



INFLUENCE OF YOGA PRACTICES ON BLOOD PRESSURE AMONG RURAL COLLEGE GIRLS

Dr.M.SURESH KUMAR

Director of physical Education, Ganesar College of Arts and Science, Ponnamaravathi, Tamilnadu, India.

Abstract

This purpose of the study was to find out the effect of yoga practices on blood pressure among rural college women. To facilitate the study, thirty students were selected from Ganesar College of Arts & Science, Ponnamaravathi, Pudukkottai, Tamilnadu, India. Their age was ranged from 18 and 25 years. They were assigned in to two groups of which group one served as yoga practices group and group two acted as control group. The study was formulated by true random group design, consisted of pretest and posttest. Pretest was conducted for all the subjects on systolic blood pressure and diastolic blood pressure. The experimental groups participated yoga practices for a period of six weeks. The post tests were conducted on the above said dependent variables after a period of six weeks in the respective treatments. The initial and final scores in selected physiological variables were put in to statistical treatment using Analysis of Covariance (ANCOVA) to find out the significant mean differences. It was concluded that there was significant decrease in systolic blood pressure due to yogic practices when comparing to control group. It was concluded that there was significant decrease in diastolic blood pressure due to yogic practices when comparing to control group.

Keywords: Yoga Practices, Blood Pressure, College Girls, Rural.

INTRODUCTION

The literal meaning of the word yoga is Yoke. It means for uniting the individual spirit with the universal spirit or God. The word yoga is derived from the roots of Sanskrit "YUJ" which means to join, to attach, to bind and yoke and to concentrate on one's attention. The Gita and according to Gandhi, The yoking of all the powers of body, the mind, the emotion, the will which the yoga purposes, it means poses of the soul which enables one to look at life in all its aspect evenly. In Indian culture the human beings or everyone on this earth is Guided by the supreme universal spirit, i.e., Paramatma or God of which the individual human spirit, i.e., Jivatma is apart yoga is a way to secure liberation (moska) because it means by which the Jivatma can be united to the Paramatma. The science of yoga works on physical, mental, emotional, psychic and spiritual aspects of a person. When imbalance is experience at this level, the organs, and muscles and nerves no longer functions in harmony, rather they at in opposition to each other. Therefore yoga aims at bringing the different body functions into project co-ordination so that they work for the god of the whole body. Yoga has a complete message for humanity. It is a message for the human body, human mind and human soul.

Health, physical fitness and emotional stability are the objectives which bring yoga and physical education on a common platform for the benefit of human individual. Health is a more general and comprehensive term conveying the 'feeling of well being', while physical fitness is a more specific term.

Physical fitness is the capacity of an individual to perform a given task at a particular time. Health and physical fitness are not static. They are always changing they follow the law can be maintained only by carefully selected physical activities which are called 'exercise'. The utility of the particular exercise program can be evaluated only in forms of the effects that one obtained in promoting a particular factor of physical fitness. Through constant practice of yoga, one can overcome all difficulties and eradicate all weakness, pain can be transmitted in to bliss, sorrow in to joys, and failure into success and sickness in to perfect health. Determination, patience and persistence lead one to goal.

METHODOLOGY

This purpose of the study was to find out the effect of yoga practices on blood pressure among rural college women. To facilitate the study, thirty students were selected from Ganesar College of Arts & Science, Ponnamaravathi, Pudukkottai, Tamilnadu, India. Their age was ranged from 18 and 25 years. They were assigned in to two groups of which group one served as yoga practices group and group two acted as control group. The study was formulated by true random group design, consisted of pretest and posttest. Pretest was conducted for all the subjects on systolic blood pressure and diastolic blood pressure. The experimental groups participated yoga practices for a period of six weeks. The post tests were conducted on the above said dependent variables after a period of six weeks in the respective treatments. The initial and final scores in selected

physiological variables were put in to statistical treatment using Analysis of Covariance (ANCOVA) to

find out the significant mean differences.

RESULTS

TABLE – I
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF SYSTOLIC BLOOD PRESURE OF EXPERIMENTAL AND CONTROL GROUPS

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	119.86	119.33	BG	2.13	1	2.13	0.08
			WG	703.06	28	25.11	
Post Test Mean	119.73	119.13	BG	2.70	1	2.70	0.75
			WG	100.66	28	3.59	
Adjusted Post Mean	119.68	119.18	BG	1.90	1	1.90	0.42
			WG	78.15	27	2.89	

*Significant at 0.05 level

Table value for df 1 and 28 was 4.20

Table value for df 1 and 27 was 4.21

The above table indicates the adjusted mean value of systolic blood pressure of experimental and control groups were 119.68 and 119.18 respectively. The obtained F-ratio of 0.42 for adjusted mean was lesser than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The

result of the study indicates that there was a in significant difference among experimental and control groups on systolic blood pressure. The pre, post and adjusted mean values of systolic blood pressure of both control and experimental groups are graphically represented in the figure-I.

