

Effect of Pranayama and Suriyanamaskar on Health related Muscular Endurance among Teacher Training Students

*Renjusha.U.V

Abstract

Suryanamaskara is a yoga practice (routine) that consists of a series of 12 physical postures made up of a variety of forward and backward bends. The series of movements stretch the spinal column and massage, tone and stimulate vital organs through alternately flexing the body forwards and backwards. Pranayama means control life force through the art of breathing. Methods: Sixty Teacher training women students were randomly selected as subjects. The selected samples were divided in to four equal groups of fifteen samples each. Group I underwent Pranayama practices, group II underwent Suriyanamaskar practice, group III underwent combined Pranayama and Suriyanamaskar practice or five days per week for six weeks. Group IV acted as control that did not participate in any special training program apart from their regular activities as per their curriculum. The results of the study indicated that there was a significant difference between the adjusted post-test means of Group A,B,C and D on Muscular Endurance.

Keywords: *Pranayama, Suriyanamaskar, Muscular Endurance,*

Introduction

Pranayama is an art and has techniques to make the respiratory organs to move and expand intentionally, rhythmically and intensively. The Sun Salutation series includes 10-12 basic poses put together into a flowing vinyasa. These basic poses from a complete full body warm-up, stretching the major muscles of the back, arms and legs while encouraging full range of motion in the joints. This paper deals with how the suriyanamaskar and pranayama inspire to reach the muscular endurance for physical fitness.

Review of Related Literature

Ashwini and Snehal et.al 2018 explain that individuals who undertake no leisure time activity and individuals who undertake <30 min of physical activity each day are all defined as sedentary. Yoga is an ancient Indian form of physical activity which may assist in achieving recommended levels of fitness. Pilates inspired to reach the desired level of muscular strength and flexibility on simple equipment such as mats.

Objective of the Study

To know that sun salutation and breath control in yoga on health related physical fitness namely muscular endurance will increase.

Effect of Pranayama and Suriyanamaskar on Health related Muscular Endurance Among Teacher Training Students

Renjusha.U.V

Hypothesis

There is no significant improvement on selected criterion variables namely muscular endurance among teacher training students.

Sample

The age of the subjects were ranged between 20 to 25 years. The selected subjects were divided in to four equal groups of fifteen subjects each. Group I underwent Pranayama practices and Group II underwent Suriyanamaskar practice, group III underwent combined training for five days per week for six weeks. Group IV acted as control that did not participate in any special training programme apart from their regular activities as per their curriculum. The muscular endurance was measured by modified Bent knee sit ups and the unit of measurement was in numbers per minute.

Methodology

All the subjects of four groups were tested on selected dependent variables at prior to and immediately after the training programme. The analysis of covariance was used to analyse the significant difference. If any among the group since, four group were compared whenever they obtained "F" ratio for adjusted post-test was found to be significant, The 0.5 level of confidence was fixed as the level of significance to test the "F" ratio obtained by the analysis of covariance which was considered as an appropriate.

Table

ANALYSIS OF COVARIANCE OF THE DATA ON MUSCULAR ENDURANCE OF PRE AND POST TESTS SCORES OF PRANAYAMA, SURIYA NAMASAKAR PRACTICES COMBINED EFFECT GROUP AND CONTROL GROUP.

Test	Group A	Group B	Group C	Group D	Source of Variance	Sum squares	Df	Mean squares	Obtained "f" Ratio
Pre Test									
Mean	34.27	32.20	32.40	32.27	Between	44.32	3	14.77	0.39
S.d	5.70	5.91	5.99	6.23	Within	2131.87	56	38.07	
Post Test									
Mean	36.60	38.07	39.80	32.47	Between	441.07	3	147.02	3.93
S.d	5.81	5.80	5.92	6.11	Within	2096.67	56	37.44	
Adjusted Post Test									
					Between	480.08	3	160.03	82.48
Mean	45.72	49.19	50.73	43.91					
					Within	106.63	55	1.94	

*Significant at .05 level of confidence

Effect of Pranayama and Suriyanamaskar on Health related Muscular Endurance Among Teacher Training Students

Renjusha.U.V

Description

The table shows that the pre-test mean value of Muscular Endurance of Group A,B,C and D are 34.27, 32.20, 32.4 ad 32.27 respectively. The obtained “F” ratio of 0.39 for pre-test scores is less than the table value of 2.776 for df 3 ad 56 required or significance at .05 level of confidence on Muscular Endurance.

The post-test mean values on Muscular Endurance of Group A,B,C and D are 36.00,38.07, 39.80 respectively, the obtained “F” ratio of 3.93 of post test scores is more than the able value of 2.776 for df 3 and 56 required for significance at .05 level of confidence on Muscular Endurance.

The adjusted post-test means of Muscular Endurance Group A,B,C and D are 45.72, 49.19, 50.73 and 43.91 respectively on Muscular Endurance. The obtained “f” ratio of 3.77 for adjusted post-test means is more than the tale value of 2.78 for df 3 and 55 required for significance at .05 level of confidence on Muscular Endurance.

The results of the study indicated that there was a significant difference between the adjusted post-test means of Group A, B, C and D on Muscular Endurance.

Since, four groups were compared, whenever the obtained ‘f’ ratio or adjusted post test was found to be significant.

Findings of the Study

The Pranayama practice improved muscular endurance greater than that of Suryanamaskar practice among teacher training students.

Recommendations

1. On the basis of the findings o the study. It is recommended that the combined (Suryanamaskar and Parnayama) training could be utilized as useful methods to improve the muscular endurance among teacher training students.
2. Pranayama practice is the best method of improving muscular endurance among teacher training students.

***Physical Director
Smt. A.K.D.S. College of
Education for women,
Rajapalayam**

Bibliography & Reference

Ashwini Deshmukh, Dr. Snehal Chincholkar, Dr. Anuradha Sutar, Dr. Snehal Ghodey. 2018. “A comparative study between Pilates and Suryanamaskar on flexibility in women having sedentary lifestyle using sit and reach test and shoulder and wrist test”. PN 190-195. International Journal of Yoga, Physiotherapy and Physical Education

ISSN: 2456-5067.

**Effect of Pranayama and Suriyanamaskar on Health related Muscular Endurance
Among Teacher Training Students**

Renjusha.U.V