



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2019; 4(2): 207-209

© 2019 Yoga

www.theyogicjournal.com

Received: 28-05-2019

Accepted: 30-06-2019

**Dr. T Arun Prasanna**

Post Doctorate Fellowship,  
Cum Medical Officer, Alagappa  
University College of Physical  
Education, Karaikudi,  
Tamil Nadu, India

**Dr. M Sundar**

Principal, Cum Medical Officer  
Alagappa University College of  
Physical Education, Karaikudi,  
Tamil Nadu, India

**Dr. A Anandhi**

Assistant. Professor,  
Cum Medical Officer Alagappa  
University College of Physical  
Education, Karaikudi,  
Tamil Nadu, India

## Isolated combined effects of yogic practices continuous training on selected physiological and bio chemical variables among university middle distance runners

**Dr. T Arun Prasanna, Dr. M Sundar and Dr. A Anandhi**

### Abstract

The study aims to determine the isolated and combined effect of yogic practices continuous training, physiological variable (Vital Capacity) and Biochemical Variables (Lactic Acid) among the male athletes of Alagappa University affiliated colleges. The research involved a random subject selection of twenty athletes with age ranging from 17-25 years and had two equally divided groups' namely experimental groups with 10 athletes each. The groups endured the training activities for twelve weeks with a schedule of thrice a week whereas the control group remained with no activities. The data procured in prior and after the training programme was examined with the application of Analysis of variance and the fixation of level of significance at 0.05.

**Keywords:** Yogic practice, continuous training, vital capacity, lactic acid

### Introduction

The conditioning and coaching are the chief words in sports training. Conditioning is a process of gradually preparing the body for strenuous physical activity for focusing attention on development of physical and motor fitness components and indirectly enhancing sports performance. The characteristic feature of training as a program of activities intends for the enhancement of the ability of force of a person for a specific occasion. The coordinative process of logical and instructive standards drives an individual to the best level of execution in sports. Sports training is a procedure of flawlessness coordinated by logical and instructive standards and goes for driving an individual to high and best level execution in sports through planned methods of change in the status and limit of execution.

### Yoga

"Yoga" is gotten from the underlying foundations of Sanskrit 'Yuj' which intends to join, to connect, to tie and burden and to focus on one's consideration. The exacting significance of "Yoga" is Yoke. It additionally implies association. It implies the experience of unity or solidarity with inward being. Yoga means joining the individual soul with the general soul, or God.

### Continuous Training

Endurance is the ability to engage in activity with high caliber for a long time without fatigue. Every athlete requires energy for which endurance, the resultant of all the organs of psychic and physical systems is necessary. This kind of extended training with fair intensity enhances the abilities of aerobic that aim to build up the systems of energy generation.

### Physiological

Physiology deals with the functional elements of the human physical body impacted by the execution of physical actions. The general health of a person with fitness and performance can be improved through the exercises of sports.

**Corresponding Author:**

**Dr. T Arun Prasanna**

Post Doctorate Fellowship,  
Cum Medical Officer, Alagappa  
University College of Physical  
Education, Karaikudi,  
Tamil Nadu, India

**Lactic Acid**

When glucose is catabolised anaerobically, the end result obtained is Lactate. Anaerobic glycol state after breakdown results in the formation of Lactic acid which is a byproduct and oxidizes unless removed from cell.

**Methodology**

The research was designed to discover isolated and combined effect of yogic practices, (bhujangasana (CS), virabhadrasana

(LS) and adhomukhashvanasana (PS). Continuous training physiological variable (Vital Capacity) and Bio Chemical variables (Lactic acid) among middle distance runners. For this purpose, fifty athletes from the college were chosen randomly as subjects for the study and their age ranged between 17 to 25 years.

**Data Analysis**

**Table 1:** Analysis of Variance for the Pre and Post-test of Yogic Continuous Training Group and Control Group on Vital Capacity

Test	Yogic and Continues Training Group	Control Group	SOS	DF	MEAN	F RATIO
Pre	3.504	3.538	.006	1	.006	.0857
			.121	18	.007	
Post	3.701	3.531	.155	1	.155	22.14*
			.119	18	.007	

Significant level 0.05 table value 4.10 df 1.18

The analysis presented in the table-1 that indicate variance value of pre test of the combined yogic practice and continuous training and control group pre test value 3.504 and 3.538 correspondingly. The obtain 'F' ratio. 0857 of pre test was lesser than the table value 3.49 for df 1 and 18 mandatory for significance at 0.05 level of assurance on vital capacity.

