EFFECT OF SUN SALUTAION WITH VIDEO VISUALIZATION ON SELECTED HEALTH RELATED PHYSICAL FITNESS VARIABLES OF STUDENTS WITH HEARING IMPAIRMENT.

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ABSTRACT

To achieve the purpose of the study to find out the effect of sun salutation with video visualization on selected health related physical fitness variables of students with hearing impairment in Coimbatore district, 15 students from Kaumaran prashanthi school and 15 students from Infant Jesus school selected to evaluate in the study from Coimbatore, district, Tamil Nadu. Their age ranged from 10 to 17 years. The investigator and two qualified physical educationists conducted all of the testing procedures. To test the significance of changes made on both the groups, independent's' test was applied. The significance of the means of the obtained test results was tested at 0.05 level of confidence. The analysis of the data revealed that there is a significant difference between endurance, leg explosive power and flexibility of students with kaumaran prashanthi school boys and Infant Jesus school boys.

Key words: Sun salutation, Physical fitness, endurance, leg explosive power, flexibility

INTRODUCTION

The term "Hearing impaired" is a technically accurate description of someone who is hard of hearing or who has no hearing. However many deaf hard of hearing and late deafened people prefer not be called impaired they do not want to be primly defined by lack (or poor) hearing..While it is true that their hearing is not perfect that does not make them impaired as people most would prefer to be called Deaf, Hard of hearing or deaf when the need arises to refer to their hearing status, but not as a primary way to identify them as people(where their hearing statue is not significant..Hearing loss in children is often a silent and hidden handicap. Children with hearing loss frequently appear to be normal, and often their handicaps are not apparent. Hearing loss that is undetected and untreated can result in speech, language, and cognitive delays. Early identification and intervention with hearing inquired child improve language, communication, and cognitive skills. Sudden or progressive sensorineural hearing loss accompanied by dizziness following barotrauma should prompt

consideration of traumatic perilymph fistula. Early surgical exploration is recommended to improve hearing and vestibular symptoms.

SUN SALUATION

Sun salutation, also known as Surya Namaskar, is an ancient method consisting of a sequence of yoga asanas or positions performed to reverence the sun. The sun has always been revered throughout human history, and in Hindu mythology, the Sun-God, or Surya, is a symbol of good health and eternal life. According to the Rig Veda, the sun is the soul of both moving and non-moving entities.Surya Namaskar steps are divided into twelve postures or asanas performed one after the other in order. The asanas stretch the body while contracting and extending the chest alternately to control respiration. Surya Namaskar Yoga improves the flexibility of the spine and joints and the body's ability to shed excess fat when practised regularly. It also helps warm up the body in preparation for various asanas and yoga activities

PHYSICAL FITNESS

Physical fitness is one of the main mottos of physical education programmer. Physical fitness is defined as the ability of the body to adapt and recover from strenuous exercises. The sports performance depends largely on physical fitness, i.e., Strength, speed, endurance, flexibility and various coordinative abilities. The process of improvement of motor abilities is also called conditioning. Physical fitness is a matter of fundamental importance to the well-being of every individual in the field of physical education.

METHODOLOGY

To achieve the purpose of the study to find out the effect of sun salutation with video visualization on selected health related physical fitness variables of students with hearing impairment in Coimbatore district, 15 students from Kaumaran prashanthi school and 15 students from Infant Jesus school selected to evaluate in the study from Coimbatore, district, Tamil Nadu. Their age ranged from 10 to 17 years. The investigator and two qualified physical educationists conducted all of the testing procedures. To test the significance of changes made on both the groups, independent's' test was applied. The significance of the means of the obtained test results was tested at 0.05 level of confidence. The analysis of the data revealed that there is a significant difference between endurance, leg explosive power and flexibility of students with kaumaran prashanthi school boys and Infant Jesus school boys.

