Original Research Paper

Volume-9 | Issue-10 | October - 2019 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Physical Education

IMPACT OF PRANAYAMA PRACTICE ON RESTING PULSE RATE AMONG LONG DISTANCE WOMEN ATHLETES

X. Christy — Ph. D., Research Scholar Alagappa University College of Physical Education, Alagappa University, Karaikudi, Tamil Nadu, INDIA

Dr. S. Dhanaraj* — Assistant Professor, Alagappa University College of Physical Education, Alagappa University, Karaikudi, Tamil Nadu, INDIA. *Corresponding Author

ABSTRACT The purpose of the present study was to investigate the impact of pranayama practice on resting pulse rate among long distance women athletes. To achieve the purpose of the study forty long distance women athletes were selected from Alagappa University, Karaikudi, during the year 2019. The subject's age ranges from 18 to 25 years. The selected players were divided into two equal groups consists of 20 Women students each namely experimental group and control group. The experimental group underwent a pranayama practice programme for six weeks. The control group was not taking part in any training during the course of the study. Resting pulse rate was taken as criterion variable in this study. The selected subjects were tested on Resting pulse rate was measured through to record the pulse rate the fingertips were placed on the radial artery at the thumb side of the wrist about an inch from the base of the thumb. Pre-test was taken before the training period and post- test was measured immediately after the six week training period. Statistical Technique't' ratio was used to analyse the means of the pre-test and post test data of experimental group and control group. The results revealed that there was a significant difference found on the criterion variable. The difference is found due to pranayama practice given to the experimental group on Resting pulse rate when compared to control group.

KEYWORDS : Pranayama practice, Resting Pulse Rate and't' ratio.

INTRODUCTION

Today, sports have become a part and parcel of our culture. It is being influenced and does influence all our social institutions including education, economics, arts, politics, law, mass communication and even international diplomacy **(Alaguraja, K. et.al, 2019)**[4]. Yoga is universally benefiting all people of all ages. The study of Yoga is fascinating to those with a philosophical mind and is defined as the silencing of the mind's activities which lead to complete realization of the intrinsic nature of the Supreme Being **(Alaguraja, K. et.al., 2017)**[1]. In the sports world, physical education is the most essential aspect due to the fact physical schooling increases the performance and the effectiveness of the sports **(Alaguraja, K. et.al., 2018)**[2].

Yoga is a system of exercises which helps the mind and body in order to achieve tranquillity and spiritual insight **(Alaguraja, K. et.al, 2019)**[5]. Make sure that when you practice yoga asanas, you don't just stretch the body because the mind has to be with the body. **(Alaguraja, K. et.al, 2019)**[8]. One can start practicing Yoga at any given moment of time and you may start with meditation or directly with pranayama without even doing the asanas (postures). **(Alaguraja, K. et.al, 2019)**[3]. Today's there is an escalating emphasis on appearing smarter, feeling etter and living longer. In order to achieve these ideals as, scientific evidence tells us that one of the keys is high fitness and exercises **(Alaguraja, K. et.al, 2019)**[7]. When consciousness is operating with the intellect and with all the senses, by making an individual think that he or she is awake and aware, but the mind is actually less receptive and more critical **(Yoga, P. et. al., 2019)**[9].

METHODOLOGY

Statement of the problem

The purpose of the study was to find out the impact of pranayama practice on resting pulse rate among long distance women athletes.

Selection of subjects

To achieve this purpose of the study, forty long distance women athletes were selected as subjects at random. The age of the subjects were ranged from 18 to 25 years.

Experimental design

The selected subjects were divided into two equal groups of twenty subjects each, such as a pranayama practice group (Experimental Group) and control group. The experimental group underwent pranayama practice for five days per week for six weeks. Control group, which they did not undergo any special training programme apart from their regular physical activities as per their curriculum. The following physiological variable, namely Resting pulse rate was selected as criterion variable. All the subjects of two groups were tested on selected criterion variable Resting pulse rate was measured through to record the pulse rate the fingertips were placed on the radial artery at the thumb side of the wrist about an inch from the base of the thumb test at prior to and immediately after the training programme.

Statistical tool

The't' test was used to analysis the significant differences, if any, in between the groups respectively. The 0.05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

ANALYSIS OF THE DATA

The significance of the difference among the means of the experimental group was found out by pre-test. The data were analysed and dependent't' test was used with 0.05 levels as confidence.

