



EFFECT OF YOGASANA AND PRANAYAMA ON PHYSICAL AND PSYCHOLOGICAL VARIABLES OF RESIDENTIAL SECONDARY SCHOOL OF VIJAYAPURA"

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ABSTRACT

Yoga is practiced through the various breathing exercises, postures, and meditation. Although mankind has entered in a new era and in a well advanced hi-tech medical facilities which makes life more comfortable, the expected quality of life still seems to be far from reality. Problems like stress, anxiety, restlessness, nervous breakdown, other stress related ailments, fatigue breaking up of families, suicides are all on an exponential rise.

KEYWORDS: breathing exercises, postures, and meditation.

INTRODUCTION

The frustrated patients are now moving towards alternative non-scientific therapies for a better living. Yoga with its multi fold advantages is gaining popularity in all parts of the world.

Meaning of yoga

The science yoga works on physical, mental, emotional, psychological and spiritual aspects of a person. When imbalance is experienced at this level, the organs, and muscles and nerves no longer functions in harmony, rather they are in opposition to each other. Therefore yoga aims at bringing the different body functions into perfect co-ordination so that they work for the good of the whole body. Yoga has a complete message for humanity. It is a message for the human body, human mind and human soul. (Swami kavalayananda,1997)

Meaning of Pranayama

Pranayama is a Sanskrit word which consists of prana and ayama. Prana means self-energizing life forces and ayama means extension. Pranayama may be defined as expansion and control of prana through various yogic techniques. In a simple way, we can say that Pranayama is a combination of systematic exhalation and inhalation.

Statement of the Problem:

Effect of Yogasana and Pranayama on Physical and Psychological Variables of Residential secondary school of Vijayapura"

Objectives:

- To find out the effects of yoga asana on physical and psychological variables.



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- To find out the effects of Pranayama on physical, and psychological variables.
 - To find out the combined effects of Yogasana and Pranayama on physical and psychological variables.
 - To explore the Yogasana and Pranayama, its improvement on combination of physical, and psychological variables of school children.

Hypothesis:

- It was hypothesized that the training of Yogasana and Pranayama would lead to improve the agility of school children.
- It was hypothesized that the training of Yogasana and Pranayama would lead to improve the flexibility of school children.
- It was hypothesized that the training of Yogasana and Pranayama would lead to remove the stress of school children.
- It was hypothesized that the training of Yogasana and Pranayama would lead to remove the anxiety level of school children.

Delimitation:

- The study was delimited to selected females as subjects of the study.
- The study was delimited to 80 as subjects for the study.
- In this study the subjects age is delimited to 14 to 16 years school Children.
- The training schedule was delimited to 6 weeks.
- The data will be gathered in Vijayapura district of Karnataka state.

Limitation:

- No motivational techniques applied while testing and training of the subjects.
- The daily routine work of the subjects might influence results, this is considered as limitation.
- Day to day activities, rest period, food habits and life style could not be controlled this is also considered as limitation of the study.

Significance of the Study:

- 6 weeks of Yogasana and Pranayama training will be useful for improvement on physical, psychological variables of school children.
- The study will be useful for teachers and students to know yogic performance of the school children.
- will be useful for teachers and students to know psychological performance of the school children.

STRENGTH

Strength is defined as the maximal force that can be exerted in a single voluntary contraction. Most of us possess more strength than we are able to demonstration.

Muscular Strength

Muscular strength is the ability if a muscle or muscle group to exert a maximal force against a resistance one time through the full range of motion.

Muscular Endurance

Muscular endurance is the ability of a muscle or muscle group to exert a sub maximal force repeatedly over a period of time.

METHODOLOGY

In this chapter selection of subjects, selection of variables, orientation of subjects, selection of tests, and statistical techniques have been discussed in this chapter.

- Selection of Subjects :The purpose of the study was to be find out the "Effect of Yogasana and Pranayama on Physical and Psychological Variables of Residential School of Vijayapura"
- To achieve this purpose 80 female students selected as subjects for the study, in the age *group* ranging from 14 to 16 years.

Selection of variables:

- Dependent variable
 - Independent variable
- Dependent Variables.

Physical

- Muscular strength
- Flexibility

Psychological variables

- Stress
- Anxiety

Independent Variables

- 1.Yogasana
- 2.Pranayama

Table. No 4.3 Results of ANOCOVA test between effects of Control Group and Experimental Group on pre test and post test of Stress variables of Residential Secondary School of vijayapura .

