STAR
Research Journal

Available online at www.starresearchjournal.com (Star International Journal)
PHYSICAL EDUCATION
Star. Phy. Edn. 02(2014)

INFLUENCE OF ASANA WITH MEDITATION ON SELECTED PHYSIOLOGICAL VARIABLES AMONG RESIDENTIAL SCHOOL BOYS

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Abstract

The purpose of the study was to find out the influence of asana with meditation on selected physiological variables among residential school boys. To achieve the purpose of the present study, forty residential school boys from Velammal Matriculation Higher Secondary School, Viraganoor, Madurai, Tamilnadu, India were selected as subjects at random and their ages ranged from 15 to 17 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=40) were randomly assigned to two equal groups as asana with meditation group (AWMG) and control group (CG) in an equivalent manner. The asana with meditation group participated for a period of eight weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups analysis of covariance (ANCOVA) was used. The result reveals that the asana with meditation group showed better performance on resting pulse rate, systolic blood pressure and diastolic blood pressure than the control group owing to the influences of asana with meditation

Key Words: Asana, Meditation, Blood Pressure, Resting Pulse Rate, School Boys.

Introduction

Yoga is a scientific method of life and also integrated educational system of our body, mind and soul. This was practiced by the Indian thousands years of ago but it is one of the universal truths and rectified lot of problems today as there were in the ancient times. Yoga is a practical aid. It does not belong to a particular religion but it could be practiced by all other religions like the Hindus, Muslims, Christians, Jews, Buddhists, Jainis and the Atheists so on. Therefore, Yoga is union with all. (**Joshi, 2001).**

Asana is derived from the verb root "as" which means "to sit", "to remain", etc. Therefore asanas means, a state of being in which one can remain physically and mentally steady, calm, quite and comfortable. A steady and pleasant posture produces mental equilibrium and prevents fickleness of mind. Asanas are not merely gymnastic exercise but postures. Asanas have been evolved over the centuries so as to exercise every muscle, nerve and gland in the body. They reduce fatigue and soothe the nerves. But their real importance lies in the way they train and discipline the mind. **(Iyengar, 2008).**

Meditation is the act of focusing one's thoughts or engaging in self –reflection or contemplation. Some people believe that, through deep meditation one can influence or control physical and psychological functioning and the course of illness. Meditation is a state of consciousness that can be understood only on a direct, intuitive level. While you meditate, past and future cease to exist. There is only the consciousness of I AM in infinite eternal now. Meditation is the royal road to the attainment of freedom a mysterious ladder that reached from earth to heaven, darkness to light, and mortality to immorality. **(Chandrasekaran, 2003).**

Purpose of the study

The purpose of the study was to find out the influence of asana with meditation on selected physiological variables among residential school boys.

Hypothesis

It was hypothesized that the asana with meditation group would show significant improvement on selected physiological variables than control group.

Methodology

To achieve the purpose of the present study, forty residential school boys from Velammal Matriculation Higher Secondary School, Viraganoor, Madurai, Tamilnadu, India were selected as subjects at random and their ages ranged from 15 to 17 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=40) were randomly assigned to two equal groups as asana with meditation group (AWMG) and control group (CG) in an equivalent manner. The asana with meditation group participated for a period of eight weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups analysis of covariance (ANCOVA) was used.

Results and Discussion

The detailed procedure of analysis of data and interpretation were given below,

Table-I

Summary of Mean for the Pre and Post Tests on Selected Physiological variables among Residential School Boys

SNo	Variables	Asana with meditation Group				Control Group			
		Pre	SD (±)	Post	SD (±)	Pre	SD (±)	Post	SD (±)
1	Resting Pulse Rate	76.10	3.32	71.40	3.20	75.50	3.64	75.25	3.76
2	Systolic Blood Pressure	120.80	3.12	116.85	3.45	119.25	2.95	120.95	3.69
3	Diastolic Blood Pressure	79.55	2.32	76.65	2.13	80.20	1.98	80.50	2.81

The table I shows that the pre and post test means on selected physiological variables among residential school boys.

Table-II

Analysis of Variance of Pre Test Scores on Selected Physiological Variables among Residential School Boys

Sl. No	Variables	Source of Variance	Sum of Squares	df	Mean Squares	F-Value
1	Resting Pulse Rate	BG	3.60	1	3.600	0.29
		WG	462.80	38	12.17	
2	Systolic Blood Pressure	BG	24.02	1	24.02	2.60
		WG	350.95	38	9.23	
3	Diastolic Blood Pressure	BG	4.22	1	4.22	0.90
		WG	178.15	38	4.68	

***** P < 0.05 Table F, df (1,28) (0.05) = 4.19

In table II, the results of analysis of variance of pre test scores on resting pulse rate (0.29), systolic blood pressure (2.60) and diastolic blood pressure (0.90) were lesser than the table value of 4.19 indicating that it was not significant for the degrees of freedom (1,28) at 0.05 level of confidence indicating that the random sampling was successful.