Table I

Analysis of t-ratio for the Pre and Post Tests of Experimental and Control Group on Resting pulse rate Scoring (Number of Beats/one minutes)

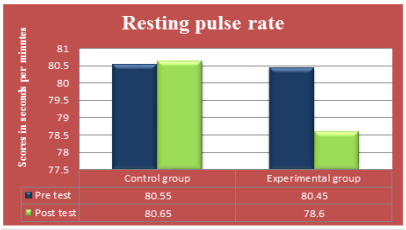
Variables	Group	Mean		SD		Sd Error		df	't' ratio
		Pre	Post	Pre	Post	Pre	Post		
Resting Pulse Rate	Control	80.55	80.65	4.03	4.04	0.90	0.90	19	0.41
	Experimental	80.45	78.6	2.98	3.35	0.67	0.75		5.66*

**Significance at .05 level of confidence.*

The Table-I shows that the mean values of pre-test and post-test of the control group on Resting pulse rate were 80.55 and 80.65 respectively. The obtained 't' ratio was 0.41, since the obtained 't' ratio was less than the required table value of 2.14 for the significant at 0.05 level with 14 degrees of freedom it was found to be statistically insignificant. The mean values of pre-test and post-test of the experimental group on Resting pulse rate were 80.45 and 78.6 respectively. The obtained 't' ratio was 5.66* since the obtained 't' ratio was greater than the required table value of 2.14 for significance at 0.05 level with 19 degrees of freedom it was found to be statistically significant. The result of the study showed that there was a significant difference between control group and experimental group in resting pulse rate. It may be concluded from the result of the study that experimental group improved in resting pulse rate due to six weeks of pranayama practice.

Figure-1

Bar Diagram Showing the Pre and Post Mean Values of Experimental and Control Group on Resting Pulse Rate (Score in Seconds per Minute)



DISCUSSIONS ON FINDINGS

The result of the study indicates that the experimental group, namely pranayama practice group had significantly improved the selected dependent variable, namely Resting pulse rate, when compared to the control group. It is also found that the improvement caused by pranayama practice when compared to the control group.

CONCLUSIONS

1. There was a significant difference between experimental and control group on Resting pulse rate after the training period.
2. There was a significant improvement in Resting pulse rate. However the improvement was in favour of experimental group due to six weeks of pranayama practice.

REFERENCES

1. Alaguraja, K., & Yoga, P. (2017). Influence of yogasana practice on flexibility among obese adolescent school boys. International Journal of Yoga, Physiotherapy and Physical Education, 2(7), 70-71.
2. Alaguraja, K., & Yoga, P. (2018). Effect of core stability training on dynamic strength among college male students. International Journal of Yogic, Human Movement and Sports Sciences, 3 (2), 436-437.
3. Alaguraja, K., & Yoga, P. (2019). Effect of yogic practice on resting pulse rate among school students. Indian Journal of Applied Research, 9, (7), 17-18.
4. Alaguraja, K., Yoga, P., Balamuralikrishnan, R., & Selvakumar, K. (2019). A scientific study on efficacy of yogic package on resting pulse rate among obese school students. Journal of Information and Computational Science, 9(8), 483-487.
5. Alaguraja, K., & Yoga, P. (2019). Effect of yogic practice on resting pulse rate among school students. Indian Journal of Applied Research, 9, (7), 17-18.
6. Alaguraja, K., & Yoga, P. (2019). Analyze of pranayama technique on physiological parameter among rural school students. Journal of Information and Computational Science, 9(8), 545-550.
7. Alaguraja, K., Yoga, P., James Rathinaraj, S., R., & Selvakumar, K. (2019). A study on yoga intervention on maximal oxygen uptake among stress patient. Indian Journal of Applied Research, 9, (9), 38-39.
8. Alaguraja, K., & Yoga, P. (2019). Effect of yogic practice on resting pulse rate among school students. Indian Journal of Applied Research, 9, (7), 17-18.
9. Yoga, P., Balamuralikrishnan, R., & Alaguraja, K. (2019). Influence of cyclic meditation on selected physiological parameter. International Journal of Advanced Education and Research, 4 (1), 17-18.
10. Jackson C. Healing ourselves, healing others: first in a series. Holistic Nursing Practice, 2004; 18(2): p. 67-81.
11. Strukic, P.J. Basic Physiology, New York: Spring Ervellong Inc. 1981; p.23.
12. Farhi D.,(2005). Bringing Yoga to Life: The everyday practice of Enlightened Living. Harper Collins Publisher, Australia.
13. Sunil(2014). The importance of yoga in daily Life. https:/ www. Researchgate.net/publication/ 278673574, accessed. 2015, 2017.