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IMPACTS OF YOGIC PROGRAMME ON BLOOD PRESSURE AND RESPIRATORY RATE AMONG FOOTBALLERS

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ABSTRACT
This investigation evaluated the impacts of yogic programme on Blood Pressure and respiratory rate. The current investigation was conducted at the Footballers, University College of Engineering, Ramanathapuram. The age of the subjects were ranged between 18 to 23 years. Tools and Technique Selected Physiological variables i.e. Blood Pressure and respiratory rate were used and measured in this study to know the impact of yoga training on its. Measurements for the variables were taken at the pre test and at the end of the treatment period, after eight weeks post test the data were collected for all the variables from treatment group, for three days. During this period the subject were not allowed to participate in any training. The information was analyzed using paired't' test to compare the before and after yogic training programme values of treatment group. P value of less than 0.05 was accepted as indicating significant difference between the compared values. The results of this investigation indicate that 6 weeks of yoga practice can significantly improve blood pressure and respiratory rate in collegiate footballers.
KEYWORDS: ***Yogic Programme, Blood Pressure, Respiratory Rate, Football Players.***

1. INTRODUCTION

Regular yoga practice reduces illness and daily stress in the body. As a result, your body becomes healthier and more energetic. Physical exercise and yoga improve blood flow in the body and lower blood pressure. When small problems in life increase the tension and make you a patient of BP. This is not known. But in yoga there is a solution to this problem of yours. If you take the path of yoga to control increased blood pressure, then you feel healthier for longer. The lungs can be kept healthy. By doing this yoga practice, the respiratory system is strengthened and the lungs also function actively. This reduces the risk of any type of disease associated with the respiratory system by several times.

2. METHODOLOGY

The current investigation was conducted at the Footballers, University College of Engineering, Ramanathapuram. The age of the subjects were ranged between 18 to 23 years. Tools and Technique Selected Physiological variables i.e. Blood Pressure and respiratory rate were used and measured in this study to know the effect of yoga training on it. Measurements for the variables were taken at the pre test and at the end of the treatment period, after six weeks post test the data were collected for all the variables from treatment group, for three days. During this period the subject were not allowed to participate in any training.

Table 1: Yoga Training Programme

Asana and Pranayama	1st to 3rd Week		4th to 6th Week	
	Set	Duration OfExercise in seconds	Set	Duration OfExercise in Seconds
Warming Up	-	250	-	250
Tada – asana	3	190	2	190
Urdhva – hasta asana	3	190	2	190
Vriksha – asana	3	120	3	120

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Vajra asana	3	120	3	120
Paschima – uttana – asana	4	120	2	120
Padma – asana	4	160	2	160
Sarvanga – asana	3	120	2	120
Hala – asana	3	120	1	120
Karna – pida – asana	3	120	2	120
Bhujanga – asana	3	120	2	120
Dhanur asana	3	120	2	120
Shawa – asana	1	180	1	180
Kapalbhati	2	240	2	240
Anulom vilom pranayam	2	240	2	240
Nadi shodhana	2	240	2	240
Ujjayi-pranayama	2	240	2	240
Simhasana-pranayama	2	240	2	240
Shawa – asana	1	180	1	180

3. SELECTION OF VARIABLES AND TESTS

The subjects were tested on the following variables.

Table 2

Name of Variables	Test	Unit
Blood Pressure	Sphygmomanometer	Milliliter of Mercury
Respiratory rate	Manual method	Numbers of breathing cycle in one minute

4. STATISTICAL ANALYSIS

The information was analyzed using paired‘t’ test to compare the before and after yogic training programme values of treatment group. P value of less than 0.05 was accepted as indicating significant difference between the compared values.

Table 3: t-ratio of the Means of Systolic Blood Pressure in Footballers

Test	N	Mean	SD	SE	MD	OT	DF	TT
Pretest	20	121	2.12	0.719	2.10	9.70*	19	2.09
Posttest	20	119	2.41					

*Significant at 0.05 level, t.05 (19) = 2.09

From Table -3 it is evident that ’t’ value of systolic blood pressure is 9.70 which is significant at 0.05 level.