Test		Experimental group	Control group	SOV	Sum of the square	DF	Mean squares	F	p-value	sig
Pre-test	Mean	183.5000	172.5000	B	2420.0	1	2420.000	2.687	.105	NS
	SD	19.17932	37.85939	W	70246.	78	900.590			
				Total	72666.	79				
Post-test	Mean	157.6000	172.3750	B	4366.013	1	4366.013	13.066	.001	S
	SD	11.08892	23.35203	W	26062.975	78	26062.975			
				Total	30428.988	79	30428.988			
Post-adjust test	Mean	157.047	172.251	B	4390.841	1	4390.841	12.890	.001	S
	SD	27.18028	26.38278	W	25889.542	76	340.652			

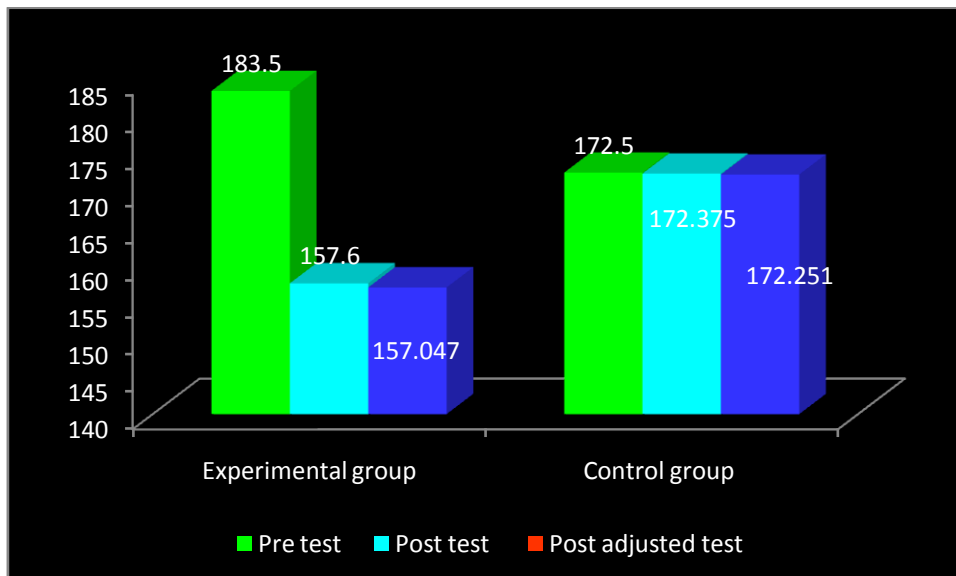
Table Value =2.81

The pre-test mean values on Stress for the Experimental group and control group is 183.5000 and 172.5000 respectively. The F ratio is 2.687 this reveals that there is no Statistical difference between the Experimental group and control group on Stress before the commencement of yogic Exercises training. It is inferred that the random selection of the subjects for the two groups are successful.

The post-test mean values on Stress for the Experimental group and control group is 157.6000 and 172.3750 respectively. The F ratio is 13.066 the adjusted post test mean values of Experimental group and control group is 157.047 and 172.251 respectively. The F ratio is 12.890 the result of the study indicates that

the calculated values are higher than table value in post –test and adjusted post –test. The post test Stress performance is more than the Stress performance. These are significant difference between the Experimental group and the control group on Stress.

Figure4.3(c) pre test ,post test and post adjusted test performance of Stress.



The above figure 4.3 (c) indicates that the post test values of experimental group and post adjusted test significantly decreases the level of Stress and also the post test values of Stress were lower than the pre test values due to 6 weeks of yogic exercises training. the control group pre test and post test performance Stress shows no improvement.

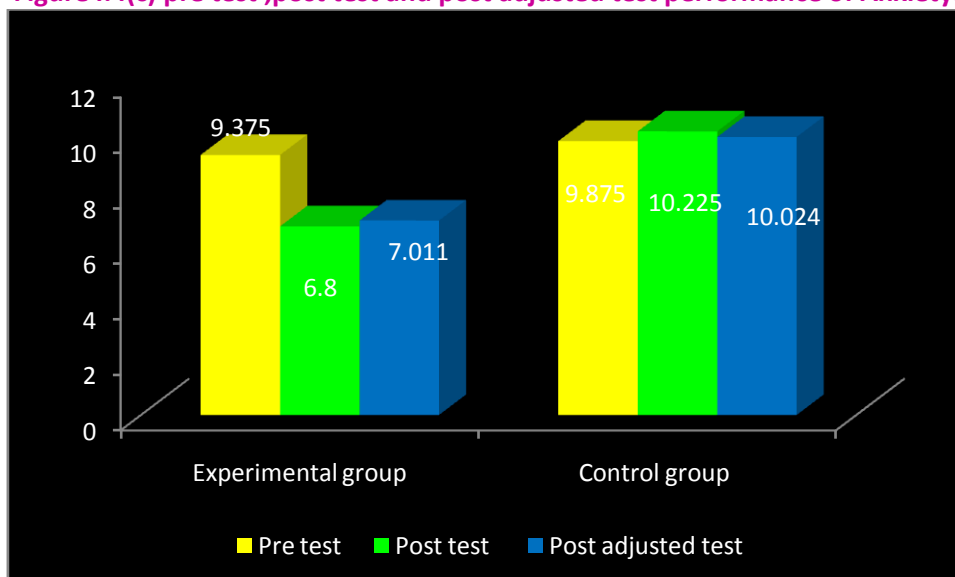
Table. No 4.4 Results of ANOCOVA test between effects of Control Group and Experimental Group on pre test and post test of Anxiety variables of Residential Secondary School of vijayapura .