TABLE-I

COMPUTATION OF'T' RATIO BETWEEN THE PRE TEST & POST TEST ON ENDURANCE FOR EXPERIMENTAL AND CONTROL GROUP

Group	Mean	MD	SD	Stan. Error of the Mean	DF	't'	Table value
Experimental group Pre-test	2545.00	72	233.33	52.17	19	2.43 *	2.09
Experimental group Post-test	2617.50		246.16	55.04			
Control group pre-test	2537.50	17.50	300.38	67.16	19	1.27	
Control group post-test	2520.00		288.09	64.42			

*significant at 0.05 level of confidence

Table –I shows that the pre-test and post test value of experimental group on endurance were 2545.0 and 2617.50 respectively. The obtained't' ratio was 2.43 which is higher than the required table value 2.09 and 0.05 level of significant for degrees of freedom 1 and 14. The pre-test &post test value of control group on endurance were 2537.50 and 2520.0 respectively. The obtained't' ratio was 1.27 which is lesser than the required table value 2.09 at 0.05 level of significant for degrees of freedom 1 and 14. Result shows that the experimental group had significant improvement on endurance due to the surya namaskar and the control group had insignificant difference on endurance due to insufficient training period.

FIGURE - I

BAR DIAGRAM SHOWING THE MEAN VALUES OF PRE & POST TEST ON ENDURANCE OF EXPERIMENTAL AND CONTROL GROUP

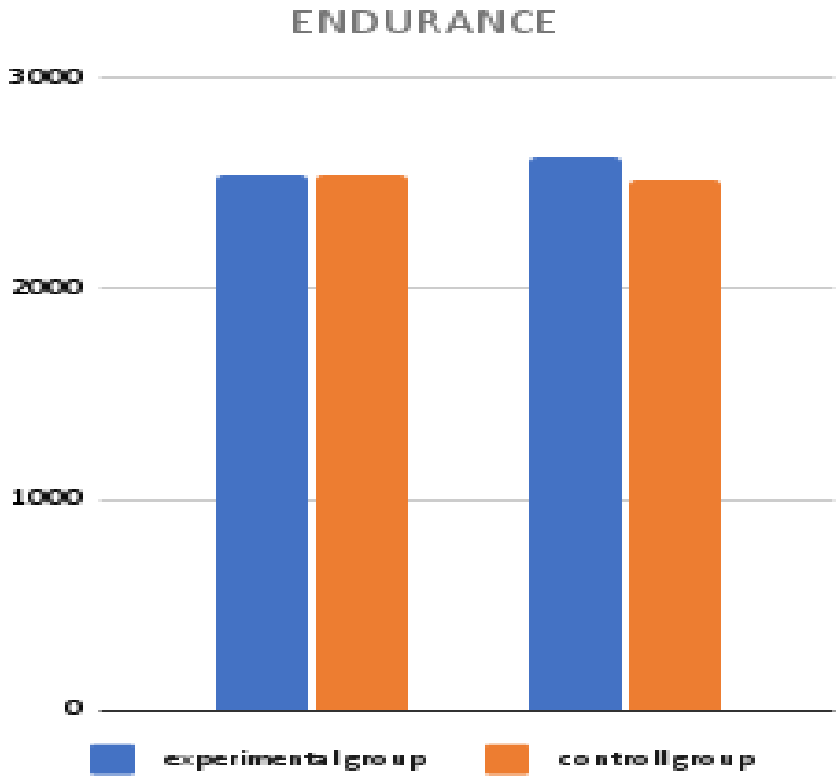

TABLE-II

COMPUTATION OF'T' RATIO BETWEEN THE PRE TEST & POST TEST ON LEG EXPLOSIVE POWER FOR EXPERIMENTAL AND CONTROL GROUP

Group	Mean	MD	SD	Stan. Error of the Mean	DF	't'	Table value
Experimental group Pre-test	2.00	0.24	0.26	0.05	19	6.42 *	2.09
Experimental group Post-test	2.20		0.25	0.05			
Control group pre-test	1.94	0.01	0.23	0.07	19	0.19	
Control group post-test	1.93		0.33	0.07			