The post-test mean value on vital capacity of yogic practice and continuous training group and control group are 3.701 and 3.531 correspondingly. The obtain 'F' ratio 22.14\* of post-test was greater than the table value 3.49 for df 1 and 18 mandatory for significance at 0.05 level of assurance on vital capacity

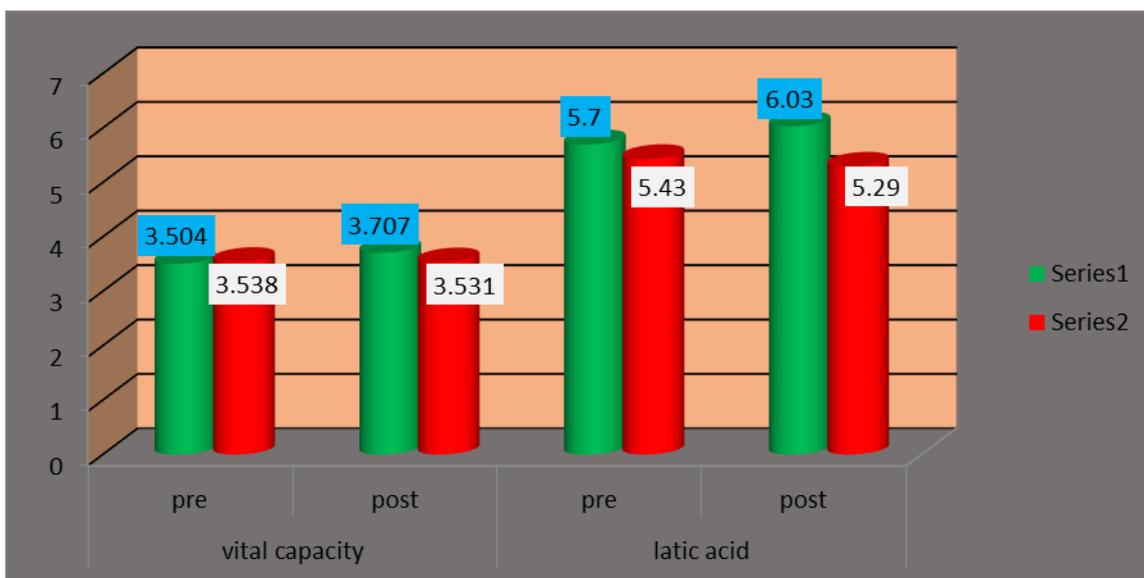
**Table 2:** Analysis of Variance of Yogic Continues Training Group And Control Group On Lactic Acid

Test	Yogic and Continues Training Group	Control Group	Sos	Df	Mean	F Ratio
Pre	5.50	5.43	.272	1	.272	1.087
			4.503	18	.250	
Post	6.03	5.29	2.204	1	2.024	14.45*
			2.527	18	.140	

\*Required C.I Value 14.45\*at 0.05 level

The analysis presented in the table-2 that indicate variance value of pre test of the combined yogic practice and continues training group and control group pre test value 5.50 and 5.43 correspondingly. The obtain 'F' ratio 1.087 of pre test was lesser than the table value 3.49 for df 1 and 18 mandatory for significance at 0.05 level of assurance on lactic acid. The

post-test mean value on lactic acid of yogic practice and continues training group and control group are 6.03 and 5.29 correspondingly. The obtain 'F' ratio 14.45\* of post-test was greater than the table value 3.49 for df 1 and 18 mandatory for significance at 0.05 level of assurance on lactic acid.



Bar Diagram of the Vital Capacity and Lactic Acid of Yogic Practice Continues Training Group and Control Group

**Acknowledgments**

The authors would like to thank Alagappa University, Karaikudi, Tamil Nadu, India for its financial support under my Research Scheme is Rusa 2.0 Scheme.

**Conclusions**

The results of the study reveals that there was significant improvement in the experiment group selected variables when compared to the control group after the completion of

12weeks combined yogic practices continuous training. It was concluded that the combined group and control training had greater influence on vital capacity and lactic acid.

### Reference

1. Anand, Mithin *et al.* Effect of Game Specific Circuit Training and Plyometrics on Selected Physiological and Hematological Variables of Handball Players. Indian Journal of Public Health Research & Development. 2019; 10:7
2. Meera R, Mohanakrishnan R, Prasanna TA. Effect of Core Training with and without Yogic Practices on Selected Psychological Variables among College Women Athletes. Indian Journal of Public Health Research & Development. 2019; 10(4).
3. Saran KS, Vaithianathan K, Anand M, Prasanna TA. Isolated and Combined Effect of Plyometric and Weight Training on Selected Physical Fitness and Hematological Variables of Football Players. Indian Journal of Public Health Research & Development. 2019, 10(7).
4. Arun Prasanna T, Vaithianathan K. The Combined Effect of Continuous Run, Alternate Pace Run and Fartlek Training on Selected Physiological Variable among Male Athletes. Indian Journal of Public Health Research & Development. 2019, 10(3).
5. Mohanakrishnan R. Effect of Core Strength Training and Yogasana Practices on Selected Health Related Physical Fitness Components among Female Athletes, 2017.