



A STUDY OF TRANSFORMATIVE EFFECTS OF YOGIC TRAINING ON PHYSIOLOGICAL PARAMETERS AMONG TEACHERS

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ABSTRACT

The study aimed to explore the impact of yoga training on the physiological attributes of teachers at Rampur, with the overarching goal of enhancing their physiological well-being. A randomized selection process involved 30 participants; specifically males aged 35-55 years. Physiological variables such as Lung Capacity, Vital Capacity, Blood Pressure, and Pulse Rate were measured before and after the yoga training program. The t-test was employed to assess the significant effects, and the results indicated a noteworthy ($p < 0.05$) improvement in the physiological characteristics of teachers, affirming the positive impact of the selected yoga training program.

Keywords: Yoga Training, Physiological Parameters, Vital Capacity, Lungs Capacity, Pulse Rate, Blood Pressure.

INTRODUCTION

Yoga, a millennia-old science originating in India, encompasses a holistic approach to the development of the body, mind, and spirit. With its gentle movements, deep breathing, and extensive stretches, yoga serves as an ideal method for relaxation and revitalization, offering various forms to cater to individual preferences. Yogic exercises, known as asanas, play a pivotal role in strengthening the nervous system and optimizing the potential of both mind and body. These exercises contribute to the healing, strengthening, stretching, and relaxation of skeletal, muscular, digestive, cardiovascular, glandular, and nervous systems, thereby enhancing overall bodily resilience. Yoga not only brings a sense of tranquility to the mind but also primes the body for meditation. The practice of yoga includes deep breathing exercises like pranayama and nadi sodhanas, such as alternate nostril breathing techniques. These exercises prove beneficial in alleviating stress, managing depression, and addressing various mental and physical challenges. In contemporary times, yoga has evolved into a lifestyle accessible to individuals of all ages, genders, and health conditions, grounded in universal physical and spiritual laws. Yogic exercises, involving bodily movements with mental concentration, aid in developing physical health and fostering emotional control over desires such as lust, love, affection, anger, and greed. They provide a robust framework for overcoming various dangerous diseases. The global recognition of yoga's importance is evident, with people across nations acknowledging its multifaceted benefits. Beyond its role in developing the mind, fostering socio-control, and contributing to spiritual and moral aspects, yoga is increasingly perceived as a therapeutic practice.

Despite documented physiological benefits and celebrity endorsements, integrating regular yoga practices into daily life remains a challenge for many. Organized classes ranging from forty five to ninety minutes can be difficult to fit into schedules already committed to cardiovascular or resistance training routines. Finding time for yoga or flexibility training amid busy mornings and evenings becomes nearly impossible for most individuals, leading to the neglect of mind and body flexibility precisely when it is needed the most. The mission of physical education teachers is to promote the development of motor skills and abilities, enabling individuals to lead healthy, productive lives and engage in recreational and sports activities of their choice.

METHODOLOGY

A sample of 30 male participants, ranging in age from 35 to 55 years, was randomly selected for this study. Physiological parameters, including lung capacity, blood pressure, vital capacity, and pulse rate, were assessed to evaluate the transformative effect of yoga training on these variables.

The yoga training programme lasted for 8 weeks, with teachers receiving training six days a week for 45 minutes each day. The programme was designed to improve selected physiological variables.



Yoga Training Programme

S. No	Day	Yoga Asana
1	Monday	Vrikshasana, Nadi Shodhan Pranayama and Shavasana
2	Tuesday	Vajarasana, Bhujangasana, Dhanurasana and Shavasana
3	Wednesday	Surya Namaskar and Shavasana
4	Thursday	Vrikshasana, Nadi Shodhan Pranayama and Shavasana
5	Friday	Vajarasana, Bhujangasana, Dhanurasana and Shavasana
6	Saturday	Surya Namaskar and Shavasana

Physiological Variables

Name of the variables	Test	Unit
Lungs Capacity	Spirometer	Millilitres
Vital Capacity	Wet Spirometer	Millilitres
Blood Pressure	Sphygmomanometer	Millimetre of Mercury
Pulse Rate	Manual method	No. of pulse beat/minute

The study initiated with a baseline assessment, conducting a pre-test on the chosen participants to gauge physiological variables such as lung capacity, vital capacity, blood pressure, and pulse rate. Subsequent to the pre-test, the 10-week yoga training program was systematically implemented as per the schedule. Concluding the intervention, a post-test was executed utilizing reliable measurement tools to reassess the same physiological variables. The primary objective was to discern any noteworthy differences and ascertain the most suitable yoga training programs for college teachers. To evaluate the impact of yoga training on the physiological attributes of teachers, a t-test was utilized at a significance level of 0.05.

FINDING AND RESULTS

TABLE-1
T-RATIO OF THE MEANS OF PHYSIOLOGICAL PARAMETERS OF TEACHERS

Characteristics	Group	N	Mean	S.D	t-ratio
Lungs Capacity	Pre test	30	3942.33	97.12	3.56
	Post test	30	4023.77	78.95	
Vital Capacity	Pre test	30	3074.17	42.08	5.9
	Post test	30	3131.77	32.94	
Systolic Blood Pressure	Pre test	30	131.13	10.38	3.25
	Post test	30	124.53	3.98	
Diastolic Blood Pressure	Pre test	30	78.2	1.54	4.08
	Post test	30	79.3	0.79	
Resting Pulse Rate	Pre test	30	77.8	1.91	3.56
	Post test	30	74	5.52	

Significant at 0.05 level.



The results presented in Table 1 indicate significant t-values for Lungs Capacity (3.56), Vital Capacity (5.9), Systolic Blood Pressure (3.35), Diastolic Blood Pressure (4.08), and Resting Pulse Rate (3.56) at the 0.05 significance level.

DISCUSSION

Statistically significant variances were noted in Lungs Capacity, Vital Capacity, Systolic Blood Pressure, Diastolic Blood Pressure, and Resting Pulse Rate. These findings suggest a positive influence of modified yoga training on the physiological characteristics of teachers. These outcomes are in line with earlier studies conducted by Lohan and Rajesh (2002), Mohan (2003), and Chaudhary and Ahsan (2012), reinforcing the idea that yogasanas and pranayama can contribute to the improvement of physiological variables in adults.

CONCLUSION

The study generated two-fold results, addressing three distinct objectives related to the physiological components. Firstly, it aimed to identify an yoga training program for participants, aligning with Saroja's (2010) findings that highlighted the effectiveness of a superior yoga program for various physical, physiological, and biological variables in the teachers. Secondly, the study sought to identify notable distinctions in the transformative effect of yoga training programs on physiological parameters, including lungs capacity, vital capacity, blood pressure, and pulse rate, among the participants. This outcome resonates with the findings of Lega's (2010) research, which highlighted significant variances in the impact of yoga training on cardiorespiratory functions in school children. Finally, the study aimed at enhancing the physiological well-being of college teachers through a yoga training programme. The findings, underscoring the transformative effects of yoga practice and walking on specific physical, physiological, and biochemical variables in the teachers, align with the outcomes of Saroj's (2010) research.

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