Table-III

Analysis of Variance of Post Test Scores on Selected Physiological Variables among Residential School Boys

Sl. No	Variables	Source of Variance	Sum of Squares	df	Mean Squares	F-Value
1	Resting Pulse Rate	BG	148.22	1	148.22	12.12*
		WG	464.55	38	12.22	
2	Systolic Blood Pressure	BG	168.10	1	168.10	13.15*
		WG	485.50	38	12.77	
3	Diastolic Blood Pressure	BG	148.22	1	148.22	23.71*
		WG	237.55	38	6.25	

***** P < 0.05 Table F, df (1,28) (0.05) = 4.19

In table III, the results of analysis of variance of post test scores on resting pulse rate (12.12), systolic blood pressure (13.15) and diastolic blood pressure (23.71) were greater than the table value of 4.19 indicating that it was significant for the degrees of freedom (1,28) at 0.05 level of confidence.

Table-IV

Analysis of Covariance of Selected Physiological Variables among Residential School Boys

Sl. No	Variables	Adjusted Mean		Source of Variance	Sum of Squares	df	Mean Squares	F-Value
		AWMG	CG					
1	Resting Pulse Rate	71.35	75.29	BG	153.96	1	153.96	12.53*
				WG	454.35	37	12.28	
2	Systolic Blood pressure	116.78	121.02	BG	168.24	1	168.24	12.89*
				WG	482.64	37	13.04	
3	Diastolic Blood pressure	76.65	80.49	BG	144.28	1	144.28	22.47*
				WG	237.53	37	6.42	

***** P < 0.05 Table F, df (1,27) (0.05) = 4.21

In table IV, the results of analysis of covariance on resting pulse rate (12.53), systolic blood pressure (12.89) and diastolic blood pressure (22.47) were greater than the table value of 4.21 indicating that it was significant for the degrees of freedom (1,27) at 0.05 level of confidence.

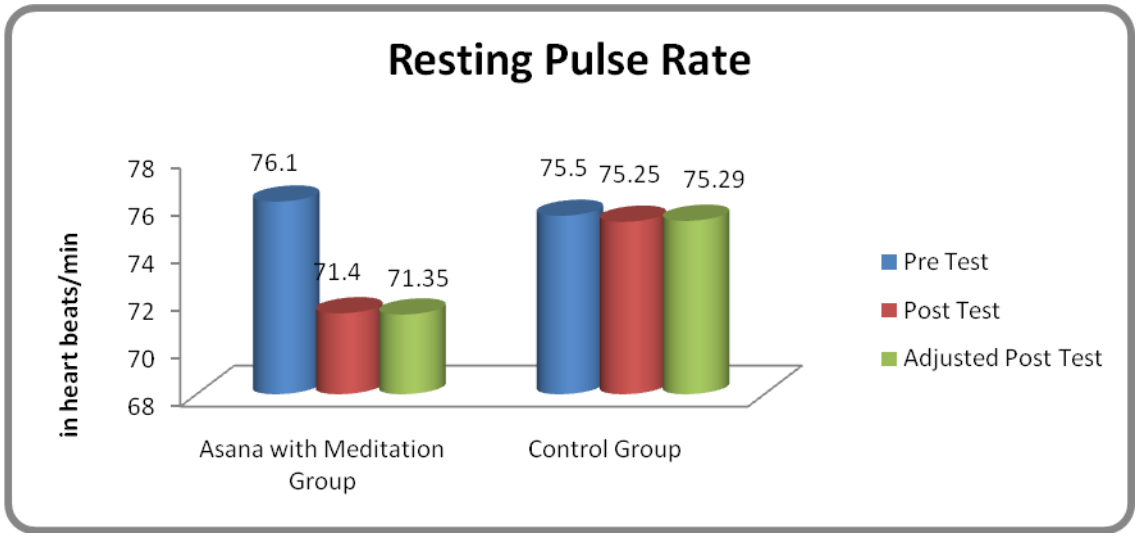

Figure-I Shows the Mean Values of Asana with Meditation Group and Control Group on Resting Pulse Rate among Residential School Boys

