

INFLUENCE OF YOGA PRACTICES ON SELECTED PHYSIOLOGICAL VARIABLES AMONG MIDDLE AGE WOMEN

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Abstract

The purpose of the study was to find out the effect of yogic practices on selected physiological variables among middle age women. To achieve the purpose of the present study, thirty middle age women from Tirupattur, Tamilnadu were selected as subjects and their age shall ranged from 35 to 50 years. The subjects were divided into two equal groups. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (N=30) were randomly assigned to two equal groups of fifteen subjects each. The groups were assigned as yogic practices group (YPG) and control group (CG) in an equivalent manner. The experimental group were participated the training for a period of six weeks to find out the outcome of the training package. Analysis of covariance (ANCOVA) was applied. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study. The yogic practices group had shown significant decrease in all the selected physiological variables.

Key words: Yoga, Blood Pressure, Women.

Introduction

Yoga is one of India's wonderful gifts to mankind. One of its valuable qualities is that it builds up a store of physical health through the practice of a system of exercises called asanas which keep the body cleansed and fit. Yoga believes that exercise is essential for speedy removal of toxins and for keeping blood circulation and all internal processes functioning smoothly. Practising of yoga asanas strengthen the muscles, release physical tension and improve concentration and poise. Yoga makes limbs balanced strong and relaxed. The standing poses improve balance and muscle flexibility. Yogic practice can help players to relax and replenish their energy after strenuous games. It also promotes calm, clear thinking even in situations that call for fast reactions. Yoga stretches and strengthens all muscles of body and brings peace and calm to the mind and spirit. It is necessary to note that the nature of all Yogic practices is psychological and physiological. Some exercises emphasizing the control of mental processes directly are more psychological. Importance of Yogic exercises on physiological systems is to improve circulation vital to proper functioning of the body. Nourish, stimulate and maintain the vital balance of the endocrine glands, which govern growth and development. Help to establish a regular menstrual cycle. Other exercises are more physical or physiological. It is this latter part of yogic practices that has become more popular and is being extensively used for the development and promotion of health and fitness (Indla & Pandurang, 2011).

Methodology

The purpose of the study was to find out the effect of yogic practices on selected physiological variables among middle age women. To achieve the purpose of the present study, thirty middle age women from Tirupattur, Tamilnadu were selected as subjects and their age shall ranged from 35 to 50 years. The subjects were divided into two equal groups. The study

was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (N=30) were randomly assigned to two equal groups of fifteen subjects each. The groups were assigned as yogic practices group (YPG) and control group (CG) in an equivalent manner. The experimental group were participated the training for a period of six weeks to find out the outcome of the training package. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. It was assumed as pre-test. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. The following statistical techniques were adopted to treat the collected data in connection with established hypothesis and objectives of this study. Analysis of covariance (ANCOVA) was applied because the subjects were selected random, but the groups were not equated in relation to the factors to be examined. Hence the difference between means of the two groups in the pre-test had to be taken into account during the analysis of the post-test differences between the means. This was achieved by the application of the analysis of covariance, where the final means were adjusted for differences in the initial means, and the adjusted means were tested for significance. To test the obtained results on variables, level of significance 0.05 was chosen and considered as sufficient for the study.

RESULTS AND DISCUSSION

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

TABLE-I
COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF YOGIC AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE

	Yogic Practices	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	135.25	134.10	BG	13.22	1	13.22	0.37
			WG	1327.55	38	34.93	
Post-Test Means	124.60	137.85	BG	1755.62	1	1755.62	108.76*
			WG	613.35	38	16.14	
Adjusted Post-Test Means	124.52	137.92	BG	1777.69	1	1777.69	111.29*
			WG	590.98	37	15.97	

(Table Value for 0.05 Level for df 1 & 28 = 4.19) df- Degrees of Freedom

(Table Value for 0.05 Level for df 1 & 27 = 4.21)

An examination of table - I indicated that the pretest means of yogic practices and control groups were 135.25 and 134.10 respectively. The obtained F-ratio for the pre-test was 0.37 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 1 and 28. The post-test means of the yogic practices and control groups were 124.60 and 137.85 respectively. The obtained F-ratio for the

post-test was 108.76 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 28. The adjusted post-test means of the yogic practices and control groups were 124.52 and 137.92 respectively. The obtained F-ratio for the adjusted post-test means was 111.29 and the table F-ratio was 4.21. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 27.

