

## EFFECT OF YOGASANAS AND BURPEE EXERCISES ON SELECTED FITNESS PARAMETERS OF COLLEGE MEN STUDENTS

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### ABSTRACT

**Study aim:** Yogasanas and Burpee is a full-body workout that promotes cardiovascular health. It provides with extraordinary balance, muscular endurance and flexibility. It improves physical fitness skills. It improves physical and social functioning and strengthens the overall body capacity. **Materials and methods:** Therefore the purpose of the study was to examine the effect of yogasanas and burpee exercises on selected fitness parameters of college men students. To achieve the purpose of the study college men students participated were randomly selected from in and around Andrapradesh, and their age were ranged between 17 to 23 years. The subjects were randomly assigned into two equal groups (n=15). All the subjects were divided in to two groups with 15 subjects each as experimental and control group. Group-I underwent Yogasanas and Burpee exercises for a period of 6 weeks and group-II acted as control who did not participate in any special training other than the regular routine. The fitness variables such as Muscular endurance, Flexibility and Balance were selected as dependent variables. Muscular endurance was tested by Sit-ups test unit measurement in points, Flexibility was tested by Sit and reach test unit of measurement in centimetres and Balance was tested by balance backward test unit of measurement in seconds. The dependent 't' test was applied to determine the difference between the means of two groups. To find out whether there was any significant difference between the experimental and control groups. To test the level of significant of difference between the means 0.05 level of confidence was fixed. **Results:** The result of the study shows that, there was a significant improvement takes place on Muscular endurance, Flexibility and Balance of college men students. **Conclusions:** Improved of Muscular endurance, Flexibility and Balance after regular yogasanas and burpee exercises is beneficial for college students. Therefore yogasanas and burpee exercises covered in this study are beneficial for the college students.

**Keywords:** Yogasanas, Burpee Exercises, Fitness, College students.

### **Introduction:**

College students need to participate regularly in physical activities that enhance and maintain their cardiovascular and musculoskeletal health. Regular physical activity during adolescence is associated with numerous physiological and psychosocial benefits and has the potential to improve the quality of life for boys and girls (Corbin & Pangrazi, 1993; United States Department of Health and Human Services, 1996). Furthermore, it appears that physical activity habits established early in life may persist into adulthood (Taylor, Blair, Cummings, Wun, & Malina, 1999). Yet despite these potential health benefits, numerous studies show that children and adolescents are often physically inactive (Rowland, 1999; United States Department of Health and Human Services, 1996). The need to improve the physical fitness of youth has prompted the development of new and creative approaches that provide an opportunity for all boys and girls to participate in regular, healthful physical activity. Indeed, the National Task Force on Community Prevention Services recommends modifying school physical education in order to enhance physical activity behaviours and improve physical fitness (Centers for Disease Control and Prevention, 2001).

Yogasanas gives benefits of increased flexibility, muscle strength and tone, improved respiration, energy and vitality, maintained a balanced metabolism, weight reduction, cardio and circulatory health, improved athletic performance, production from injury. You are not physically fit, there is no use of mentally fit. Practicing all Yogas make you joyful and enthusiastic. Pranayama the breathing technic also helpful to get the fitness of your body.

Benefits of burpee workouts It improves your physical skill. It builds strength. It improves physical and social functioning and strengthens the overall body capacity. This high-intensity workout helps add immense strength to your muscular bulk, legs, and the rest of the body. Burpees are effective in improving posture and body strength and composition. They also help tighten your core. Many fitness experts state that burpees are a strength-building workout or a high load workout, which works towards developing muscular fortitude. Through lower and upper level muscular exercise, it improves the capacity of your heart and lungs. Burpee is a form of functional training that requires the absence of free oxygen with high severity and potential. It

is generally performed in a short time span and requires a lot of energy without oxygen. Practicing this workout can help you perform anaerobic and aerobic exercises properly. This high intensity workout also helps one lose more weight while burning calories. It may also aid in fat loss. The burpee workout plan improves the strength of your legs, chest, thighs, and arms. It is an ultimate fat burning workout, which helps you burn up to 50% more fat than any other conventional workout. It can accelerate your metabolism, which is helpful in burning calories all day round. The burpee workout boosts your endurance and improves coordination of muscles. Therefore, the aim of the study was to investigate effect of yogasanas and burpee exercises on fitness parameters of college men students.