FIGURE - I
BAR DIAGRAM SHOWS THE MEAN VALUE OF SYSTOLIC BLOOD PRESURE OF EXPERIMENTAL AND CONTROL GROUPS

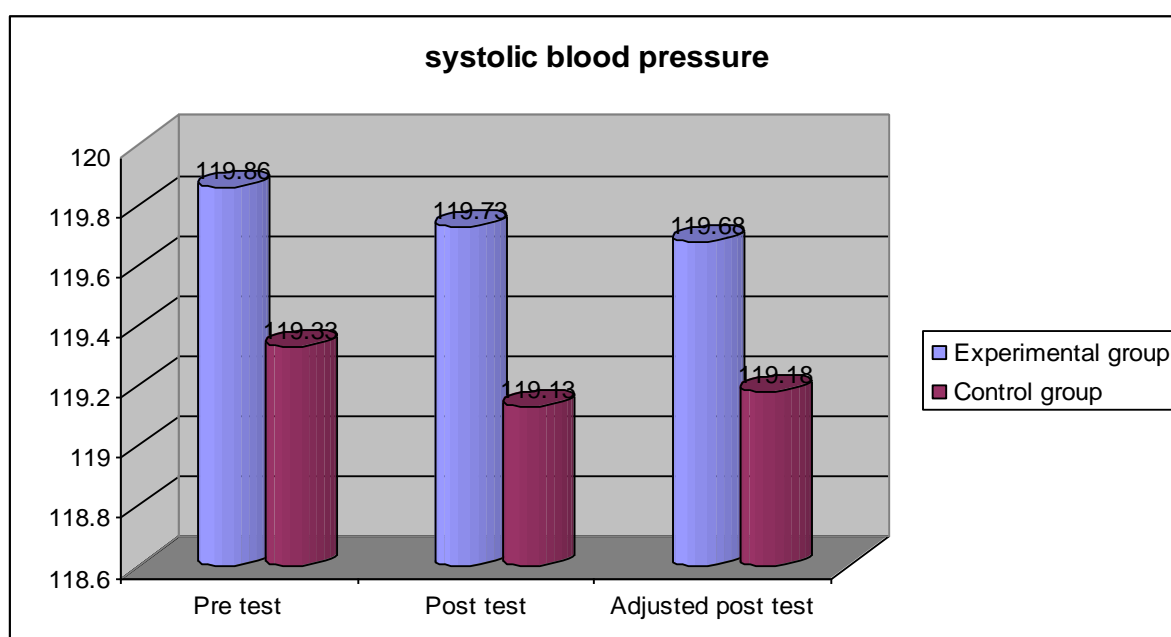


TABLE – II
COMPUTATION OF MEAN AND ANALYSIS OF COVARIANCE OF DIASTOLIC BLOOD PRESSURE OF EXPERIMENTAL AND CONTROL GROUPS

	Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	F
Pre Test Mean	80.33	78.13	BG	36.30	1	36.30	3.64
			WG	279.06	28	9.96	
Post Test Mean	79.46	78.66	BG	4.80	1	4.80	0.31
			WG	427.06	28	15.25	
Adjusted Post Mean	78.44	79.68	BG	10.27	1	10.27	1.49
			WG	186.07	27	6.89	

