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EFFECTS OF YOGIC PRACTICES ON SELECTED HEALTH RELATED PHYSICAL FITNESS COMPONENTS OF COLLEGE WOMEN

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ABSTRACT :

This research aims to assess the effect of yogic practice on health-related physical fitness Variables among College Level women. To achieve the purpose of the study fourty physical education department students were selected as subjects from Bharathiar University Coimbatore, Tamilnadu. The age of the subjects was ranged from 21 to 25 years. The subjects were further classified at random into two equal groups of 20 subjects, Group-I underwent yogic practice and group-II acted as Control Group (CG). Training period limited with three days in a week for eight weeks of training. The selected criterion variables Flexibility, Muscular strength and Cardio respiratory endurance was assessed by sit and reach box, sit-ups and Harvard step test before and after the training period. The collected data were statistically analysed by using dependent 't' test. From the results of the study, it was found that there was a significant enhancement on health-related physical fitness components of college women.

Keywords: Yoga, Flexibility, Muscular strength, Cardio respiratory endurance, Yogic practice.

INTRODUCTION :

In recent years, the interest in holistic approaches to health and wellness has witnessed a significant surge, with yoga emerging as a prominent practice embraced by individuals across various demographics. Its profound effects on both mental and physical well-being have garnered considerable attention from researchers and practitioners alike. Amidst this burgeoning interest, a specific focus has been directed towards understanding the influence of yogic practice on the health-related physical fitness components of college women.

The transition to college life marks a critical period in a woman's life journey, characterized by newfound independence, academic rigor, and a plethora of social and personal challenges. It's during this transformative phase that maintaining optimal physical fitness becomes paramount, not only for academic success but also for overall well-being. In light of this, investigating the potential benefits of yogic practice on health-related physical fitness components among college women presents a compelling avenue for research.

Physical fitness encompasses various components, including cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. These components collectively contribute to an individual's ability to perform daily tasks efficiently, participate in physical activities, and maintain overall health. However, the sedentary lifestyle often associated with academic pursuits can predispose college women to physical inactivity and its adverse health consequences.

Yogic practice, rooted in ancient Indian traditions, offers a holistic approach to fitness by integrating physical postures (asanas), breath control (pranayama), and meditation (dhyana). Proponents of yoga advocate its efficacy in enhancing strength, flexibility, balance and overall physical well-being. Furthermore, the meditative aspect of yoga is supposed to improve stress, anxiety and depression, which are prevalent concerns among college students.

STATEMENT OF THE PROBLEM

The purpose of the study was to find out the effect of yogic practices on selected health related physical fitness components of college women.

METHODS

EXPERIMENTAL APPROACH OF THE PROBLEM

In order to address the hypothesis presented herein, college level women from Bharathiar University, Coimbatore were selected randomly on the voluntary response to participate in. The selected subject (N=20) was divided into two groups (n=20) of which group I underwent yogic practice and

group II was considered as control group (CG). The asanas with specific yogic practice group underwent the training for a period of eight weeks. After Pre-test, Group I was treated with yogic practice, group II was not treated with any training but they were doing their regular activity.

TRAINING PROGRAM

The total duration of effects of yogic practice on health-related physical fitness components. The load was increased one in two asana practice progress and lasted for 45 minutes. During the training period the subject were treated with specific yogic practice for three alternative days (Monday, Wednesday, Friday) per week.

Phase I

During the 1st to 4th weeks of yogic practice, the subjects were treated with meditation and streatching for 10 minutes. Followed by asanas namely parvatasana, paschimottasana, ardhamatsyendras, thadasana, trikonasana, padahastasana, dhanurasana, pavanamukthasana, sarvangasana, underwent 4 repetitions with 2 sets. Further the session ended with savasana (relaxation) for 5 minutes.

Phase II

During the 5th to 8th weeks of yogic practice, the subjects were treated with meditation and streatching for 10 minutes. Followed by asanas namely parvatasana, paschimottasana, ardhamatsyendras, thadasana, trikonasana, padahastasana, dhanurasana, pavanamukthasana, sarvangasana, underwent 4 repetitions with 3 sets. Further the session ended with savasana (relaxation) for 5 minutes.

STATISTICAL ANALYSIS

The collected data were systematically processed, assemble around subject to tabulation on completion of analysis results derived from dependent 't' test was used to find out the effects of yogic practice on selected health related physical fitness components. In all cases the criterion for statistical significance was set at 0.05 level of confidence (P > 0.05).

RESULTS

Table 1: Computation of 't' ratio between pre and post-test means of Experimental group on Performance variables

Experimental Group					
Performance Variables	**Pre/Post test**	**Mean**	**Std. Deviation**	**Std Error Mean**	**'t' Ratio**
Flexibility	Pre-Test	18.70	5.08	0.16	7.16*
	Post-Test	19.90	5.14		
Muscular strength	Pre-Test	24.70	3.90	0.491	6.30*
	Post-Test	27.80	4.40		
Cardio respiratory endurance	Pre-Test	53.88	8.20	0.143	10.29*
	Post-Test	55.36	8.00		

*Significant at 0.05 level of confidence (2.09), 1 & 19.