### **Methods:**

The purpose of the study was to find out the effect of Yogasanas and Burpee exercises training. To achieve the purpose of the study, thirty college men students were selected from in and around Andrapradesh. The subjects were randomly assigned in to two equal groups namely, Yogasanas and Burpee exercises training group (YBETG) (n=15) and Control group (CG) (n=15). A pilot study was conducted to assess the initial capacity of the subjects in order to fix the load. The respective training was given to the experimental group the 3 days per weeks (alternate days) for the training period of six weeks. The control group was not given any sort of training except their routine. Design: The fitness variables such as Muscular endurance, Flexibility and Balance were selected as dependent variables. Muscular endurance was tested by Sit-ups test unit measurement in points, Flexibility was tested by Sit and reach test unit of measurement in centimetres and Balance was tested by balance backward test unit of measurement in seconds.

### **Training Program:**

The training program was conducted for 45 minutes for session in a day, 3 days in a week for a period of 6 weeks duration. These 45 minutes included 10 minutes warm up, Yoga asanas: Suryanamskar, Naukasana, Ardha matsyendrasana, Dwi Pada Uttanasana, Dandasana, Viparita Karni, Bhujangasana, Bitilasana. Burpee exercises: Walk Back Squat Thrust, Squat Thrust With Support, Squat Thrust, Half Burpee, Basic Burpee, Burpee to Box Jump, Burpee to Tuck Jump, One-Legged Burpee, One-Legged Burpee With Skater for 25 minutes and 10 minutes warm

down. Every two weeks of training 5% of intensity of load was increased from 65% to 80% of work load. The volume of Yogasanas and Burpee exercise training prescribed based on the number of sets and repetitions. The equivalent training is the length of the time each action in total 3 day per weeks (Monday, Wednesday and Friday).

### Statistical Analysis:

The collected data before and after training period of 6 weeks on the above said variables due to the effect of Yogasanas and Burpee exercise training was statistically analyzed with dependent 't' test to find out the significant improvement between pre and post-test. In all cases the criterion for statistical significance was set at 0.05 level of confidence. ( $P < 0.05$ )

**Table I**

**Computation of 't' Ratio on Selected Fitness Variables of College Men Students on Experimental Group and Control Group**

Group	Variables	Mean	N	Std. Deviation	Std. Error Mean	t ratio	
Experimental Group	Muscular Endurance	Pre	22.26	15	3.86	0.430	14.55*
		Post	28.23		3.13		
	Flexibility	Pre	20.80	15	3.58	0.153	25.66*
		Post	24.73		3.53		
	Balance	Pre	16.54	15	5.70	0.930	13.50*
		Post	19.78		5.49		
Control Group	Muscular Endurance	Pre	22.46	15	3.48	0.350	1.524
		Post	23.00		3.18		
	Flexibility	Pre	19.93	15	3.75	0.320	1.247
		Post	20.33		3.55		
	Balance	Pre	16.00	15	2.80	0.169	1.847
		Post	16.48		2.62		

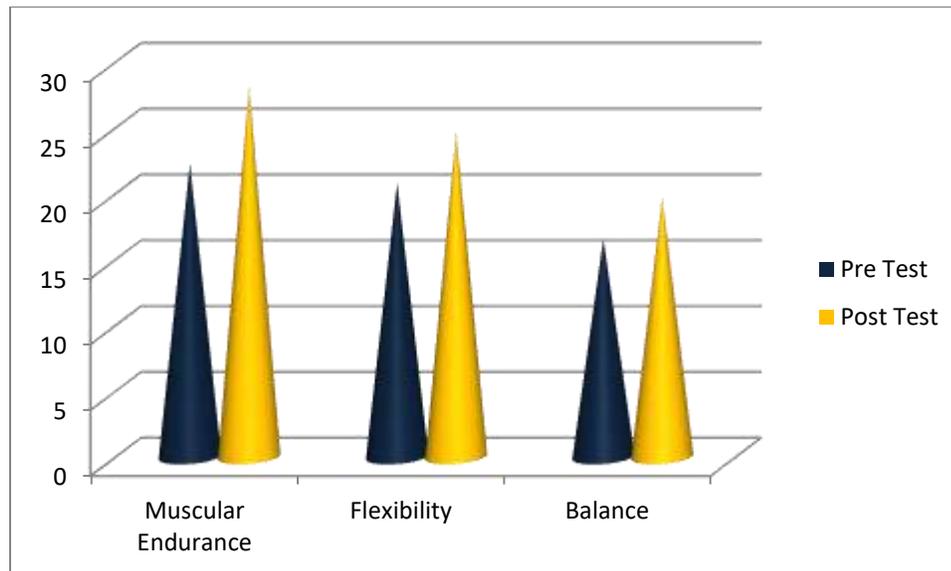
\*Significant level 0.05 level degree of freedom (2.14, 1 and 14)

