



## EFFECT OF YOGA PRACTISES ON SELECTED PHYSIOLOGICAL PARAMETERS OF B.ED. STUDENTS OF AMRAVATI

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### ABSTRACT:

The purpose of the study was to see the effect of some yoga practices on selected physiological parameters of B.Ed. students' of Amravati. For this purpose researcher has selected twenty (N-20) B.Ed. students from Shri Shivaji College of Education, Amravati (Maharashtra). The age group of the students was ranged between 20 to 25 years. B.Ed. students were selected with the help of simple random sampling methods. The B.Ed. students were gone through six weeks of yoga practices under the guidance of a qualified yoga teacher at Yoga centre of Shri Shivaji College of Physical Education, Amravati. Practice sessions were conducted five days a week during the morning hours for sixty minutes for a total duration of six weeks. Practice session concludes: Prathana for 5 min, Surya Namaskar (12 step method), Asanas – Postural exercise sessions – included – Trikonasana (Triangle postures) – Veerasana (warrior posture) – Padahastasana (forward bend posture) – Chakrasana (wheel posture) – Sarvangasana (shoulder stand posture, head stand posture) – Halasana (plough posture) – Paschimothanasana (posterior stretching) – Padmasana (lotus posture) – Vajrasana (ankle posture) – Ushtrasana (camel posture), Breathing practices – Kapalabhati – Ujjayi (breathing with a hissing sound), Pranayama (5 repetitions each) – Nadi shuddhi pranayam (alternate nostril breathing) – Bharamari pranayama (humming bee breath) – Mukh-bhastrika in vajrasana (bellows type breathing) and Meditation. Physiological parameters are as follows: Heart rate (measured manually, Breathing rate (measured manually) and Vital capacity (measured by peak flow meter. To see the effect of some yoga practices on selected physiological parameters researcher applied mean, standard deviation, mean difference to determine the difference between pre-test and post-test means of group. When a difference was found in mean researcher applied 't' test assess the significant difference between the means of pre and post test. Result shows that on the basis of mean difference there was differences between mean of pre & post test of physiological parameters of B.Ed. students'. To see these differences were significant or not at 0.05 level of significance. Researcher further calculated 't' test which shows that there is significant difference between pre & post test of breathing rate and vital capacity as the calculated 't' values 2.517 & 6.369 was greater than tabulated 't' value 2.024. Heart rate shows insignificant differences as the calculated 't' values 1.605 is lesser than the tabulated 't' value 2.024. The results shown in the study are inconclusive because it is well known that regular yoga practices decreases heart rate and breathing rate. In the present study, yoga practices resulted decrease in heart rate and breathing rate but heart rate was found not to be significant and breathing rate was found to be significant, whereas vital capacity was increased and it was found to be significant.

### KEYWORDS:

**HEART RATE, BREATHING RATE, VITAL CAPACITY, YOGA PRACTICES, B.ED. STUDENT'S.**

### INTRODUCTION:

Yoga is not a series of consecutive steps of exercise, but it includes continuous and changing process that helps to mould the mental and physical abilities. Physical abilities can be defined as "any physically movement produced by skeletal muscles that result in energy expenditure". Yoga is almost an oldest practice of self development of body and mind of an individual. The Indian sage Pantajali, in his Yoga sutras defines yoga as the control of activities of one's minds. Through yoga practice an individual can develop his/her own capabilities i.e. physical, emotional, mental and spiritual well being. The methods of yoga practices (yoga and pranayam) includes ethical disciplines, physical postures, breathing control and as well as meditation. According to Patanjali yoga has eight stages of spiritual development also known as 'eight limbs of yoga". The Sanskrit names for the eight limbs of.yoga.are: Yama, Niyam, Asana, Pranayama, Pratyahara, Dharana, Dhyan

and Samadhi.

Fitness can be defined as the condition of being strong and healthy. Generally, physical fitness in sports competition means to exhibit top performance and here the real sense of fitness is performance related. Such fitness may not consider one's health. In this investigation the researcher considers a state of physical fitness that has relation with one's health. Through regular practice all the muscles of an individual are toned, as well as consciously and persistently overrides the usual stimuli to respiratory centers leading to improve cardio-respiratory efficiency also. Hence the researcher has selected the study entitled 'Effect of yoga practices on selected physiological parameters of B.Ed. students' of Amravati.

