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Effect of Yogic Practices on Blood Pressure among Physical Education Students

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Abstract

The purpose of the study was to investigate the effect of yogic practices on blood pressure among physical education students. In this study, 30 students from Sri Sarada College of Physical Education for Women, Salem were selected as the subjects for this study. They were divided into two groups of fifteen each and assigned as control and experimental group. Experimental treatment was applied only to the experimental group for a period of six weeks. The control group was not given experimental treatment. The yogic practices was given thrice a week. After six weeks the final performance of both the control and experimental groups were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by 't' test. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 1 and 14. It was observed that the experimental group showed significant reduction in blood pressure.

Keywords: Yogic practices, Blood pressure.

Introduction

Yoga has been practiced in India for over two millennia. Stories and legends from ancient times testify to the existence of yoga, and to the practitioners and divinities associated with it. Indian literature is a storehouse of knowledge about yoga covering every conceivable level. Roughly in chronological order are the vocals (books of Scriptural knowledge), the upanishada (philosophical cosmologies), and their commentaries then the puranas (ancient cosmologies), and the two epics, the ramayana and the mahabharatha. The mahabharatha contains within itself that masterpiece of indian scripture the bhagavad gita. Towards the end of vedic period comes the aphoristic literature, with the "yoga aphorisms" of patanjali of special interest to yoga students. These are, besides, whole bodies of works both ancient (Pre-Christian) and more modern dealing with various aspects of yoga and yoga philosophy, testifying to the continued relevance of yoga as a discipline. Yoga has a hoary past. The importance for the spiritual attainment has been recognized throughout the ages by all the systems of Indian philosophy. There is no doubt that the essence of yoga has been considered in the spiritual upliftment of man. One may question as to how then yoga is related to the physical education and whether yoga will not be pulled down from its highest pedestal in doing this. It is necessary, therefore, to clear the concepts of yoga and physical education first (Seamus, 2001).

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Methodology

The purpose of the study was to investigate the effect of yogic practices on blood pressure among physical education students. In this study, 30 students from Sri Sarada College of Physical Education for Women, Salem were selected as the subjects for this study. They were divided into two groups of fifteen each and assigned as control and experimental group. Experimental treatment was applied only to the experimental group for a period of six weeks. The control group was not given experimental treatment. The yogic practices was given thrice a week. After six weeks the final performance of both the control and experimental groups were taken. The significant differences between the means of experimental group and control group for the pre-test and post-test scores were determined by 't' test. The level of significance was fixed at 0.05 level of confidence for the degree of freedom 1 and 14.

Results

TABLE I
DESCRIPTIVE ANALYSIS OF PRE AND POST TEST MEANS OF EXPERIMENTAL AND CONTROL GROUP ON BLOOD PRESSURE.

Variables	Pre Test Mean	Post Test Mean
Systolic blood pressure	Exp:139.40	Exp:130.93
	Con:139.27	Con:138.47
Diastolic blood pressure	Exp:89.47	Exp:81.20
	Con:89.33	Con:89.00

TABLE II
COMPUTATION OF't' RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF SYSTOLIC BLOOD PRESSURE OF EXPERIMENT GROUP

S. No	Variables	Mean diff	SD	σ DM	't' ratio
2	**Systolic blood pressure**	**8.46**	**1.36**	**0.35**	**24.19***

Significant at 0.05 level

An examination of table II indicates that the obtained't' ratio was 24.19 for systolic blood pressure of experimental group. The obtained't' ratio on systolic blood pressure were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that 6 of weeks practice of pranayama produced a significant mean lose in systolic blood pressure. Hence the formulated hypothesis related to this was accepted in blood pressure. The mean scores of systolic blood pressure of experimental group were shown graphically in figure I.

