



## **INFLUENCE OF YOGIC PRACTICES ON PHYSIOLOGICAL VARIABLES AMONG OVERWEIGHT SCHOOL BOYS**

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### **Abstract:**

*The purpose of the study was to find out the influence of yogic practices on physiological variables among overweight school boys. To achieve the purpose of the present study, thirty overweight school boys from Madurai district, Tamilnadu were selected as subjects at random and their ages ranged from 11 to 15 years. The subjects were divided into two equal groups of fifteen overweight school boys each. The study was formulated as a true random group design, consisting of a pre-test and post-test. The groups were assigned as yogic practices group and control group in an equivalent manner. The experimental group participated the training for a period of twelve weeks to find out the outcome of the training packages and the control group did not participated in any training programme. Paired 't' test was applied. In all cases 0.05 level of confidence was fixed to test hypotheses. The yogic practices group had shown significant improvement in all the selected physiological variables among overweight school boys after undergoing yogic practices group for a period of twelve weeks.*

**Key Words:** Yogic Practices, Physiological Variables & Overweight School Boys

### **Introduction:**

Yoga shows us all happiness is within ourselves and trying to quench desires is like pouring ghee on fire which only makes it blaze more instead of putting it out. So with desire, it is never satisfied. Yoga shows us that happiness for which we are eternally searching can be obtained through non-desire. To achieve a state of non-desire, the mind must be trained to think clearly. A healthy mind requires a healthy body. This is where Hatha Yoga comes in. Yoga, a Vedic science has been applied in the field of therapeutics in modern times. Yoga has given patients the hope to reduce medication besides slowing the progression of the disease. Yoga employs stable postures or asana and breath control or pranayama. It has already proven its mettle in the improvement of oxidative stress as well as in improving the glycaemic status of diabetics through neuroendocrinal mechanism (Moorthy & David, 1983).

Body composition is a key component of an individual's health and physical fitness profile. Obesity is a serious health problem that reduces life expectancy by increasing one's risk of developing coronary artery diseases, etc. Too little body fat also poses a health risk because the body needs a certain amount of fat for normal physiological functions. Essential lipids, such as phospholipids, are needed for cell membrane formation: nonessential lipids, like triglycerides found in adipose tissue, provide thermal insulation and store metabolic fuel. Combating obesity is not an easy task. Many over-weight and obese individuals have incorporated patterns of overeating and physical inactivity into their lifestyles, while others have developed eating disorders, exercise addictions, or both (Adrian et al. 2011).

### **Methodology:**

The purpose of the study was to find out the influence of yogic practices on physiological variables among overweight school boys. To achieve the purpose of the

present study, thirty overweight school boys from Madurai district, Tamilnadu were selected as subjects at random and their ages ranged from 11 to 15 years. The subjects were divided into two equal groups of fifteen overweight school boys each. The study was formulated as a true random group design, consisting of a pre-test and post-test. The groups were assigned as yogic practices group and control group in an equivalent manner. The experimental group participated the training for a period of twelve weeks to find out the outcome of the training packages and the control group did not participated in any training programme. Paired 't' test was applied. In all cases 0.05 level of confidence was fixed to test hypotheses.

Table 1: Variables and Test Items

S.No	Variables	Tests
1	Resting Pulse Rate	Stethoscope
2	Body Mass Index	BMI
3	Systolic Blood Pressure	Sphygmomanometer
4	Diastolic Blood Pressure	

**Results:**

Table 2: Significance of Mean Gains & Losses between Pre and Post Test Scores on Selected Variables of Yogic practices Group (YPG)

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean Difference	Std. Dev (±)	σ DM	't' Ratio
1	Resting Pulse Rate	75.21	72.10	3.11	2.71	1.03	9.78*
2	Body Mass Index	28.87	26.34	2.53	1.87	1.12	21.51*
3	Systolic Blood Pressure	123.45	120.03	3.42	7.29	2.09	14.34*
4	Diastolic Blood Pressure	83.75	80.25	3.50	3.70	1.38	5.67*

\* Significant at 0.05 level

Table 2 shows the obtained 't' ratios for pre and post test mean difference in the selected variable of resting pulse rate (9.78), body mass index (21.51), systolic blood pressure (14.34) and diastolic blood pressure (5.67). The obtained ratios when compared with the table value of 2.14 of the degrees of freedom (1, 14) it was found to be statistically significant at 0.05 level of confidence. It was observed that the means gain and losses made from pre to post test were significantly improved in physiological variables.

