

# REVIEW OF RESEARCH

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## THE EFFECT OF YOGASANA ON BLOOD PRESSURE VARIABLES OF GIRLS STUDENTS

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#### **ABSTRACT**

The purpose of the study was to find out the Effect of Yogasana on Blood Pressure Variables of High School Girls Students. To facilitate the study, 40 subjects were selected at random from high schools of Vijayapura city. The target subjects are the girls high school students and having their age in the range of 14-16 years old. The subjects are classified into two groups one is control group which is not exposed to any treatment and other one is experimental group which is exposed to yoga training treatment. Before carry out the treatment, all the subjects were tested and their initial scores are measured and recorded



on the Blood Pressure Variables of the students. Later yogasana treatment is given for experimental group for four weeks and by keeping the control group constant. Finally, all the Blood Pressure Variables such as Systolic blood pressure and Diastolic blood pressure are tested and scores are recorded. Later, collected data was put into the statistical treatment using Analysis of Covariance (ANCOVA) to find out the significant mean differences. The study reveals that yoga training played vital role in decreasing the Systolic blood pressure and Diastolic blood pressure of the students. So, it can be concluded that Yogasana made significant impact on the control of Blood Pressure Variables of the high students under study.

**KEYWORDS**: Yogasana, Blood pressure. Systolic and Diastolic Blood Pressure.

#### **INTRODUCTION**

Yoga is physical, mental and spiritual practice aimed for attaining permanent peace within. This practice for permanent inner peace originated in ancient India and it also belongs to the six schools of Hindu philosophy or six "astika". Yoga is also considered as a form of exercise because of its physical forms and postures that has physical benefits to the body and it is also considered as meditation because of the mental and emotional benefits. It gives as well as it is also considered spiritual because it involves getting in touch with your spirit or beyond physical nature. This is why yoga is known as a combination of physical, mental and spiritual exercise and development or creating union with your inner self which can benefit life.

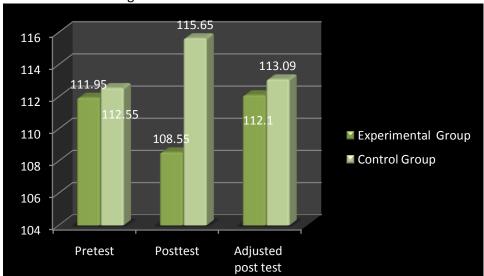
The word yoga means 'unity' or 'oneness' and is derived from the Sanskrit word yug, which means 'to join'. This unity or joining is described in spiritual terms as the union of the individual consciousness with the universal consciousness. On a more practical level, yoga is a means of balancing and harmonizing the body, mind and emotions. This is done through the practice of asana, pranayama, mudra, bandha, shatkarma and meditation, and must be achieved before union can take place with the higher reality.

#### **METHODOLOGY**

The purpose of the study was to find out the Effect of Yogasana on Blood Pressure Variables of High School Girls Students, for the present study the experimental research design was employed where in treatment is applied to study the cause and effect of the treatment. To carry out the study, 40 subjects were selected at random from high schools of Vijayapura city. The target subjects are the girls high school students and having their age in the range of 14-16 years old. The subjects are classified into two groups one is control group which is not exposed to any treatment and other one is experimental group which is exposed to yoga training treatment. Before carry out the treatment, all the subjects were tested and their initial scores are measured and recorded on the Blood Pressure Variables of the students. Later yogasana treatment is given for experimental group for four weeks and by keeping the control group constant. Finally, all blood pressure variables such as Systolic blood pressure and diastolic blood pressure are tested and scores are recorded. Later, collected data was put into the statistical treatment using Analysis of Covariance (ANCOVA) to find out the significant mean differences. The study reveals that yoga training played vital role in decreasing the Systolic blood pressure and diastolic blood pressure of the students. So, it can be concluded that Yogasana made significant impact on the control of blood pressure variables of the high students under study.

Analysis of Covariance of Performance of Systolic of High School Students

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Variable	Test		Experimental	Control	SOV	Sum of the	Df	Mean	F —		
			Group	Group		Square		Square	ratio		
	Pretest	Mean	111.9500	112.5500	В	3.600	1	3.600	.055		
		SD	8.61135	7.46553	W	2467.900	38	64.945			
systolic	Posttest	Mean	108.5500	115.6500	В	504.100	1	504.100	6.040*		
		SD	9.52269	8.73152	W	3171.500	38	83.461			
	Adjusted	Mean	112.100	113.09	В	507.878	1	507.878	5.896*		
	post test	SD	8.856	8.012	W	3164.589	37	85.529			



\*significance  $\alpha = .05$  Table value = 4.08

Table- 8 Shows that the pre test means scores of Systolic level of control and experimental groups of high school girl students. It is observed that mean scores of pretest of control and experimental groups of high school girl students are 111.9500 and 108.5500 and their standard deviation are. 8.61135 and 7.46553 respectively. The obtained 'F' Ratio value is (  $F=.005\,1,38,\,\alpha=.05$ ) .005 at. 5% level of significance, which is much less than the table value (F=4.08), hence the null hypothesis is accepted, it can be concluded that

Systolic level between the experimental group and control group found almost similar among the high school girl students.