FIGURE I
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF SYSTOLIC BLOOD PRESSURE OF EXPERIMENTAL GROUP

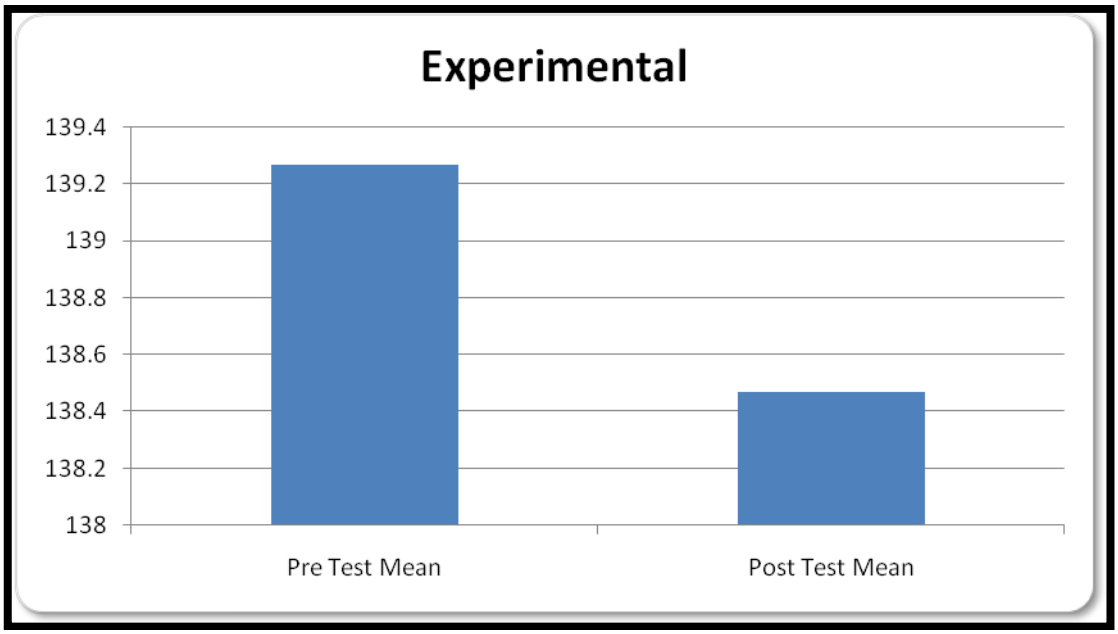


TABLE III
COMPUTATION OF‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF SYSTOLIC BLOOD PRESSURE OF CONTROL GROUP

S. No	Variables	Mean diff	SD	σ DM	‘t’ ratio
3	Systolic blood pressure	0.80	1.52	0.39	2.03

Significant at 0.05 level

An examination of table III indicates that the obtained‘t’ ratios were 2.03 for systolic blood pressure of control group. The obtained‘t’ ratio on systolic blood pressure were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of systolic blood pressure of control group were shown graphically in figure II.

FIGURE II
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF SYSTOLIC BLOOD PRESSURE OF CONTROL GROUP

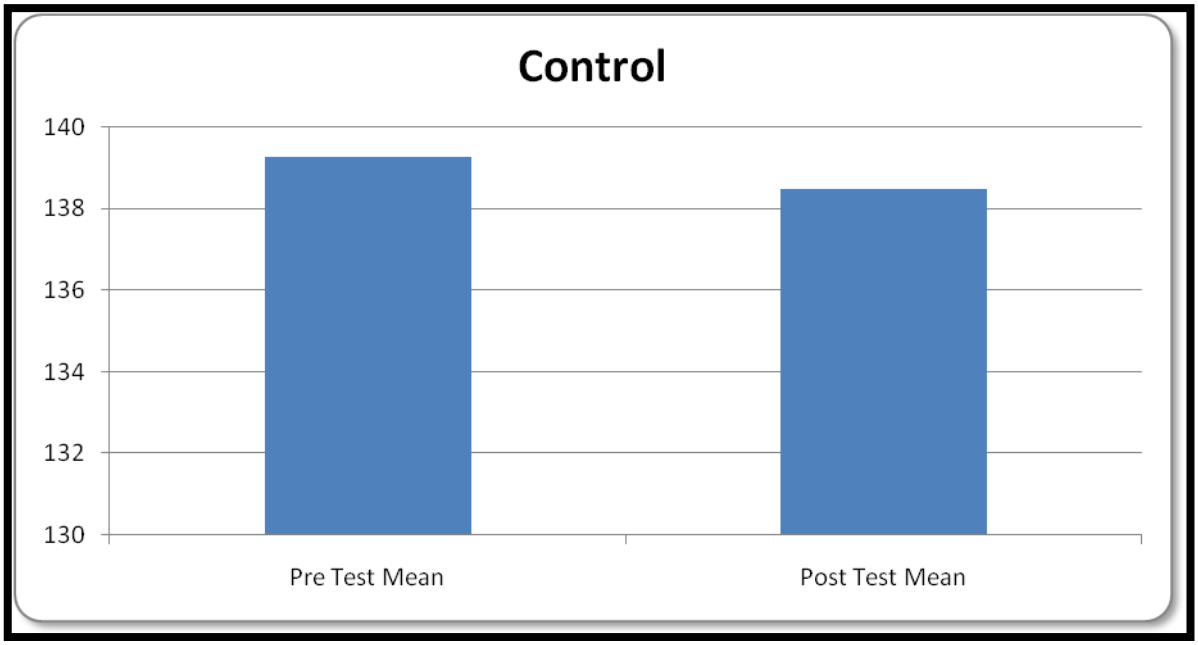


TABLE III
COMPUTATION OF‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF DIASTOLIC BLOOD PRESSURE OF EXPERIMENT GROUP

S. No	Variables	Mean diff	SD	σ DM	‘t’ ratio
4	Diastolic blood pressure	8.27	1.22	0.32	26.18*

Significant at 0.05 level

An examination of table III indicates that the obtained‘t’ ratios were 26.18 for diastolic blood pressure. The obtained‘t’ ratio on diastolic blood pressure were found to be greater than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be significant. The results of this study showed that 6 of weeks practice of pranayama produced a significant mean lose in diastolicblood pressure. Hence the formulated hypothesis related to this was accepted in blood pressure. The mean scores of diastolic blood pressure of experimental group were shown graphically in figure III.