* Significant at 0.05 level

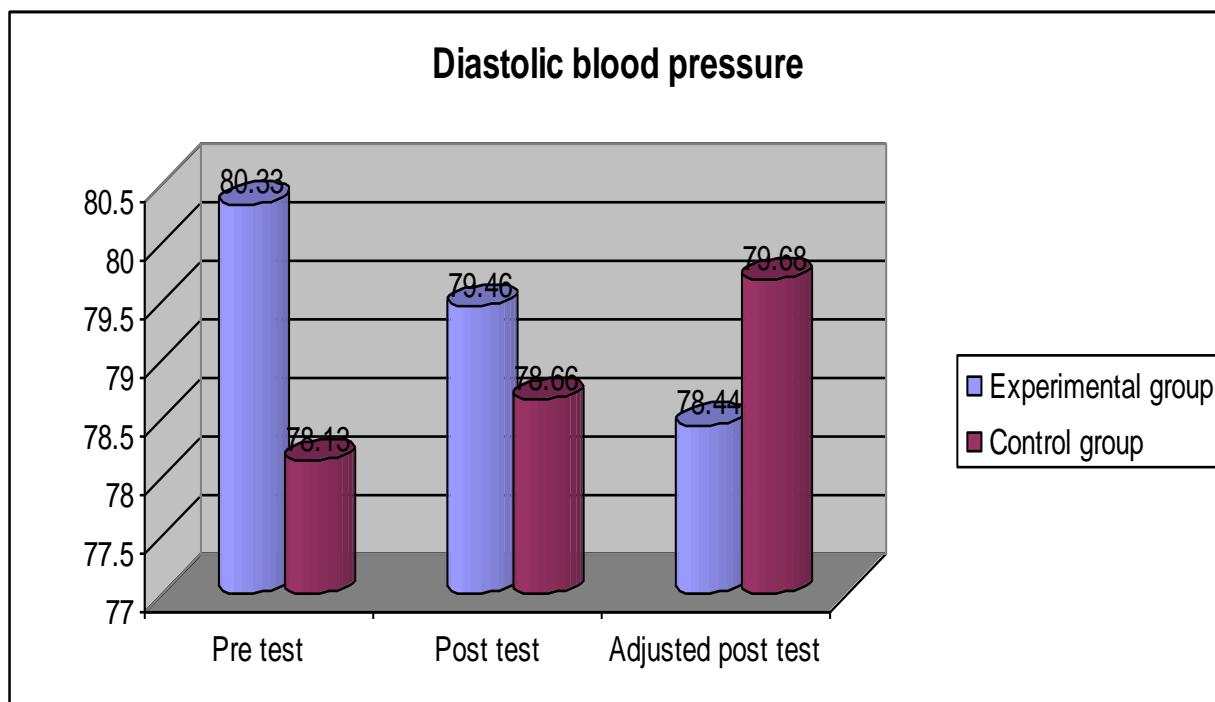
Table value for df 1 and 28 was 4.20

Table value for df 1 and 27 was 4.21

The above table indicates the adjusted mean value of diastolic blood pressure of experimental and control groups were 78.44 and 79.68 respectively. The obtained F-ratio of 1.49 for adjusted mean was lesser than the table value 4.21 for the degrees of freedom 1 and 27 required for significance at 0.05 level of confidence. The

result of the study indicates that there was a in significant difference among experimental and control groups on diastolic blood pressure. The pre, post and adjusted mean values of diastolic blood pressure of both control and experimental groups are graphically represented in the figure-II.

FIGURE - II
BAR DIAGRAM OF SHOWS THE MEAN VALUES OF DIASTOLIC BLOOD PRESURE OF EXPERIMENTAL AND CONTROL GROUPS



CONCLUSIONS

Within limitations and delimitations of this study, the following conclusions arrived at,

1. It was concluded that there was significant decrease in systolic blood pressure due to yogic practices when comparing to control group.
2. It was concluded that there was significant decrease in diastolic blood pressure due to yogic practices when comparing to control group.

REFERENCES

1. Amita, S., Prabhakar, S., Manoj, I., Harminder, S., Pavan, T. (2009). Effect of yoga-nidra on blood glucose level in diabetic patients. *Indian Journal of Physiology and Pharmacology*, Vol.53 (1): PP.97-101.
2. Andreasi, V., Michelin, E., Rinaldi, A, E., Burini, R, C. (2010). Physical fitness and associations with anthropometric measurements in 7 to 15-year-old school children. *Journal De Pediatria*, Vol.86 (6): PP.497-502.
3. Anne, L. Rothstein. (1985). *Research Design and Statistics for Physical Education* (Englewood Cliffs, N.J: Prentice Hall, Inc.).
4. Barrow, H., M. and McGee, R. (1971). *A Practical Approach to Measurement in Physical Education*, Philadelphia: Lea & Febiger.
5. Baumgartner, A. T. and Andrew, J. (1987). *Measurement for Evaluation in Physical Education and Exercise Science*. IOWA: W.M.C Brown Publishers.
6. Chatterjee,F.,Bruce,S,A.,Woldege,R,C. (2010)Effect of yogic Exercises on human Growth hormone in a middle aged group: a pilot study. *Yoga Mimamsa a Quarterly Journal*, vol XLII.1, PP.40-47.
7. Chen, T, L., Mao,H,C., Lai ,C,H., Li ,C,Y., Kuo,C,H. (2009). The effect of yoga exercise intervention on health related physical fitness in school-age asthmatic children. *The Journal of Nursing-Taiwan*, Vol.56 (2): PP.42-52.
8. Cordain, Loren, Tucker, Alan and Moon, Debbie, (1990) Lung volumes and Maximal Respiratory Pressures in Collegiate Swimmers and Runners”, *Research Quarterly for Exercise and Sport*, 61. 70-74.
9. De, A,K., Dasgupta, P,K., Panda, B,K., Bhattacharya, A,K. (1982). Physical efficiency tests on Indian male "Kabaddi" inter-university players. *Br J Sports Med.*;16(1):33-6.
10. Devendrakumar kansal K. (2008) *Textbook of applied measurement evaluation and abortsselection sports and spiritual: science publications*. New delhi – 110059 India. P 290.