Test		Experimental group	Control group	SOV	Sum of the square	DF	Mean squares	F	p-value	sig
Pre-test	Mean	9.3750	9.8750	B	5.000	1	5.000	.750	.389	NS
	SD	2.26101	2.86614	W	519.750	78	6.663			
				Total	524.750	79				
Post-test	Mean	6.8000	10.2250	B	234.612	1	234.612	46.998	.000	S
	SD	2.00256	2.44412	W	389.375	78	389.375			
				Total	623.988	79	623.988			
Post-adjust test	Mean	7.011	10.024	B	179.725	1	179.725	342.831	.000	S
	SD	1.38	1.38	W	39.842	76	.524			

The pre-test mean values on Anxiety for the Experimental group and control group is 9.3750 and 9.8750 respectively. The F ratio is .750 this reveals that there is no Statistical difference between the Experimental group and control group on Anxiety before the commencement of yogic Exercises training. It is inferred that the random selection of the subjects for the two groups are successful.

The post-test mean values on Anxiety for the Experimental group and control group is 6.8000 and 10.2250 respectively. The F ratio is 46.998 the adjusted post test mean values of Experimental group and control group is 7.011 and 10.024 respectively. The F ratio is 342.831 the result of the study indicates that the calculated values are higher than table value in post –test and adjusted post –test. The post test Anxiety performance is less than the pre test Anxiety performance. These are significant difference between the Experimental group and the control group on Anxiety.

Figure4.4(c) pre test ,post test and post adjusted test performance of Anxiety.



The above figure 4.4 (d) indicates that the post test values of experimental group and post adjusted test significantly decreases the level of anxiety and also the post test values of anxiety were lower than the pre test values due to 6 weeks of yogic exercises training. the control group pre test and post test performance anxiety shows no improvement.

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The purpose of the study was to investigate the Effect of Yogasana and pranayama on physical and psychological variables of residential secondary school of vijayapura. The researcher selected physical variables muscular strength , flexibility and psychological variables stress, anxiety .Six weeks of yogasana and pranayama training were given to 80 female school children subject before training the researcher conducted pre-test performance on physical and psychological variables. The Performance of the pre-test was recorded. After the 6weeks of yogasana and pranayama training the post-test performance was recorded on physical and psychological performance. The result of post-test performance indicates significant improvements.

CONCLUSIONS:

- Based on the findings the following conclusions were drawn from the present study.
- Six weeks yogasana training has shown significant improvement on Physical and Psychological Performance variables of the subject.
- Six weeks of pranayama training has shown significant improvement on Physical and Psychological Performance variables of the subject.

RECOMMENDATIONS:

- **Based on the results** of the study the following recommendations were drawn by the investigator.

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- The result of the study may help the physical education teachers to improve the physiological and psychological performance variables of the students.
 - Coaches/trainers can utilize the outcome of the study in their training programme.
 - Similar study may be conducted to examine the effect of yogasana and pranayama on physical and psychological variables for the different age groups.
 - Similar study may be conducted to examine the effect of yogasana and pranayama on physiological variables for the different age groups.
 - Further similar researcher may be undertaken considering secondary school girls students.
 - Similar study may be replicated with medium duration different intensities of the training other than mentioned in the present study.
 - Continuous and regular meditation and aerobic exercises programme, in an organized manner has to be suggested for the participant to obtain desired results in their physiological and psychological variables.
 - Similar studies may be conducted on sports persons and non sports persons.
 - Similar studies may be conducted on rural and urban area students.
 - For the development of physiological psychological performance meditation and aerobic training programme may be included in the physical education curriculum.