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EFFECT OF SURYANAMASKAR ON SELECTED PHYSIOLOGICAL PARAMETERS AMONG COLLEGE MEN STUDENTS

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Abstract:

The purpose of the study was designed to examine the effect of suryanamaskar on resting pulse rate and breath holding time among college men students. For the purpose of the study, thirty college men students from AVVM Sri Pushpam College, Poondi, Thanjavur, Tamil Nadu, India were selected as subjects. They were divided into two equal groups. Each group consisted of the fifteen subjects. Group I underwent suryanamaskar for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables namely resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables namely resting pulse rate and breath holding time by using radial pulse and holding the breath for time at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference, if any among the groups. The .05 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. The results of the study showed that there was a significant difference between suryanamaskar group and control group on resting pulse rate and breath holding time. And also it was found that there was a significant improvement on selected criterion variables such as resting pulse rate and breath holding time due to suryanamaskar.

Key Words: Suryanamaskar, Resting Pulse Rate, Breath Holding Time, College Men Students

Introduction:

Surya Namaskar, often referred to as Sun Salutation, is a venerable and revered yoga practice that has been performed for centuries. It is a graceful sequence of postures and movements traditionally practiced in the morning as a form of salutation to the rising sun, although it can be practiced at any time of day. Surya Namaskar holds profound significance in yoga and Hindu philosophy and has gained recognition worldwide for its numerous physical, mental, and spiritual benefits.

Surya Namaskar has ancient origins deeply rooted in Indian tradition and spirituality. It is not only a physical practice but also a ritual that pays homage to the solar deity, Surya, symbolizing the divine source of life, energy, and illumination. The practice has been passed down through generations, preserved in various yoga texts, including the Hatha Yoga Pradipika and the Bhagavad Gita. Over time, it has evolved into a versatile yoga routine that blends physical postures, breath control, and meditation. A typical Surya Namaskar sequence consists of 12 distinct postures that flow seamlessly from one to another. These postures are performed in a specific order and synchronize with controlled breathing, creating a harmonious rhythm. The sequence includes forward bends, backbends, lunges, and inversions, allowing for a comprehensive stretch and strengthening of various muscle groups. As practitioners move through the sequence, they also engage in mindful awareness of their breath, body, and mental state.

Surya Namaskar is not just a physical exercise; it is a profound practice that encompasses the essence of yoga-uniting body, mind, and spirit. As it continues to gain popularity worldwide, more individuals are discovering its transformative potential, making it a cherished part of their daily routines for holistic well-being. Whether you are a seasoned yogi or new to yoga, Surya Namaskar offers a path to health, mindfulness, and spiritual connection that is both accessible and deeply rewarding.

Methodology:

The purpose of the study was designed to examine the effect of suryanamaskar on resting pulse rate and breath holding time among college men students. For the purpose of the study, thirty college men students from AVVM Sri Pushpam College, Poondi, Thanjavur, Tamil Nadu, India were selected as subjects. They were divided into two equal groups. Each group consisted of the fifteen subjects. Group I underwent suryanamaskar for three days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular physical education programme. The following variables namely resting pulse rate and breath holding time were selected as criterion variables. All the subjects of two groups were tested on selected dependent variables namely resting pulse rate and breath holding time by using radial pulse

and holding the breath for time at prior to and immediately after the training programme. The analysis of covariance was used to analyze the significant difference, if any among the groups. The .05 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. The results of the study showed that there was a significant difference between suryanamaskar group and control group on resting pulse rate and breath holding time. And also it was found that there was a significant improvement on selected criterion variables such as resting pulse rate and breath holding time due to suryanamaskar.

Analysis of the Data:

Resting Pulse Rate:

The analysis of covariance on resting pulse rate of the pre and post test scores of suryanamaskar group and control group have been analyzed and presented in table 1.

Table 1: Analysis of Covariance of the Data on Resting Pulse Rate of Pre and Post Tests Scores of Suryanamaskar and Control Groups

Test	Suryanamaskar Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	72.33	71.87	Between	1.63	1	1.63	1.82
S.D.	0.94	1.14	Within	25.07	28	0.90	
Post Test							
Mean	69.67	71.40	Between	22.53	1	22.53	10.61*
S.D.	0.88	1.08	Within	59.47	28	2.12	
Adjusted Post Test							
Mean	69.51	71.55	Between	29.30	1	29.30	30.29*
			Within	26.12	27	0.97	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table 1 shows that the adjusted post-test means of suryanamaskar group and control group are 69.51 and 71.55 respectively. The obtained "F" ratio of 30.29 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on resting pulse rate. The results of the study indicated that there was a significant difference between the adjusted post-test means of suryanamaskar group and control group on resting pulse rate.

Breath Holding Time:

The analysis of covariance on breath holding time of the pre and post test scores of suryanamaskar group and control group have been analyzed and presented in table 2

Table 2: Analysis of Covariance of the Data on Breath Holding Time of Pre and Post Tests Scores of Suryanamaskar and Control Groups

Test	Suryanamaskar Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	42.93	43.47	Between	2.13	1	2.13	1.28
S.D.	1.29	0.96	Within	46.67	28	1.67	
Post Test							
Mean	48.13	44.13	Between	120.00	1	120.00	23.10*
S.D.	1.20	0.88	Within	145.47	28	5.20	
Adjusted Post Test							
Mean	48.24	44.02	Between	127.69	1	127.69	196.25*
			Within	17.57	27	0.65	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table 2 shows that the adjusted post-test means of suryanamaskar group and control group are 48.24 and 44.02 respectively. The obtained "F" ratio of 196.25 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on breath holding time. The results of the study indicated that there was a significant difference between the adjusted post-test means of suryanamaskar group and control group on breath holding time.

Conclusion:

- There was a significant difference between suryanamaskar group and control group on resting pulse rate and breath holding time.

- And also it was found that there was a significant change on selected criterion variables such as resting pulse rate and breath holding time due to suryanamaskar.

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