*significant at 0.05 level of confidence

Table –II shows that the pre-test and post test value of experimental group on leg explosive power were 2.00 and 2.20 respectively. The obtained‘t’ ratio was 6.42 which is higher than the required table value 2.09 and 0.05 level of significant for degrees of freedom 1 and 14. The pre-test and post test value of control group on leg explosive power were 1.94 and 1.93 respectively. The obtained‘t’ ratio was 1.27 which is lesser than the required table value 2.09 at 0.05 level of significant for degrees of freedom 1 and 14. Result shows that the experimental group had significant improvement on leg explosive power due to surya namaskar and the control group had insignificant difference on leg explosive power due to insufficient training period.

FIGURE – II

BAR DIAGRAM SHOWING THE MEAN VALUES OF PRE & POST TEST ON LEG EXPLOSIVE POWER OF EXPERIMENTAL AND CONTROL GROUP

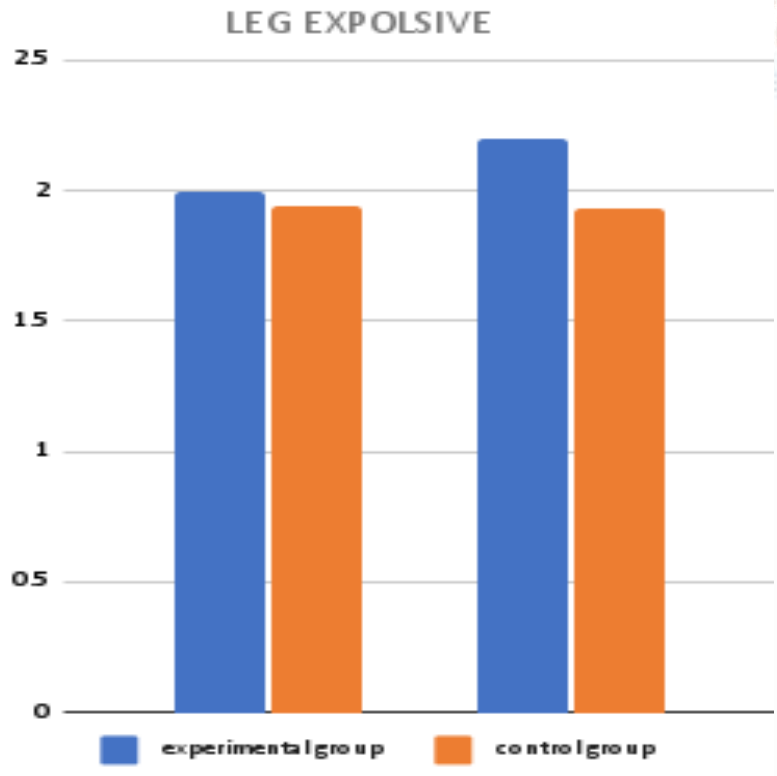

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TABLE-III

COMPUTATION OF'T' RATIO BETWEEN THE PRE TEST & POST TEST ON FLEXIBILITY FOR EXPERIMENTAL AND CONTROL GROUP

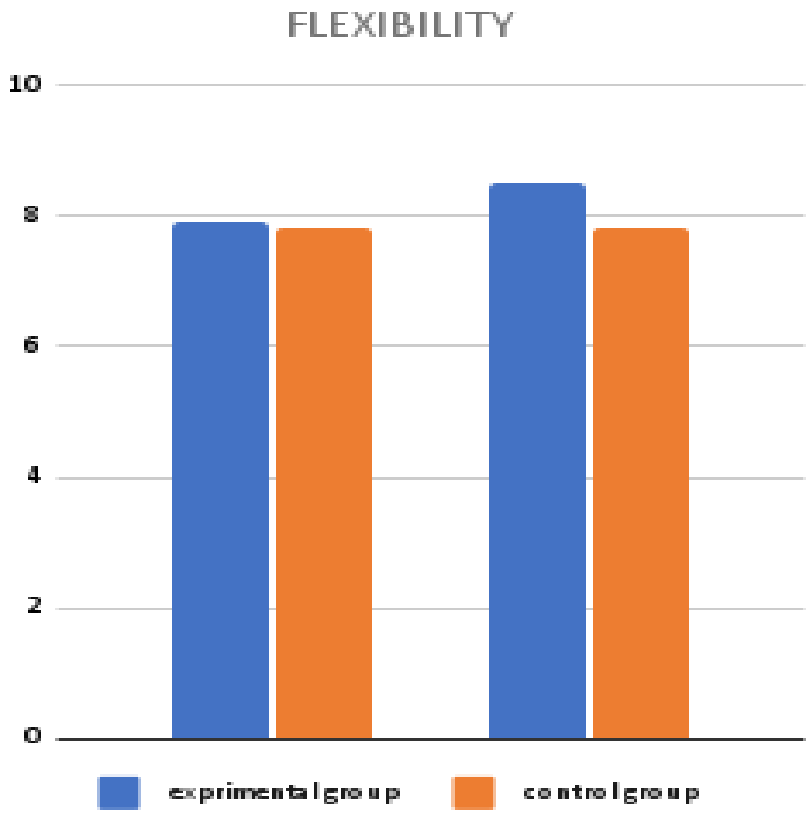
Group	Mean	MD	SD	Stan. Error of the Mean	DF	't'	Table value
Experimental group Pre-test	7.90	0.61	0.89	0.20	19	12.88 *	2.09
Experimental group Post-test	8.51		0.91	0.20			
Control group pre-test	7.81	0.89	0.91	0.20	19	0.09	
Control group post-test	7.81		0.88	0.19			

significant at 0.05 level of confidence

Table –III shows that the pre-test and post test value of experimental group on flexibility were 7.90 and 8.51 respectively. The obtained't' ratio was 12.88 which is higher than the required table value 2.09 and 0.05 level of significant for degrees of freedom 1 and 14. The pre-test &post test value of control group on flexibility were 7.81 and 7.81 respectively. The obtained't' ratio was 0.09 which is lesser than the required table value 2.09 at 0.05 level of significant for degrees of freedom 1 and 14. Result shows that the experimental group had significant improvement on flexibility due to surya namaskar and the control group had insignificant difference on flexibility due to insufficient training period.