FIGURE - I

PRE AND POST TEST DIFFERENCES OF THE YOGIC PRACTICES AND CONTROL GROUPS ON SYSTOLIC BLOOD PRESSURE

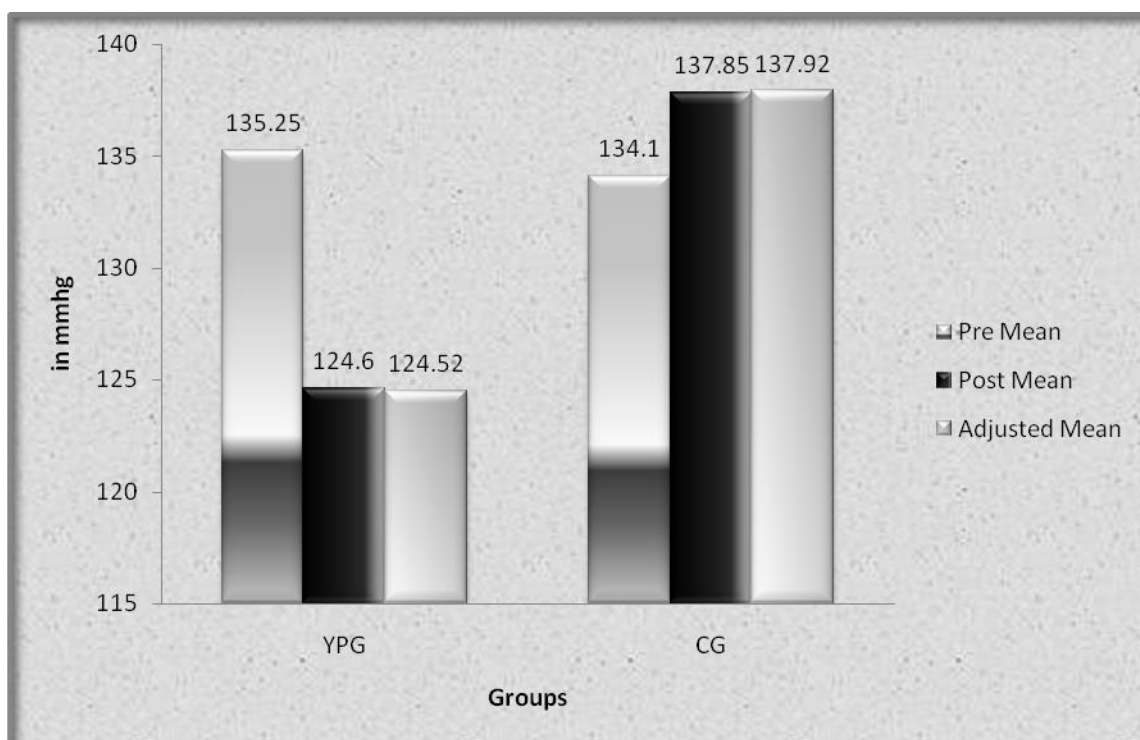


TABLE-II

COMPUTATION OF ANALYSIS OF COVARIANCE OF MEAN OF YOGIC PRACTICES AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE

	Yogic Practices	Control Group	Source of Variance	Sum of Squares	df	Means Squares	F-ratio
Pre-Test Means	85.85	86.00	BG	0.22	1	0.22	0.009