Table I reveals the computation of mean, standard deviation and 't' ratio on selected fitness parameters namely muscular endurance, flexibility and balance experimental group. The obtained 't' ratio muscular endurance, flexibility and balance were 14.55, 25.66 and 13.50 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05

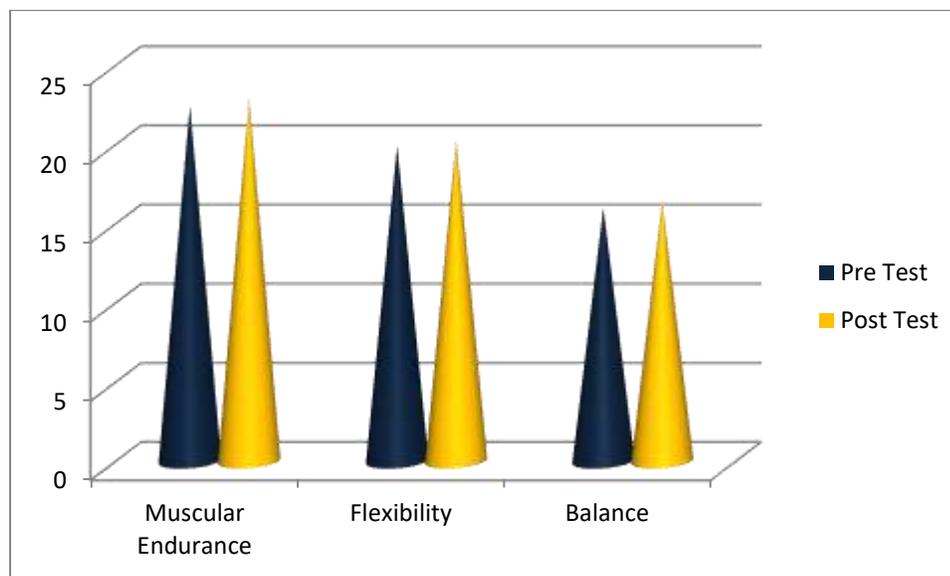
level of significance. Since the obtained 't' values were greater than the table value it was found to be statistically significant. Further the computation of mean, standard deviation and 't' ratio on selected physical parameters namely muscular endurance, flexibility and balance control group. The obtained 't' ratio on muscular endurance, flexibility and balance were 1.524, 1.247 and 1.847 respectively. The required table value was 2.14 for the degrees of freedom 1 and 14 at the 0.05 level of significance. Since the obtained 't' values were lesser than the table value it was found to be statistically not significant.

**Figure 1**

**Bar diagram showing the pre, post means values of Yogasanas and Burpee exercise training group (YBETG) on Fitness Parameters.**



**Figure 2**  
**Bar diagram showing the pre, post means values of Control group (CG)**  
**on Fitness Parameters.**



### **Discussion Findings:**

The present study experiment the effect of Yogasanas and Burpee exercise on fitness parameters of college men students. The result of the study indicated that the Yogasanas and Burpee exercise training improved the fitness parameters such as muscular endurance, flexibility and balance.

The findings of the present study had similarity with the findings of the investigations referred in this study. However, there was a significantly changes of subjects in the present study the muscular endurance, flexibility and balance was significantly improved of subject in the group may be due to the in Yogasanas and Burpee exercise training. K.Devaraju et al., (2014) reported that six weeks impact of Plyometric training, the group improved significantly on all functional fitness components. Vairavasundaram et al., (2014) showed that significant improvement in all the selected physical variables namely agility, explosive power, muscular strength endurance and flexibility among handball players. Mathewos et al., (2013) evaluated that aerobic exercise has positive effect on improvement of cardiovascular endurance, muscular strength, muscular strength and flexibility.

**Conclusions:**

1. There was a significant improvement takes place on selected fitness parameters due to the effect of six weeks Yogasanas and Burpee exercise of college men students.
2. There was a significant difference exists between experimental and control groups on selected fitness parameters such as muscular endurance, flexibility and balance of college men students.

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