International Journal of Enhanced Research in Educational Development (IJERED)
ISSN: 2320-8708, Vol. 5 Issue 2, Mar-Apr, 2017, Impact Factor 1.554

To Study The Effect of Asanas and Pranayama on Selected Physiological Variables of College football Players

Dr. Gurupreet Singh

Assistant Professor, Dept. of Physical Education, Sahu Jain College, Najibabad (U.P.)

ABSTRACT

This study was conducted on 40 male students with a view of determine the effect of asana and pranayama on selected physiological variables of footballers .All the subjects were randomly divided into 2 groups in such a way 20 that each group contains 20 students . The Physiological variables selected were vital capacity .resting blood pressure, breathing holding time, resting heart rate ,peak flow ,BMI random group design was employed for the experiment the result of ANCOVA revealed 1 .Statistically significantly improvement in vital capacity ,positive with holding time ,negative with holding time ,resting pulse rate ,peak flow rate and BMI of experimental group and control group peak flow was found significant 2. Blood pressure (systolic and diastolic) blood pressure was found insignificant this result shows that the majority of physiological variables improved significantly after practicing yoga.

Keywords:- vital capacity, resting blood pressure ,breathing holding time ,resting heart rate ,peak flow rate BMI

INTRODUCTION

Conventional medicine by concentrating on a physical and mechanical approach to healing ,can do little to relive the new and evermore cause of ill health-chronic stress and psychosomatic illness as these are caused more by lifestyle and attitudes than by physiological anomalies .The frenetic pace of modern life exposes many people to continuous unrelieved stress . Eventually stress may manifest itself in the form of physical disease or mental breakdown .Yoga has a lot to offer as we approach the 21 Century .It gives us means to compliment medical technology with a system of health care that addresses the problems of the mind and spirit as well as those of the body.

Health physical fitness and emotional stability are the three objectives which bring Yoga and Physical Education on a common platform for the benefit of human individuals .

Today Yogic practices have become popular throughout the world .But there are great misconceptions about these practices due to the lack of scientific information about them. The physiology of Yogic practices differs greatly from that of exercise ,games and sports .

The purpose of the study was to investigate the effect of asanas & pranayamas (Yogic Training) of selected physiological variables of college football players.

The study was delimited to the following variables :

1. Vital Capacity
2. Resting Blood Pressure
   (i) Systolic Pressure
   (ii) Diastolic Pressure
3. Breath Holding Time (Negative and Positive)
4. Resting Heart Rate.

5. Peak Flow Rate.
6. BMI(Body Mass Index)

DISCUSSION OF THE RESULTS

Group . Tabulated value of 't' is 2.145 hence the calculated value of 't' is more than tabulated value .So we can say that the experimental group of negative breath holding time is significant.

Table -1 Significance of Difference between Pre-test and Post –test Means of Control Group & Experimental Group in Resting Pulse Rate.

Group	Mean		SD.		DF	't' Ratio
	Pre	Post	Pre	Post		
Contro	67.46	67.86	13.26	14.07	14	0.158
Experimental	73.33	68.13	77.3	5.54	14	2.946*

* Significant at 0.05 level df = 14 tab 't' = 2.145

Above table shows the difference between pre-test and post-test means of control group and experimental group in Resting Pulse Rate .The calculated value of 't' is 2.946 for experimental group and 0.158 for control group .Tabulated value of 't' is 2.145 hence the calculated value of 't' is more than tabulated value for experimental group .So , we can say that the experimental group of resting pulse rate is significant .

Table -2 Significance of Difference between Pre-test and Post –test Means of Control Group & Experimental Group in Peak Flow Rate.

Group	Mean		SD.		DF	't' Ratio
	Pre	Post	Pre	Post		
Contro	3.83	4.37	0.56	0.75	14	0.158
Experimental	4.03				14	2.946*

* Significant at 0.05 level df = 14 tab 't' = 2.145

Above table shows the difference between pre-test and post-test means of control group and experimental group in Resting Pulse Rate .The calculated value of 't' is 2.946 for experimental group and 0.158 for control group .Tabulated value of 't' is 2.145 hence the calculated value of 't' is more than tabulated value for experimental group .So , we can say that the experimental group of resting pulse rate is significant .

Pre and post-data of physiological variable of control group and experimental group were taken prior and after completion of 42 days .Asanas and Pranayama training was given to experimental groups.

The data of physiological variables were taken with the standard procedure such as Vital capacity by wet Spiro meter ,resting pulse rate, by stop watch ,maximum breath holding time after forceful inhalation and exhalation by stop watch ,blood pressure by stethoscope ,and BMI = Wt. in kg /Ht. in mts^2 . The paired 't' test statistical technique was employed to analyses the raw data at 0.05 level of significance .

From the finding it was observe that 't' ratio was found to be significant on vital capacity, positive with holding time , negative with holding time ,resting pulse rate ,peak flow was found significant .On the contrary systolic and diastolic blood pressure was found in significant .

CONCLUSION

Yoga practice is regular and systematic practice for the human body . It become healthier and enhance the power of resistance against disease. The result of the study indicates that the majority of physiological variables improved significantly after practicing yoga .There is further scope that same kind of study can be conducted on various age group and on females.

REFERANCES

[1]. S.Nanwani, " Yoga for Mind Body Harmony , " Nanwani (September 1998):6
[2]. M.M. Gore , Anatomy and Physiology of Yogic Practices (Pune "Kanchan Prakashan Lonavala , 1984 ,pp. 1-2.
[3]. S.T. Rawal , " Yoga and Life Stule , " Abstracts : 3rd International Conference Yoga Research and Tradition (January1999) p 63.
[4]. Steven F Brena ,Yoga & Medicine (New Yark : The Jullian Press 1972)pp XIV-XV .
[5]. Bernard Hatha , Yoga pp. 15-21
[6]. B.K.S. lyengar Light on Yoga (London : George & Uniwin Ltd. 1974) p 42.
[7]. Jack H. Wilmore and David L Costill ,Physiology of Sports and Exercise (U.S.A.) Sue Mauck , 1944) pp . 173-177
[8]. David H Clarke Exercise Physiology (USA Englewood Cliff 1975) p. 159.
[9]. Edward 1 For Richard W Bowers , and Marele I Foss, " The Physiological Basis of Physical Education and Athetics (USA : W.B Saunders 1988) p 692.
[10]. Swami Kuvalyananda Asana (Bombay : Popular Prakashan 1971) p 32.