### METHODOLOGY

The purpose of the study was to see the effect of some

yoga practices on selected physiological parameters of B.Ed. students' of Amravati. For this purpose researcher has selected twenty (N-20) B.Ed. students from Shri Shivaji College of Education, Amravati (Maharashtra). The age group of the students was ranged between 20 to 25 years. B.Ed. students were selected with the help of simple random sampling methods. The B.Ed. students were gone through six weeks of yoga practices under the guidance of a qualified yoga teacher at Yoga centre of Shri Shivaji College of Physical Education, Amravati. Practice sessions were conducted five days a week during the morning hours for sixty minutes for a total duration of six weeks. Practice session concludes: Prathana for 5 min, Surya Namaskar (12 step method), Asanas – Postural exercise sessions – included – Trikonasana (Triangle postures) – Veerasana (warrior posture) – Padahastana (forward bend posture) – Chakrasana (wheel posture) – Sarvangasana (shoulder stand posture, head stand posture) – Halasana (plough posture) – Paschimothanasana (posterior stretching) – Padmasana (lotus posture) – Vajrasana (ankle posture) – Ushtrasana (camel posture), Breathing practices – Kapalabhati – Ujjayi (breathing with a hissing sound), Pranayama (5 repetitions each) – Nadi shuddhi pranayam( alternate nostril breathing) – Bharamari pranayama (humming bee breath) – Mukh-bhastrika in vajrasana (bellows type breathing) and Meditation.

**ADMINISTRATION OF THE TEST**

For the present study selected physiological parameters were considered are as follows

- Heart rate (measured manually)
- Breathing rate (measured manually)
- Vital capacity (measured by peak flow meter)

**STATISTICAL ANALYSIS**

To see the effect of some yoga practices on selected physiological parameters researcher applied mean, standard deviation, mean difference to determine the difference between pre-test and post-test means of group. When a difference was found in mean researcher applied 't' test asses the significant difference between the means of pre and post test.

**TABLE**

**COMPARISON BETWEEN PRE AND POST TEST OF SELECTED PHYSIOLOGICAL PARAMETERS**

Physiological Parameters	Pre Test	Post Test	M.D.	S.E.	't' Test
Heart Rate	x = 72.84 σ = 5.2	x = 70.3 σ = 4.8	2.54	1.582	1.605
Breathing Rate	x = 17.2 σ = 1.1	x = 16.4 σ = 0.9	0.8	0.318	2.517*
Vital Capacity	x = 375 σ = 25.5	x = 430 σ = 29	55	8.635	6.369*

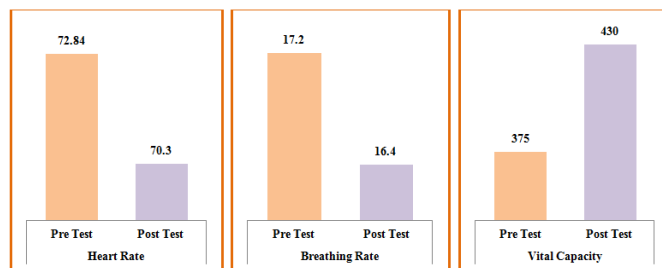
\*Significance at 0.05 level

Tabulated 't' = 2.024

The above table shows that on the basis of mean difference there was differences between mean of pre & post test of physiological parameters of B.Ed. students'. To see these differences were significant or not at 0.05 level of significance. Researcher further calculated 't' test which shows that there is significant difference between pre & post test of breathing rate and vital capacity as the calculated 't' values 2.517 & 6.369 was greater than tabulated 't' value 2.024. Heart rate shows insignificant differences as the calculated 't' values 1.605 is lesser than the tabulated 't' value 2.024.

**GRAPHS**

**COMPARISON OF MEAN OF PRE AND POST TEST OF PHYSIOLOGICAL PARAMETERS**



**CONCLUSION**

The purpose of this study was to find out the effect of some yoga practices on selected physiological parameters of B.Ed. student's. The results shown in the study are inconclusive because it is well known that regular yoga practices decreases heart rate and breathing rate. In the present study, yoga practices resulted decrease in heart rate and breathing rate but heart rate was found not to be significant and breathing rate was found to be significant, whereas vital capacity was increased and it was found to be significant.

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