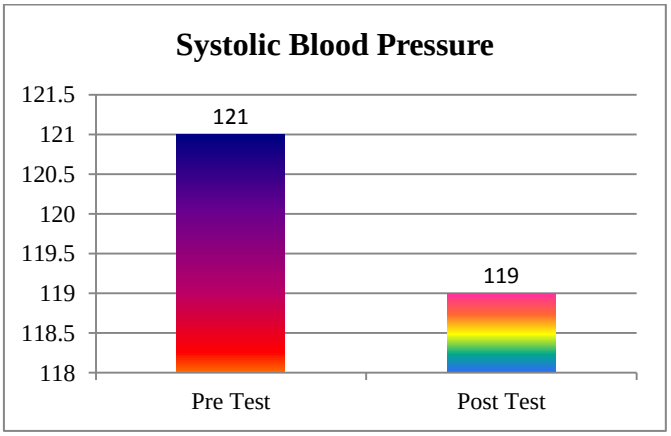

Fig 1: Graphical Representation of Mean Value of Systolic Blood Pressure between Pre Test and Post Test of Footballers.

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Table 4: t-ratio of the Means of Diastolic Blood Pressure in Footballers

Test	N	Mean	SD	SE	MD	OT	DF	TT
Pretest	20	81	2.22	0.73	1.65	6.02*	19	2.09
Posttest	20	79	2.42					

*Significant at 0.05 level, t.05 (19) = 2.09

From Table-4 it is evident that 't' value of diastolic blood pressure is 6.02 which is significant at 0.05 level.

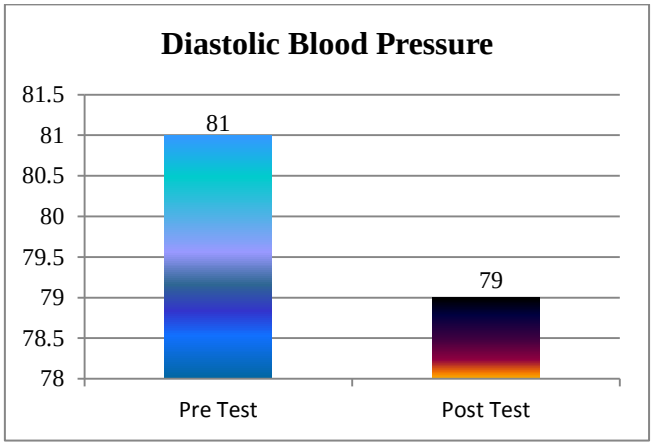

Fig 2: Graphical Representation of Mean Value of Diastolic Blood Pressure between Pre Test and Post Test of Footballers.

Table 5: t-ratio of the Means of Respiratory Rate in Footballers

Test	N	Mean	SD	SE	MD	OT	DF	TT
Pretest	20	18.85	1.57	0.496	1.350	8.102*	19	2.093
Posttest	20	17.50	1.57					

*Significant at 0.05 level, t.05 (19) = 2.09

From Table -5 it is evident that 't' value of respiratory rate is 8.10 which is significant at 0.05 level.

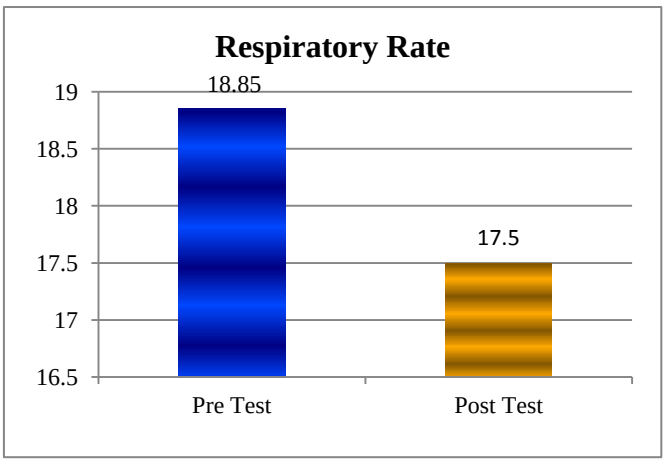

Fig 3: Graphical Representation of Mean Value of Respiratory Rate between Pre Test and Post Test of Footballers.

5. DISCUSSION ON FINDINGS

In the current investigation, systolic blood pressures, as well as diastolic blood pressures both have decreased significantly after six weeks of yoga training. This is reliable with our previous result that yoga training produces a significant decreased in systolic blood pressures and diastolic blood pressures. [1] On the other hand, Chaudhary and

Ahsan, M. (2012) have concluded that yoga training produces an decreased in systolic blood pressure and diastolic blood pressure. [2] Sree, R. V. (2012) have reported that the number of respiration per minute is also normalized after 8weeks aerobic dance and pranayama. [3] Jayachandran, K. (2014) has reported respiratory rate normalized after six weeks of yoga training. [4]

6. CONCLUSIONS

The results of this investigation indicate that 6 weeks of yoga practice can significantly improve blood pressure and respiratory rate of footballers. Yoga is a very useful practice that is easy to do and helps to get rid of some serious health problems that are common in today's lifestyle.

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