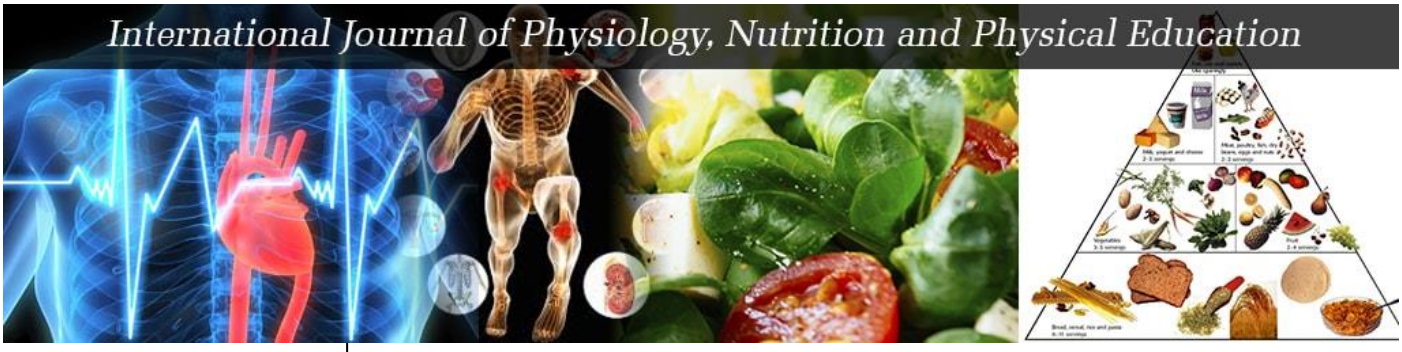

ISSN: 2456-0057
IJPNPE 2017; 2(1): 406-407

www.journalofsports.com
Received: 12-01-2017
Accepted: 18-03-2017

P Malaialagu
Ph.D, Scholar, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, Chennai, Tamil Nadu, India

Correspondence
P Malaialagu
Ph.D, Scholar, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, Chennai, Tamil Nadu, India

Effect of suryanamaskar practice on respiratory rate among college women: A single group pre and post-test study

P Malaialagu

Abstract
The study's goal was to determine the impact of Suryanamaskar on college women's respiratory rates. Single group pre and post test design were used in this present study. For this purpose, (N = 15) women college students were selected as participants from Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India age of the participants from 18 to 24 years. The selected participants underwent Suryanamaskar practice for 6 weeks. Respiratory rate were selected as criterion variable it was measured with Respiration counting (beats). One sample t test were used to analysis the data at 95% level of confidence. Results concluded that there was a significant improvement between pre and posttest mean on Respiratory rate of college women due to the 6 weeks of suryanamaskar practices.

Keywords: suryanamaskar, respiratory rate, college women

Introduction
Suryanamaskar, which means salute to the Sun God in Sanskrit, is also a component of Indian yogic traditions (Bhutkar, Bhutkar, Taware, Doijad, & Doddamani, 2008) [2, 3]. Suryanamaskar is a series of 'asanas' (Mandlik, 2001) [4] Pranamasan, hasta utthanasan, padahastasan, ashwasanchalanasan, ashtanaga namasakar, bhujangasan, & parvatasan (Saraswati, 1996) [5] performed in conjunction with 'pranayama' (Mandlik, 2001) [4]. Suryanamaskar is a yoga practise that involves alternating backward and forward bending postures while inhaling to maximal lung capacity. Suryanamaskar integrates all of yoga's major health advantages in a single practice (Anandakumar, Yoga, & Elangovan, 2010) [1]. Suryanamasakar practise strengthens the breathing muscles, improves diaphragm and lung function, and improves thoracic compliance.

Purpose of the Study
The study's goal was to determine the impact of Suryanamaskar on college women's respiratory rates.

Methodology
Single group pre and post test design were used in this present study. For this purpose, (N = 15) women college students were selected as participants from Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India age of the participants from 18 to 24 years. The selected participants underwent Suryanamaskar practice for 6 weeks. Respiratory rate were selected as criterion variable it was measured with Respiration counting (beats). One sample t test were used to analysis the data at 95% level of confidence

Instrumentation
Clinically, the respiratory rate (breaths/min) was measured. In a well-ventilated and well-lit examination room, the subject was requested to lie supine on an examination table. Clothing was removed from the chest and abdomen. The frequency of breathing was measured by examining abdominal wall movement from the foot end position for a complete minute. Three such readings are collected at 5-minute intervals, and the average is used as the final reading (Shirur, & Veena, 2019) [6].

Results and Discussion

Table 1: represents the mean, standard deviation and t ratio value of respiratory rate.

Variables	Pre-Test		Post Test		t ratio	P value
	Mean	SD	Mean	SD		
Respiratory rate	17.36	0.53	15.2	0.49	9.72	0.00

*Significant at 95% of level of confidence. Table value required for significant with dft $_{(14)}$ is 2.14

From the table 1, the obtained t ratio 9.72 & p value 0.00<0.05 level of significance. It shows that there is a significant improvement between pre and post-test mean. These changes may be happen due to the effect of 6 weeks of suryanamaskar practice. The results of the present study was also supported by previous study results, According to (Sisodia, 2015; Bhutkar, Bhutkar, Taware, Doijad, & Doddamani, 2008; Anandakumar, Yoga, & Elangovan, 2010) [7, 2, 3, 1].

Conclusion

There was a significant improvement between pre and posttest mean on Respiratory rate of college women due to the 6 weeks of suryanamaskar practices.

References

1. Anandakumar P, Yoga P, Elangovan R. Effect of Selected Asana and Suryanamaskar on Selected Physiological Variables among Diabetic Patients. Asian Journal of Physical Education & Computer Science in Sports. 2010;4(1):130-131.
2. Bhutkar PM, Bhutkar MV, Taware GB, Doijad V, Doddamani BR. Effect of Suryanamaskar practice on cardio-respiratory fitness parameters: A pilot study. Al Ameen J Med Sci. 2008;1(2):126-129.
3. Bhutkar PM, Bhutkar MV, Taware GB, Doijad V, Doddamani BR. Effect of suryanamaskar practice on cardio-respiratory fitness parameters: A pilot study. Al Ameen J Med Sci. 2008;1(2):126-129.
4. Mandlik V. Yog Shikshan Mala, Yog Parichay. 6th Ed. Yogchaitanya Publication, Nashik, 2001, 36-45
5. Saraswati SS. Surya Namaskara: A Technique of Solar Vitalization. Bihar School of Yoga. 1996.
6. Shirur SY, Veena HC. Effect of yoga (Pranayama and Suryanamaskar) on cardio pulmonary functions among adults. International Journal of Physiology. 2019;7(4):233-237.
7. Sisodia AS. Effect of Suryanamaskar on resting heart rate of school girls. International journal of research pedagogy and technology in education and movement sciences, 2015, 4(01).