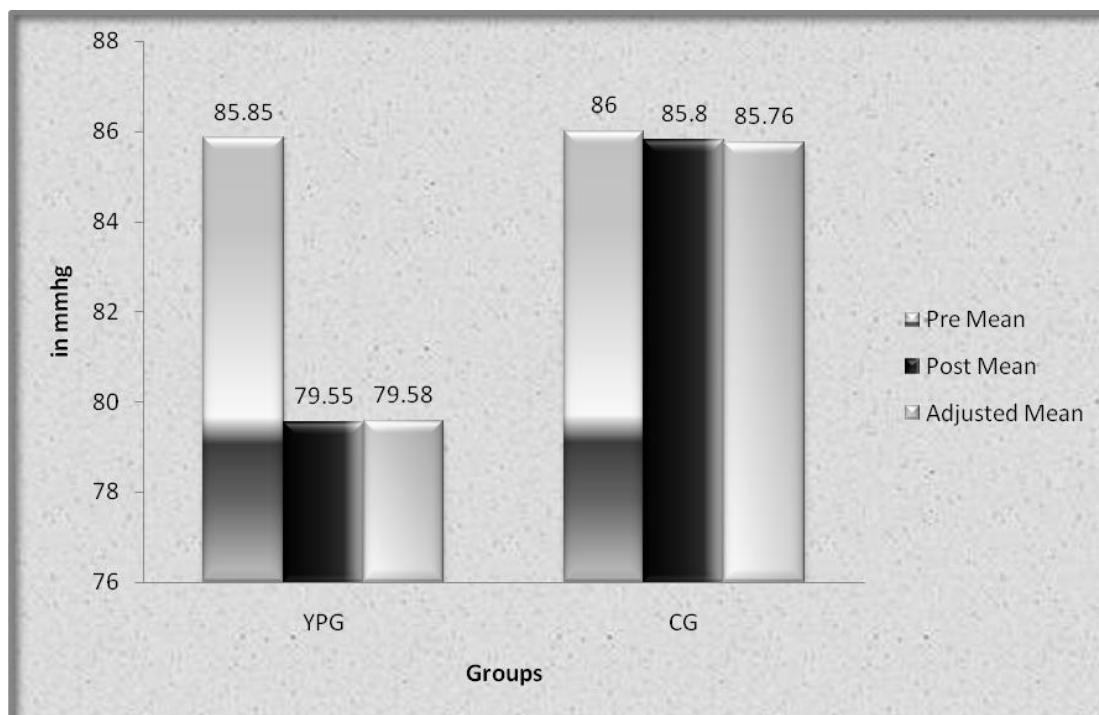
			WG	966.55	38	25.43	
Post-Test Means	79.55	85.80	BG	390.62	1	390.62	22.90*
			WG	648.15	38	17.05	
Adjusted Post-Test Means	79.58	85.76	BG	380.92	1	380.92	36.05*
			WG	390.89	37	10.56	

(Table Value for 0.05 Level for df 1 & 28 = 4.19) df- Degrees of Freedom
 (Table Value for 0.05 Level for df 1 & 27 = 4.21)

An examination of table –II indicated that the pretest means of yogic practices and control groups were 85.85 and 86.00 respectively. The obtained F-ratio for the pre-test was 0.009 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was insignificant at 0.05 level of confidence for the degree of freedom 1 and 28. The post-test means of the yogic practices and control groups were 79.55 and 85.80 respectively. The obtained F-ratio for the post-test was 22.90 and the table F-ratio was 4.19. Hence the pre-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 28. The adjusted post-test means of the yogic practices and control groups were 79.58 and 85.75 respectively. The obtained F-ratio for the adjusted post-test means was 36.05 and the table F-ratio was 4.21. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 27.

FIGURE - II

PRE AND POST TEST DIFFERENCES OF THE YOGIC PRACTICES AND CONTROL GROUPS ON DIASTOLIC BLOOD PRESSURE



CONCLUSIONS

1. The yogic practices group had shown significant decrease in all the selected physiological variables.

REFERENCES

1. Andre Van Lysebeth, (1987). *Yoga Self – Taught*, Delhi: Tarage Paper Back.
2. Chandrasekaran.K (2003). *Yoga for Health*, Delhi; Khel Sathiya Kendra.
3. Eugene S.Rawles, (1997). *Yoga for Beauty and Health*. New York: Parker Publishing CompanyInc.
4. Iyengar, B.K.S. (1986). *Light on Yoga*. London: George Allen and Unwin Publishing Ltd.
5. Joshi.K (2001). *Yogic Pranayama*, New Delhi: Orient Paper Backs.
6. Balaji, P.A., Varne, S.R. & Ali, S.S. (2012). Physiological effects of yogic practices and transcendental meditation in health and disease. *N Am J Med Sci*. 4(10):442-8.
7. Indla Devasena & Pandurang Narhare (2011). Effect of yoga on heart rate and blood pressure and its clinical significance. *Int J Biol Med Res*. 2(3): 750-753.
8. Saravanan, J. & Kanagasabai P. (2010). Effects of selected yogic practices on selected physiological variables of college men. *Bharathiar National Journal of Physical Education and Exercise Sciences*. 2, 2:30-34.