



Yoga

IMPACT OF YOGIC PRACTICES ON PHYSIOLOGICAL VARIABLES ON PRE ADOLESCENCE SCHOOL GIRLS

Dr. Y. Srinivasulu

Assistant Professor, Palamuru University, Mahabubnagar Telangana.

ABSTRACT The purpose of this study was to find out the impact of yogic practices on physiological variables on pre adolescence school girls. Randomly 30 school girls were selected from Z.P.H.S girls school Dhanwada and Z.P.H.S girls school Jajapur Mahabubnagar (Dist) Telangana, India. Were selected as subjects and their ages were ranged from 12 to 14 years. They were divided into two equal groups and each group consisted of 15 subjects. Group-I was performed yogic practice, and group-II was acted as a control group. The selected criterion variables are Resting pulse rate and vital capacity were selected and measured by manual pulse test and digital spiro meter for this study. The data was analyzed by the use of paired 't' test. The obtained 't' ratio was tested for significance at 0.05 level of confidence. The analysis of the data revealed that there was a significant improvement on Resting pulse rate and vital capacity by the application of yogic practices.

KEYWORDS : Yogic Practice, Resting Pulse Rates and Vital Capacity

INTRODUCTION

Yoga is believed to be one of the most vital and important part of the Indian culture. Even before 2000 years ago our forefathers developed it to bind the body, mind and spirit, as a harmonious whole. Nowadays, the whole world is looking towards yoga for answers to various problems of human beings. Yoga means the experience of oneness or unity with the inner being. It is not a religion but a good method by which one can obtain control over one's latent power attain complete self- realization it is a re- education of one's mental processes, along with the physical. In the age of modern science and information technology, and changing world scenario with global warming with its attendant factors, our lifestyle becomes complicated and it becomes difficult to lead a normal and natural life.

Yoga is an ancient art based on a twin juicing system of development for the body mind and spirit. It is a practical aid. And the continued practice of yoga will lead one to a sense of peace and also a feeling of harmony with one's environment. The word Yoga comes from the Sanskrit root "Yuj". Which means, "To join" or "to yoke"? Yoga is one of the six systems of Indian philosophy the classical form of yoga, based on the text described to patanjali. Became known in the Middle Ages as raja yoga or "royal yoga". Other forms of yoga also developed, which might be followed together with, or independently of the classical yoga. Among theses the practices of hatha yoga have become famous throughout the world, and the term yoga is often used to denote them. Hatha yoga seems to be a Inca development in Hinduism, and the earliest texts on the subject date from little before the Muslim invasion. (Chandrasekaran, 2003).

YOGAPHYSIOLOGY

According to a story in the pureness, Lord Shiva was instructing pariait into the secret sedans of yoga while standing on the seashore. A large fish overheard all that said and from this fish, all knowing Matsyendranath was born. Hence his name Masaya -India or 'Lord of fish'. There are also many stories concerning the birth of Goraknath. It is said that when Matsyendranath was begging for food as a parivrajaka, he met a woman who lamented to him her woe of not having a son. Matsyendranath gave her some siddha vibhooti and told her that if she eats it, she would obtain a son. The woman did not eat that substance but cast it upon a pile of crowding. Twelve years later, when Matsyendranath was passing through the same village, he called her to see the child. The woman told the yogi what she had done and he asked to be taken to the spot where she had thrown the vibhooti. He called the name 'Gorkhnath' and immediately a radiant twelve-year-old lad emerged from the pile of cow dung. Gorkhnath became the dutiful disciple of Matsyendranath and later became an expounder of hatha yoga and the founder of the Nath sect. He was an accomplished guru credited with the performance of many miracles. Gorkhantha, who was probably the guru of Swatmarama, belonged to a very popular yoga sect called the Nathpanth. Neath is a general term meaning 'master'. Members of these are Kanphata yogis. Kanphata means 'split-eared' and refers to the yogis' unique practice of having the cartilage of the ears pierced for the insertion of huge earrings. (Bhavanani et al, 2012)

Yogic Practices

Yoga is considered as a full fledged science. The science of yoga

consists of acquiring knowledge through observation and experiment. It is a science, which deals with the body and mind controlling the body through the practice of yoga to achieve the rhythm of mind. The health and strength of the body and the mind are acquired, only when a state of equilibrium is attained whereby the body and the mind are balanced. Like all other arts, yoga if a science as well as a philosophy too. As science is concerned with analysis yoga too is bent on analysis. Yoga analyses the turbulent mind and shows the way and means of reaching the ultimate goal of freedom. As any other science, yoga too conveys truth. On a practical level, yoga keeps the body healthy, the mind quiet and pure, and self in be attitude. The practical aspect of yoga dracaena conveys the artistic aspect of yoga with its precision and beauty. The science of yoga works on physical, mental, emotional, psychic and spiritual aspects of a person, when imbalance is experienced at this level, the organs, muscles and nerves no longer function in harmony, rather they act in opposition to one another. Therefore, yoga aims at bringing the different bodily functions into perfect co-ordination so that they work for the good of the whole body, yoga develops the personality of an individual mentally, morally, spiritually and intellectually (Iyengar, 2008).

METHODOLOGY

For this study, thirty (N=30) school girls were selected from Z.P.H.S girls school Dhanwada and Z.P.H.S girls school Jajapur Mahabubnagar (Dist) Telangana, India.. Were selected as subjects and their ages were ranged from 12 to 14 years. They were divided into two equal groups and each group consisted of 15 subjects. Experimental Group was given 12 weeks (Duration – 12 weeks, Session – 3 day/week, Duration of one session – One hour) of yogic practices and control group was not participated any specific training. Experimental Group-I (Yogic Practices) were given to the experimental group. The subjects were tested in the selected criterion variables Resting Pulse Rate and Vital Capacity were selected and measured manual pulse test in minute and digital spiro meter for this study. Before and after the training period the data were collected. The collected data was treated by using paired t-test. The level of confidence was fixed at 0.05 level.