Further, it is observed that mean scores of post test of control and experimental groups of girl high school students are 108.5500 and 115.6500 and their standard deviation are 9.52269 and 8.73152 respectively. The obtained 'F' Ratio value is (  $F=6.040\,1,38,\,\alpha=.05$ ) at 6.040 5% level of significance, which is much more than the table value (F=4.08), hence the null hypothesis is rejected and alternative hypothesis is accepted. It can be concluded that there is significant difference found between the experimental group and control group with respect to Systolic level of high school girl students. This indicates that Systolic level is more among the control group when compared to the experimental group. Finally it can be analyzed that yoga treatment has made significant impact to control the Systolic level of the high school girl students.

The adjusted post test means scores on Systolic of the control and the experimental groups are 112.100 and 113.09 respectively and their standard deviation are 8.856 and 8.012 respectively. The obtained 'F' Ratio value is (  $F=5.896\,1,37,\,\alpha=.05$ ) 5.896 at 5% level of significance, which is much is higher than the table value (F=4.08), hence the null hypothesis is rejected and alternative hypothesis is accepted. It can be concluded that there is significant difference is found between experimental group and control group with respect to Systolic level of high school girl students.

**Analysis of Covariance of Performance of Diastolic of High School Students** 

Analysis of Covariance of Ferformance of Diastone of Fight School Students											
Variable	Test		Experimental	Control	SOV	Sum of the	Df	Mean	F –ratio		
			Group	Group		Square		Square			
	Pretest	Mean	74.4000	75.2000	В	6.400	1	6.400	.313		
		SD	4.66115	4.38418	W	778.000	38	20.474			
Diastolic	Posttest	Mean	69.5500	80.2000	В	1134.225	1	1134.225	24.683*		
		SD	5.82621	7.61301	W	1746.150	38	45.951			
	Adjusted	Mean	74.875	74.800	В	1043.140	1	1043.140	24.792*		
	post test	SD	6.235	7.231	W	1556.815	37	42.076			

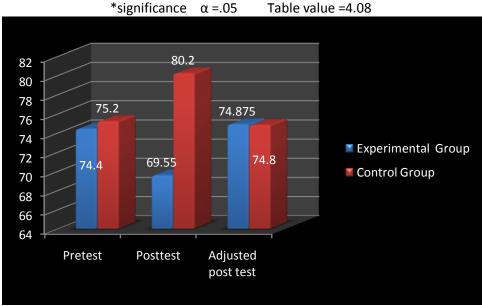


Table- 8 Shows that the pre test means scores of Diastolic level of control and experimental groups of high school girl students. It is observed that mean scores of pretest of control and experimental groups of girl high school students are 74.4000 and 69.5500 and their standard deviation are. 4.66115 and 4.38418 respectively. The obtained 'F' Ratio value is ( F = .313 1.38,  $\alpha = .05$ ). .313 at 5% level of significance, which is

less than the table value (F=4.08), hence the null hypothesis is accepted, it can be concluded that Diastolic level between the experimental group and control group found almost similar high school girl students.

Further, it is observed that mean scores of post test of control and experimental groups of girl high school students are 69.5500 and 80.2000 and their standard deviation are 5.82621 and 80.2000 respectively. The obtained 'F' Ratio value is (  $F=24.683\ 1,38,\ \alpha=.05$ ) at 24.683 5% level of significance, which is much more than the table value (F=4.08), hence the null hypothesis is rejected and alternative hypothesis is accepted. It can be concluded that there is significant difference found between the experimental group and control group with respect to Diastolic level of high school girl students. This indicates that Diastolic level is more among the control group when compared to the experimental group. Finally it can be concluded that yoga treatment has made significant influence on the control of Diastolic level of the high school girl students.

The adjusted post test means scores on Diastolic of the control and the experimental groups are 74.875 and 74.800 respectively and their standard deviation are 6.235 and 7.231 respectively. The obtained 'F' Ratio value is (  $F=24.792\ 1,37,\ \alpha=.05$ ) 24.792 at 5% level of significance, which is much higher than the table value (F=4.08), hence the null hypothesis is rejected and alternative hypothesis is accepted. It can be concluded that there is significant difference is found between the experimental group and control group with respect to Diastolic level of high school girl students.

## **MAJOR FINDINGS OF THE STUDY**

- 1. Pre test means scores of systolic blood pressure level of control and experimental groups of high school girl students is found to be similar.
- **2.** Post test means scores found significant difference found between the experimental group and control group with respect to systolic blood pressure level of high school girl students.
- **3.** The adjusted post test means scores on systolic blood pressure of the control and experimental groups found to be significant.
- **4.** Pre test means scores of Diastolic Blood Pressure level of control and experimental groups of high school girl students is found to be similar.
- **5.** Post test means scores found significant difference found between the experimental group and control group with respect to Diastolic Blood Pressure level of high school girl students.
- **6.** the adjusted post test means scores on Diastolic Blood Pressure level of the control and experimental groups found to be significant.

# 7. CONCLUSION:

The purpose of the study was to find out the Effect of Yogasna on Blood Pressure Variables of High School Girls Students. To facilitate the study, 40 subjects were selected at random from high schools of Vijayapura city. The target subjects are the girls high school students and having their age in the range of 14-16 years old. Later yogasana treatment is given for experimental group for four weeks and by keeping the control group constant. Finally, all the Blood Pressure Variables such as systolic blood pressure and Diastolic Blood Pressure are tested and scores are recorded. Later, collected data was put into the statistical treatment using Analysis of Covariance (ANCOVA) to find out the significant mean differences. Finally the study, reveals that yoga training played vital role in decreasing the systolic blood pressure and Diastolic Blood Pressure of the students. So, it can be concluded that Yogasana made significant impact on the control of Blood Pressure Variables of subjects.

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