



## Effect of Yogic Practices And Physical Exercises on Flexibility

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### ABSTRACT

The present study describes the comparison of different yogic practices with physical activity through the measurement of flexibility. In this study, female students were divided equally into three groups: those undergoing yogic practice (Group A), physical activity (Group B) and control (Group C). The status of flexibility of all the three groups was measured for a period of twelve weeks using Sit and Reach Test before and after the training period. The obtained pre and post scores were examined by Analysis of covariance (ANCOVA) for assessing the statistical significance. Scheffee's Post hoc-test was further applied to find out the best among the three groups. The results support that the designed yogic practice package has brought about a significant impact on the flexibility of the yoga group compared to the other two groups

### KEYWORDS

Yogic practice, Physical exercise, Flexibility.

### INTRODUCTION:

Result of Physical inactivity leads to reduced in range of motion. So shortness of tonic muscles aggregates the weakness of muscles. For safety and functionality of stretch of the muscles should improved flexibility.

Flexibility means the elasticity of soft tissues that cross or surround joint; muscles, tendons, fascia, articular capsule, ligments, nerves, blood vessels and skin. It is enormously required for painless of the movement of the body and preventive measures of muscle and tendon strains. Flexibility is strongly related by functional range of motion.

Flexibility has improved and quickly achieved through the regular practice of yoga. The present study examines the significant improvement of regular yogic practice on flexibility in young females.

### MATERIALS AND METHODS:

Sixty young females of engineering students were randomly recruited as subjects from Periyar Maniammai University, Vallam Thanjavur, India and their age ranged between 17yrs to 22 years. They were divided into three groups of twenty each namely, group A, group B and group C. The first two groups were experimental groups and the third group was control. The experimental group A underwent a designed yogic practice for three months and similarly, the group B was treated with designed physical exercises. The control group did not undergo any special training.

### Package – I / Designed Yogic Practices (Group-A)

**Asana** - Padmasana, Vajrasana, Paschimothanasana, Matsyasana, Artha Matsyendrasana, Halasana, Bhujangasana, Dhanurasana, Shalabhasana, Sarvangasana, Pawanmuktanasana, Chakrasana, Utthita Parvakonasana, Virabhadrasana, Utkatasana, Vrksasana, Tadasana, Garudasana, Shavasana.

**Pranayama** - Nadisuddhi, Nadi Shodhana, Ujjayi, Kapalabhati, Bhramari, Bhastrika, Sitalai, Sitakari.

**Meditation** - Observing the breath (*Swami Satyananda Saraswathi, 1993*).

### Package – II / Designed Physical Exercises (Group-B)

Lateral, front, back neck stretch, Double anterior shoulder stretch, Overhead shoulder stretch, Lateral trunk stretch, Trunk and leg stretch, Quadriceps's stretch, Hip flexor stretch and Hamstring stretch

The collected data of flexibility performance was measured by Sit and reach test in centimeters before and after the twelve weeks of training of the two experimental and Control group. The maximum distance reached to the nearest 0.5cm was recorded as score. The obtained pre and posttest values were analyzed using Analysis of covariance (ANCOVA) for statistical significance. Scheffee's Post hoc-test was utilized to find out the best among the three groups. From the table 1, the pre-test and post – test mean flexibility of the three groups namely Control group (Group-C), Yogic practice group (Group-A) and Physical exercise group (Group-B) did not differ significantly ( $P > 0.05$ ). The adjusted post-test for mean flexibility of the three groups done by ANCOVA showed that the mean flexibility differed significantly among the three groups ( $P < 0.001$ ) and the results of Post-hoc test reveals that yogic practice group (Group – A) is the better among the three with 20.37cm statistical significance.

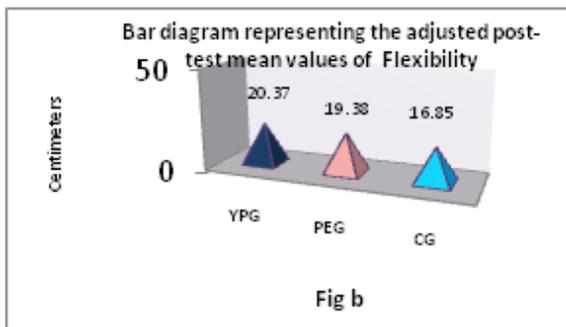
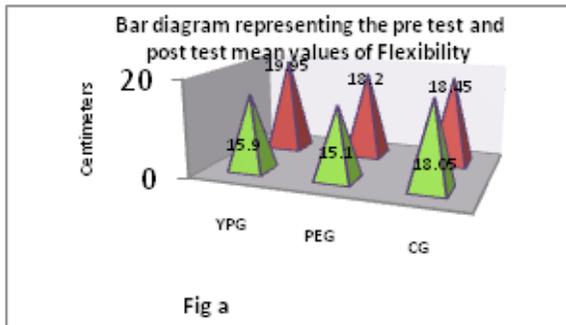
The findings support the study of Smithless Camron (1962), Hubert Dhanraj (1974) and Prasad (1996) with designed yogic practices package has made a significant impact on the flexibility . Group means

**Analysis of Covariance of Flexibility**

Test	Group Means			Source of variance	Sum of square	df	Mean square	F-ratio	Significance
	Yogic practice group	Physical exercise group	Control group						
Pre-test	15.90	15.10	18.05	B / G	93.10	2	46.55	1.22	0.30
				W / G	2170.55	57	38.08		
Post-test	19.95	18.20	18.45	B / G	35.83	2	17.92	0.48	0.62
				W / G	2139.10	57	37.53		
Adjusted post test	20.37	19.38	16.85	B / G	128.16	2	64.08	16.90*	0.00
				W / G	212.29	56	3.79		

\*Significancenificant at0.001 level

B: Between Groups & W:Within Groups



**CONCLUSION:**

The results of this study confirm that regular yogic practice has a significant effect on flexibility on young females. So improvement of flexibility is preventive treatment of muscles and tendon strains. So simple stretching through yogic practices can potentially lengthen the lifespan of muscles.

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