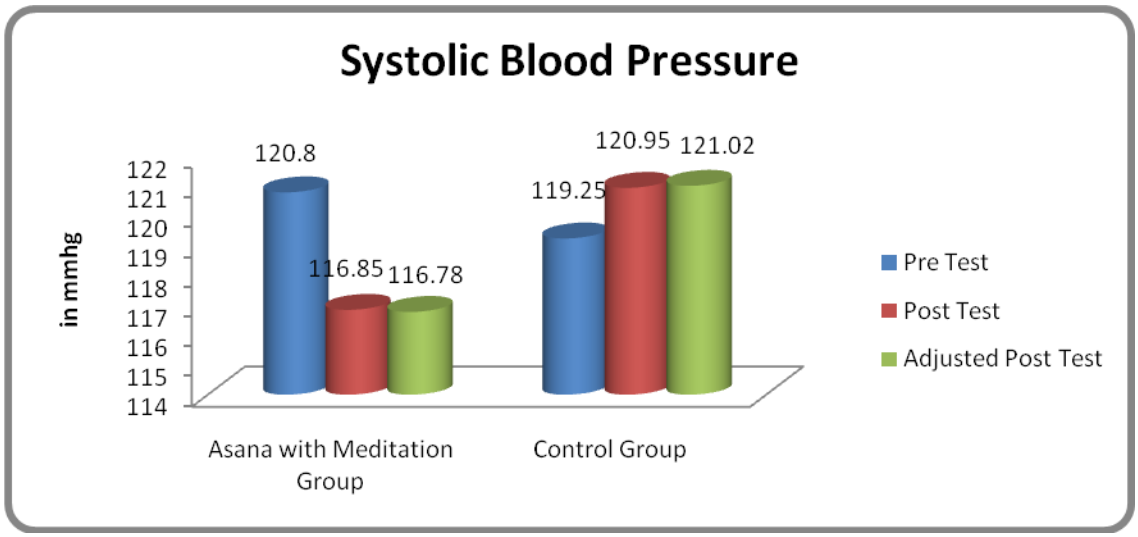

Figure-II Shows the Mean Values of Asana with Meditation Group and Control Group on Systolic blood pressure among Residential School Boys

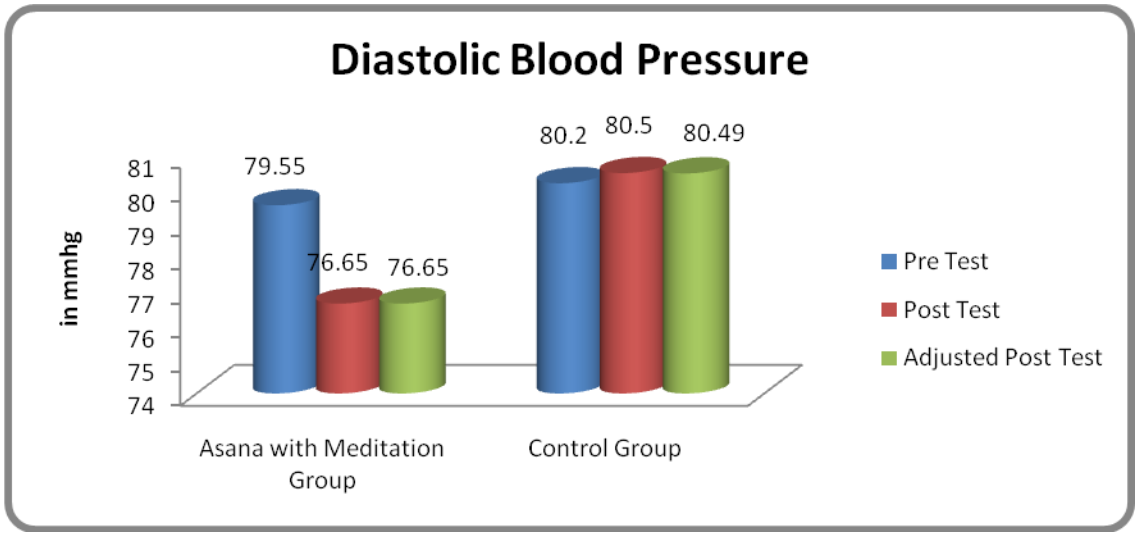

Figure-III Shows the Mean Values of Asana with Meditation Group and Control Group on Diastolic blood pressure among Residential School Boys

Discussions and Conclusions

In case of physiological variables i.e. resting pulse rate, systolic blood pressure and diastolic blood pressure the results between pre and post (8 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that eight weeks of asana with meditation group had significant influence on selected physiological variables i.e., resting pulse rate, systolic blood pressure and diastolic blood pressure of residential school boys. Hence the hypothesis earlier set that asana with meditation would have been significant influence on selected physiological variables in light of the same the hypothesis was accepted. The result reveals that the asana with meditation group showed better performance on resting pulse rate, systolic blood pressure and diastolic blood pressure than the control group owing to the influences of asana with meditation.

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