RESULTS OF THE STUDY

Table - 1 Computation Of 't' Ratio Between The Pre Test And Post Test Means On Resting Pulse Rate Of Experiment Group And Control Group

Group		Mean	SD	DM	σDM	't'
Experimental Group	Pre Test	67.00	2.29	2.00	0.58	3.44*
	Post Test	65.00	1.19			
Control Group	Pre Test	65.00	2.18	0.53	0.69	0.76
	Post Test	65.53	1.68			

*Significant at 0.05 level with table value 2.14

An examination of table – 1 indicates that the experimental group mean value of pre test and post test was 67.00. And 65.00. The obtained 't' ratio were for resting pulse rate of experimental group. The obtained 't' ratio on resting pulse rate was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that 12 weeks of yogic practice produced a significant in resting pulse rate.

Also table – 1 indicates that the control groups mean value of pre test and post test was 65.00 and 65.53. The obtained 't' ratio were 0.76. For resting pulse rate of control group. The obtained 't' ratio on resting pulse rate was found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be insignificant.

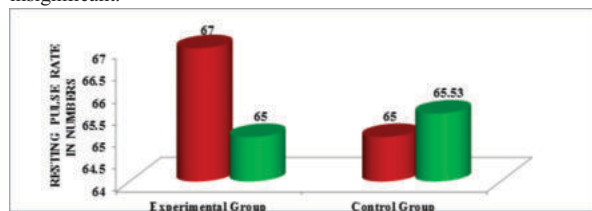


Figure -I The Mean Scores On Resting Pulse Rate Of Experimental Group And Control Group

Table - II Computation Of 't' Ratio Between The Pre Test And Post Test Means On Vital Capacity Of Experiment Group And Control Group

Group		Mean	SD	DM	σDM	't'
Experimental Group	Pre Test	1200	350.5	313	30.65	10.2*
	Post Test	1513	381.4			
Control Group	Pre Test	1205	166.7	21.0	12.5	1.68
	Post Test	1184	163.3			

*Significant at 0.05 level with table value 2.14

An examination of table – II indicates that the experimental group mean value of pre test and post test was 1200 and 1513. The obtained 't' ratio were 10.2 for Vital capacity of experimental group. The obtained 't' ratio on Vital capacity was found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that 12 weeks of yogic practice produced a significant improvement in respiratory rate.

Also table – II indicates that the control groups mean value of pre test and post test was 1205 and 1184. The obtained 't' ratio were 1.68. For vital capacity of control group. The obtained 't' ratio on vital capacity was found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be insignificant.

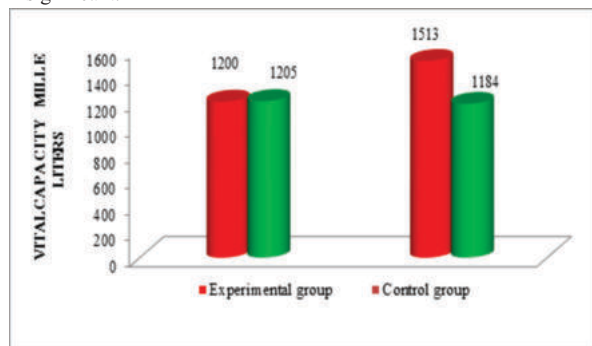


Figure-II The Mean Scores On Vital Capacity Of Experimental Group And Control Group

DISCUSSION ON FINDINGS

The result of the study reveals that the eight weeks of yogic practices on selected dependent variables. There was a significant improvement on resting pulse rate through yogic practices. In experimental group the obtained 't' ratio 3.44 was greater than the table value of 2.14 so it was found to be significant. In control group the obtained 't' ratio 0.76 was lesser than the table value of 2.14 so it was found to be insignificant. Hence the result indicates that the significant improvement on resting pulse rate was due to the yogic practices alone. The result of the study reveals that the eight weeks of yogic practices on selected dependent variables. There was a significant improvement on vital capacity through yogic practices. In experimental group the obtained 't' ratio 10.20 was greater than the table value of 2.14 so it was found to be significant. In control group the obtained 't' ratio 1.68 was lesser than the table value of 2.14 so it was found to be insignificant. Hence the result indicates that the significant improvement on vital capacity was due to the yogic practices alone.

CONCLUSION

1. It was concluded that there was a significant improvement on resting pulse rate by the application of yogic practices programme.
2. It was concluded that there was a significant improvement on vital capacity by the application of yogic practices programme.

REFERENCES:

1. Bowman, A.J., Clayton, R.H., Murray, A., Reed, J.W., Subhan, M.M., and Ford, G.A., (1997), Effects of aerobic exercise training and Yoga on the baroreflex in healthy elderly persons. *European Journal of Clinical Investigation*, 27(5), 443-449.
2. Chandrasekaran, K., (1999) Sound health through yoga, Premkalyan Publications, Sedapathi, India.
3. Clarke, David H., H. Harrison Clarke. (1984) Research processes in Physical Education. Englewood cliffs, New Jersey: Prentice Hall, Inc., 1984.
4. Radhakrishnan, T. (2007) "Effect of selected yogasanas on low back pain for middle aged group women" paper presented at the inter national conference on "metabolic syndrome in Yoga and Naturopathy" Alagappa University, Karaikudi.
5. Raj kumar and Durgesh., (2007) "effect of callisthenic exercise and yogic asanas on flexibility" paper presented at the inter national conference on "metabolic syndrome in Yoga and Naturopathy" Alagappa University, Karaikudi.