FIGURE – III

BAR DIAGRAM SHOWING THE MEAN VALUES OF PRE & POST TEST ON FLEXIBILITY OF EXPERIMENTAL AND CONTROL GROUP



DISCUSSION ON FINDINGS

The study reveals that the eigth weeks of sun salutaion for the development of physical fitness variables.

It was further observed that there was significant improvement in the variables after the treatment. This improvement can be attribute to the systematic training given by the investigator on physical fitness variables.

DISCUSSION ON HYPOTHESIS

1. The first hypothesis says that the surya namaskar may be significant improvement on selected physical fitness variables of students with hearing impairment. The findings of the results show that there was a significant improvement on all the selected physical fitness variables such as endurance, leg explosive power and flexibility due to eigth weeks surya namaskar. Hence the first hypothesis was partially accepted.

2. The second hypothesis was says that surya namaskar may not be significant improvement on selected physical fitness variables. The findings of the results show that there was a significant improvement on all the selected physical fitness variables such as endurance, leg explosive power and flexibility due to eigth weeks surya namaskar. Hence the second hypothesis was rejected.

CONCLUSIONS

Within the limitation of the present study, the following conclusions were drawn.

1. The experimental group showed significant improvement on endurance.

2. The experimental group showed significant improvement on leg explosive power.

3. The experimental group showed significant improvement on flexibility.

4. The control group showed insignificant difference on all the selected physical fitness variables

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