as yogicasana practice group experimental group and control group. The experimental group underwent yogicasana practice for three days per week for six weeks. Control group, which they did not undergo any special training programme apart from their regular physical activities as per their curriculum. The following physiological variable, namely Vo<sub>2</sub> max was selected as criterion variable. All the subjects of two groups were tested on selected criterion variable. Vo<sub>2</sub> max was measured through Astrand-Rhyming Nomogram at prior to and immediately after the training programmer. The 't' test was used to analysis the significant difference, if any, in between the groups respectively. The 0.05 level of confidence was fixed to test level of significance which was considered as an appropriate.

**Analysis of data:** The significance of the different among of the experimental group was found out by pre-test. The data

were analysed and dependent 't' test was used with 0.05 level as confidence.

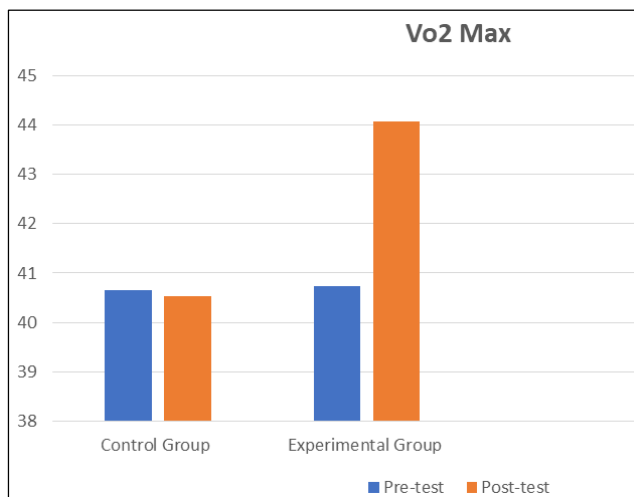
**Table 1:** Analysis of t-ratio for pre-test and post-test of experimental and control group on Vo2 max

Variable	Group	Mean		SD		SD Error		DF	"T" Ratio
		Pre	Post	Pre	Post	Pre	Post		
Vo2 Max	Control	40.65	40.54	1.27	1.09	0.33	0.28	14	0.64
	Experimental	40.73	44.08	1.32	1.70	0.34	0.44		

Significance at .05 level of confidence.

The table-1 shows that the mean value of pre-test and post-test of the control group on Vo2 Max were 40.65 and 40.54 of post-test. The obtained "t" ratio was 0.64 since the obtained "t" ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degree of freedom it was found to be statistically insignificant. The mean value of pre-test and post-test of experimental group of Vo2 Max were 40.73 and 44.08. the obtained "t" value ratio was 13.82\* since the obtained "t" ration was greater than the required table value of 2.14 for significance at 0.05 level with 14 degree of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between the control and experimental group in Vo2 Max. it may be concluded from the result of the study that experimental group improved in Vo2 Max due to six weeks of yogicasana practice.

- Centre for Activity and Aging, School of Kinesiology, The University of Western Ontario, London; c2013.
- Doijad VP, Kambel P, Sarudi AD. Effect of Yogic Exercise on Aerobic Capacity (Vo2 Max). International Journal of Physiology. 2013;1(2):47-50.
- Madanhohan, *et al.* Effect of Six Weeks Yoga Training on Weight loss following Step test, Respiratory Pressure, Handgrip strength and Handgrip Endurance in young healthy subjects, Indian Journal of Physiology and Pharmacology. 2008;52(2):164-170.
- Ray US, *et al.* Aerobic capacity and Perceived Exertion after Practice of Hatha Yogic Exercises". Indian J. Med. Res. 2001;114:215-21.
- Ray US, *et al.* Effect of Yogic Exercises on Physical and Mental Health of Young Fellowship course trainees Indian J Physiology Pharmacol. 2001;45(1):37-53.



**Fig 1:** Graph showing the Pre-test and Post-test of Control and Experimental Group on Vo2 max

### Discussion and Findings

The result of the study indicates that the experimental group had significantly improved the Vo2 Max when compared to the control group. It is also found the improved caused by yogicasana practice done by experimental group. This study supported by the R Kumar, & Doijad VP, (2016) <sup>[2]</sup>.

### Conclusions

There was a significant difference between the experimental and control group on Vo2 Max after the training period. There was a significant improvement in Vo2 Max. However the improvement was in favor of experimental group due to six weeks of yogicasana practice.

### References

- Belfry GR, *et al.* Effects of 14 Sessions of Short-Duration Highintensity Exercise on Vo2 ax and Performance Time of HighIntensity Cycling, Canadian