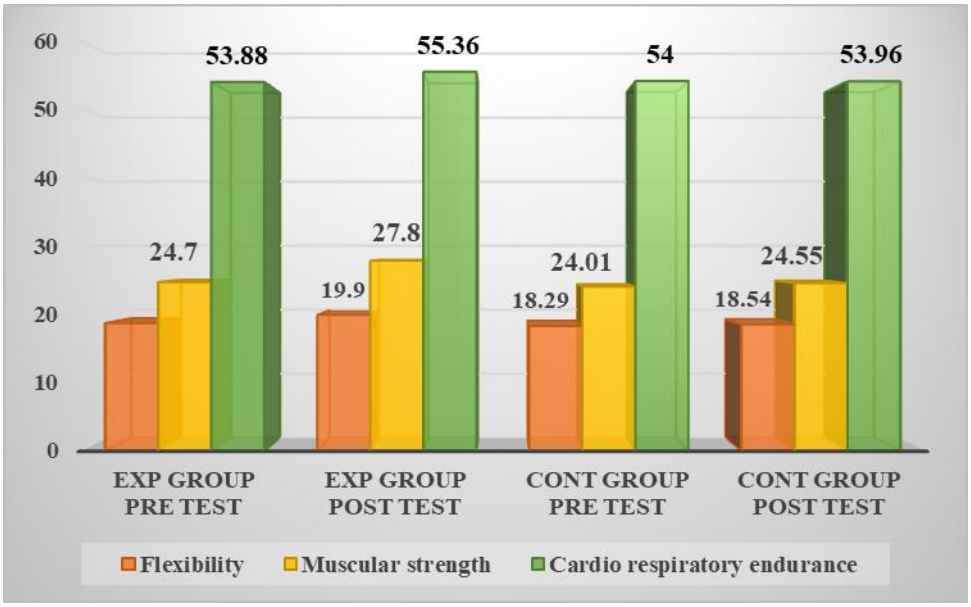
Table 1 reveals that the Computation of 't' ratio between pre and post-test means of experimental group on Performance variables. The 't' ratio on flexibility, muscular strength, cardio respiratory endurance are 7.16, 6.30 and 10.29 respectively. The required table value was 2.09 for the degrees of freedom 19 at 0.05 level of significance. Since the obtained 't' ratio values were greater than the table value, it was found statistically significant.

Table 2: Computation of 't' ratio between pre and post-test means of Control group on Performance variables

Control Group					
Performance Variables	**Pre/Post test**	**Mean**	**Std. Deviation**	**Std Error Mean**	**'t' Ratio**
Flexibility	Pre-Test	18.29	4.78	0.188	1.32
	Post-Test	18.54	5.01		
Muscular strength	Pre-Test	24.01	4.82	0.234	1.917
	Post-Test	24.55	4.72		
Cardio respiratory endurance	Pre-Test	54.00	8.28	0.026	1.36
	Post-Test	53.96	8.29		

*Significant at 0.05 level of confidence (2.09), 1 & 19.

Table 2 reveals that the Computation of 't' ratio between pre and post-test means of Control group on Performance variables. The 't' ratio on flexibility, muscular strength, cardio respiratory endurance is 1.32, 1.917 and 1.36 respectively. The required table value was 2.09 for the degrees of freedom 19 at 0.05 level of significance. Since the obtained 't' ratio values were lower than the table value, it was found statistically not significant.



DISCUSSION ON FINDINGS

The present study experiments the effect of yogic practices on flexibility, muscular strength and cardio respiratory endurance of college women. The result of this study indicated that the yogic practice improved the flexibility, muscular strength and cardio respiratory endurance. The findings of the present study had similarity with the findings of investigations referred in this study.

The yogic practice is a fantastic training which has been found to be beneficial for the college women. To study the health-related physical fitness component on performance variable of college women, it was tested under, The yogic practice on control group. The yogic practice on selected health related physical fitness component includes on flexibility, muscular strength, cardio respiratory endurance. The specific yogic practice includes on, muscular strength, cardio respiratory endurance. The yogic practice asanas are namely, Parvatasana, Paschimottanasana, Ardha matsyendrasana, Thadasana, Trikonasana, Padahasthasana, Dhanurasana, Pavanamukthasana, Sarvangasana, Savasana. The yogic practice improves flexibility, muscular strength and cardio respiratory endurance on college women. The obtained result proved positively the yogic practice on training group significantly improved. The result of the present study showed that the yogic parctice has significant improvement on college level women. The following studies was revealed that **Tiwari, A., & Tirkey, D. (2024)** report examines the impact of yoga on physical and physiological health, suggesting yoga may be effective as an adjunct to some medical conditions but not a cure. **Sirbhate, S., & Wardha, P. M. (2024)** concluded yoga helps control the mind, body, and soul by combining physical and intellectual disciplines. It helps manage stress, relax, and improves flexibility, muscle power, and body tone. Yoga also enhances respiration and vitality, improving daily life and mental and physical health. To achieve this purpose to the study fourty physical education college level women from bharathiar university, Coimbatore. On selected health related physical fitness components variables and performance ability in college level women. The result of the study supports the result of the present study. These finding had not been previously replicated for a sample of school students. The result of the study showed that the control group was not significantly improved.

The discrepancy between the result and the result of previous studies might be attributed to several reasons, such as the training experience level of the subjects, the training programme, the intensity used and the duration of the training programme.

CONCLUSIONS

Based on the findings and within the limitation of the study it is noticed that yogic practice helps to improve health related physical fitness of college women. It was seen that there is progressive improvement in the selected criterion variables of experimental group of college women after 8 weeks of training program. Further yogic practice helps to improve other health related physical fitness components i.e. as flexibility, muscular strength and cardio respiratory endurance.

Further it was concluded that yogic practice group (YPG) showed greater changes on selected health related physical fitness components of (flexibility, muscular strength and cardio respiratory endurance) of college women.

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