FIGURE III
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF SYSTOLIC BLOOD PRESSURE OF EXPERIMENTAL GROUP

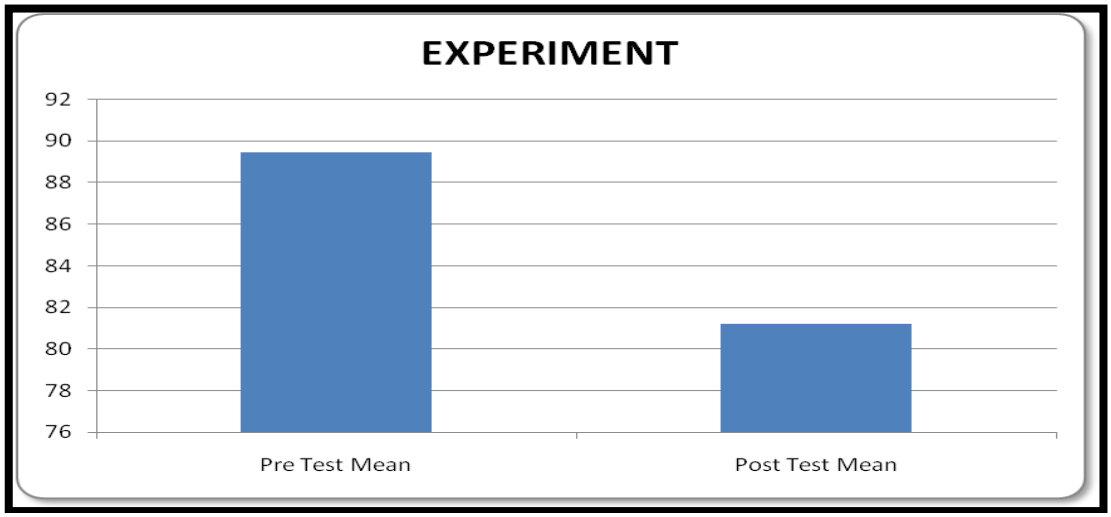


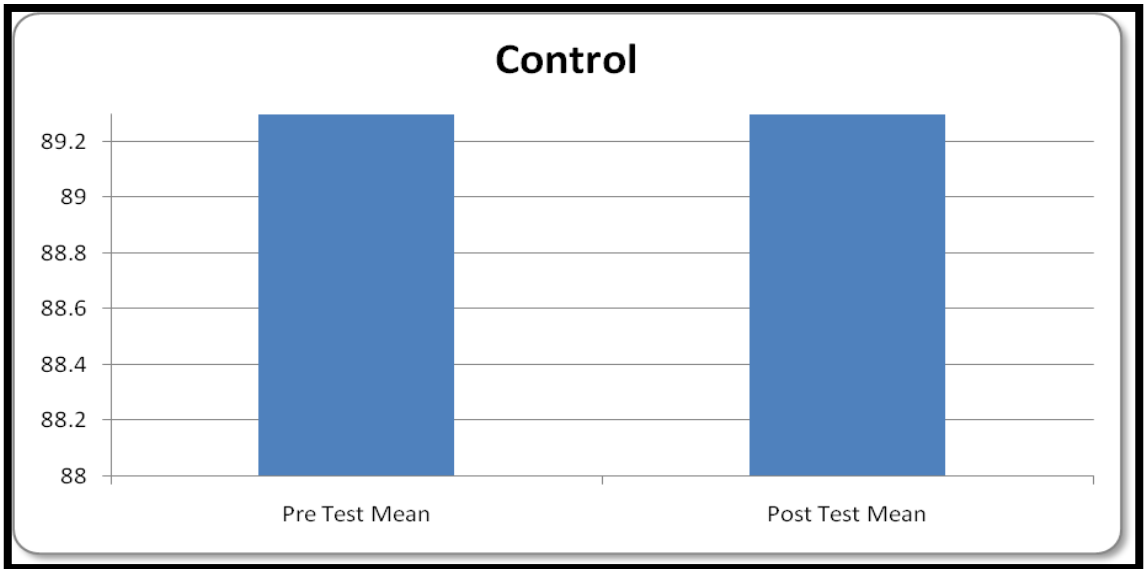
TABLE IV
COMPUTATION OF't' RATIO BETWEEN THE PRE TEST AND POST TEST MEANS OF DIASTOLIC BLOOD PRESSURE OF CONTROL GROUP

S. No	Variables	Mean diff	SD	σ DM	't' ratio
5	Diastolic blood pressure	0.33	0.72	0.187	1.78

Significant at 0.05 level

An examination of table IV indicates that the obtained't' ratios was 1.78 for diastolic blood pressure. The obtained't' ratio on diastolic blood pressure were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 14 degrees of freedom. So it was found to be not significant. The mean scores of systolic blood pressure of control group were shown graphically in figure IV.

FIGURE IV
BAR DIAGRAM SHOWING THE PRE MEAN AND POST MEAN OF DIASTOLIC BLOOD PRESSURE OF CONTROL GROUP



Conclusion

1. It was observed that the experimental group showed significant reduction in blood pressure.

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