Figure 1: Shows the Pre and Post Mean Values of Experimental Group on Selected Variables

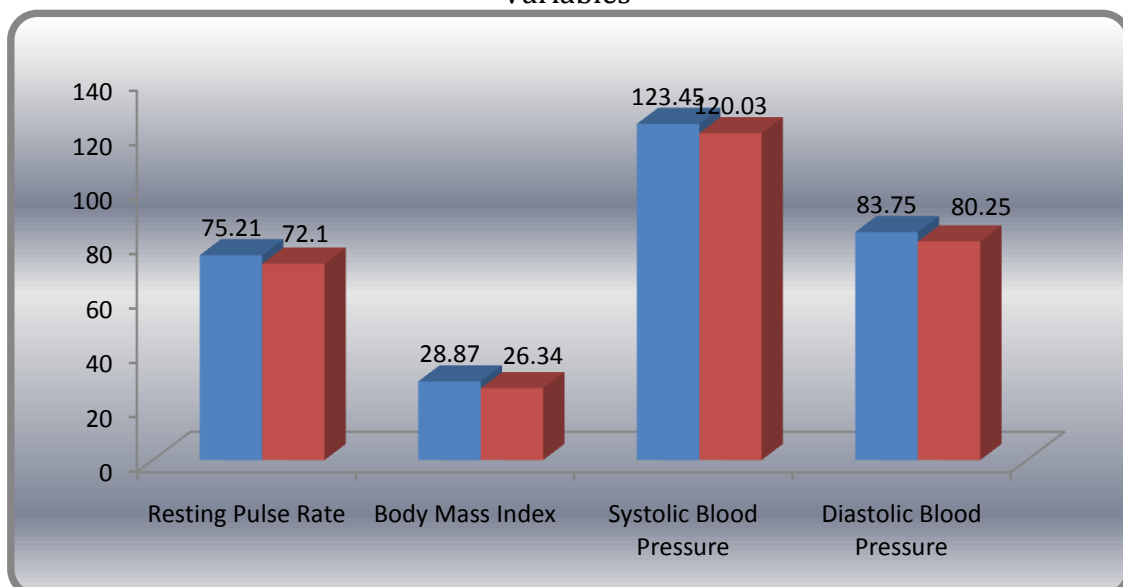


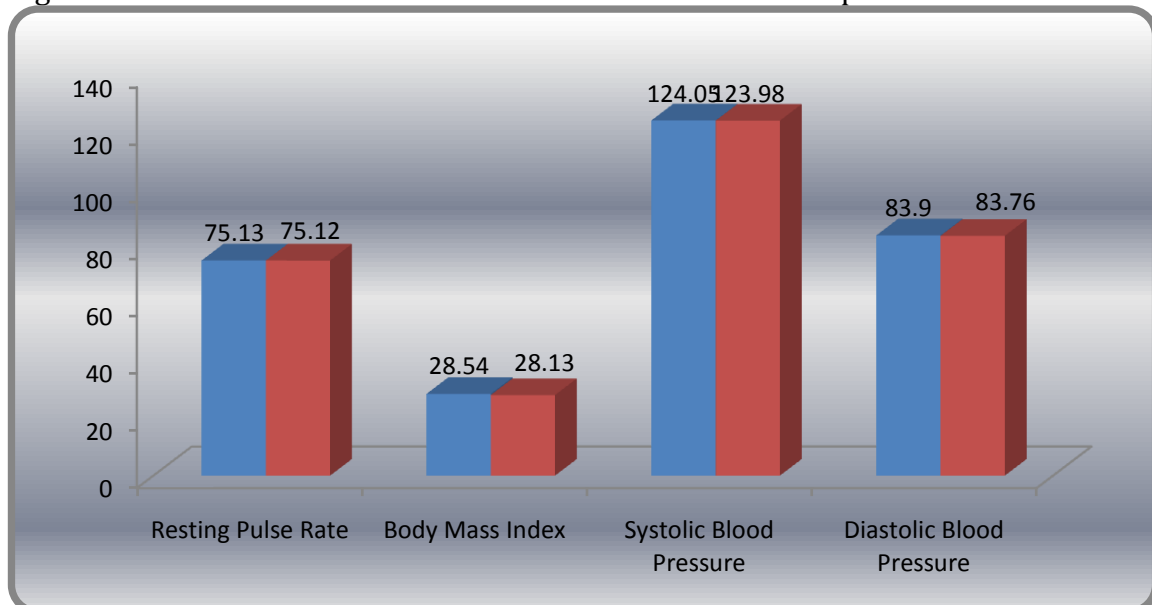
Table 3: Significance of Mean Gains & Losses between Pre and Post Test Scores on Selected Variables of Control Group (CG)

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Resting Pulse Rate	75.13	75.12	0.01	2.29	1.27	1.76
2	Body Mass Index	28.54	28.13	0.41	3.25	1.36	1.82
3	Systolic Blood Pressure	124.05	123.98	0.07	6.05	3.21	1.07
4	Diastolic Blood Pressure	83.90	83.76	0.14	2.13	1.22	0.75

\* Significant at 0.05 level

Table 3 shows the obtained 't' ratios for pre and post test mean difference in the selected variable of resting pulse rate (1.76), body mass index (1.82), systolic blood pressure (1.07) and diastolic blood pressure (0.75). The obtained ratios when compared with the table value of 2.14 of the degrees of freedom (1, 14) it was found to be statistically insignificant at 0.05 level of confidence. It was observed that the means gain and losses made from pre to post test were not significantly improved in physiological variables.

Figure 2: Shows the Pre and Post Mean Values of Control Group on Selected Variables



### Conclusions:

From the analysis of the data, the following conclusion was drawn:

- ✓ The yogic practices group had shown significant improvement in all the selected physiological variables among overweight school boys after undergoing yogic practices group for a period of twelve weeks.

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