



EFFECTS OF ADAPTED YOGIC PRACTICE ON BALANCE AND VITAL CAPACITY AMONG STUDENTS WITH HEARING IMPAIRMENT

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Abstract

The purpose of this study was to find out the effects of adapted yogic practice on balance and vital capacity among students with hearing impairment. The investigator selected 20 participation students from Industrial training institute SRKV, coimbatore-20. The subject's age ranged from 10 to 20 years. Group served as experimental group. The group was assigned as the adapted yogic training. The selected criterion variable balance tested with stroke stand and vital capacity tested with wet spirometer. The data was analysis by the use of dependent 't' ratio. The obtained' ratio was tested for significance at 0.05 level of confidence. The results of the study shows that there is a significant improvement in the balance and vital capacity by the application of adapted yogic training program.

KEYWORDS: Adapted yoga, Physical fitness, Physiological fitness, Hearing impairment

INTRODUCTION

The word "Yoga" is derived from the Sanskrit root word "Yuj" which means that "Union" with god". Yoga is a combination of physical, psychological, biological and spiritual discipline for achieving union and harmony among our mind, body and soul with ultimate union of our individual consciousness. (Iyengar,B.K.S.1981).

The word Yoga is derived from the Sanskrit root yui meaning to bind, join, attach and yoke, to direct and concentrate one's attentionon, to use and apply. It is the true union of our will with the will of God. It thus means, says Mahadev Desai in his introduction to the Gita according to Gandhi, the yoking of all the powers of body, mind and soul to God; it means the disciplining of the intellect, the mind, the emotions, the will, which that Yoga presupposes; it means a poise of the soul which enables one to look at life in all its aspects evenly.

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 to be called impaired they do not want to be primarily 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 the mass people where their hearing status is not significant.

Physical Fitness is generally defined as a set of abilities that an individual possesses in order to perform specific types of physical activity efficiently and effectively. Fitness includes the mental, emotional, social as well as the physical aspects and all these components of total fitness play a significant role for a full and happy life. Physical fitness is one's highest possession and it is a pathway to lead a healthy living. It has to be earned through a daily routine of physical exercises. **(Barrow and McGee, 1974)**

According to Hart (1964) "Physical fitness is the ability of a body to meet the demands placed upon persons fit by his works, by his way of life and by the necessity to meet emergency situations. It makes them feel mentally sharper, physically comfortable and ease with their body and better able to cope with the demands that everyday life makes upon them".

From Ancient Greek (*physis*), meaning "nature, origin", and *-λογία* (*-logia*), meaning "scientific study of normal function in living systems. A sub-discipline of biology, its focus is in how organisms, organ systems, organs, cells, and bio-molecules carry out the chemical or physical functions that exist in a living system. Given the size of the field it is divided into, among others, animal physiology (including that of human), plant physiology, cellular physiology, microbial physiology (see microbial metabolism), bacterial physiology, and viral physiology. Nobel Prize in Physiology or Medicine is awarded to those who make significant achievements in this discipline since 1901 by the Royal Swedish Academy of Sciences. In medicine, a physiologic state is one occurring from normal body function, rather than pathologically.

Physiology is the science of functioning of all the organs and systems of an organism. For the physiological system of the body to be fit, they must function well enough to support to specific activity that the individual is performing more over different activity make different demands upon the organism with respect to circulatory, respiratory, metabolic and neurologic process which are specific to the activity.

METHODOLOGY

To achieve the purpose of the study, twenty participants with Hearing impairment (N = 20) who were attending the Industrial training institute SRKV Coimbatore, were included in this study. Their age ranged from 15 to 18 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=20) were randomly assigned into two groups namely Group-I experimental group (n=10) and Group-II control group (n=10) of ten subjects each. Pre-test was conducted on selected balance and vital capacity for two groups. After pre-test the underwent eight weeks of Adapted Yogic practice training for 5 days per week for 60 minute per day and the control group was not given any specific training. After Eight weeks of training, post test was conducted and the readings were carefully recorded as post test score.

TABLE - I

COMPUTATION OF PAIRED ‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST MEANS BALANCE OF EXPERIMENTAL GROUP AND CONTROL GROUP

Variable	Group	Test	Mean	S.D	D.M	σ DM	‘t’
BALANCE	Experimental	Pre Test	2.573	1.13	1.686	0.701	2.40*
		Post Test	4.259	3.18			
	Control Group	Pre Test	2.850	0.58	0.019	0.132	
		Post Test	2.830	0.41			

*Significant at 0.05 level with df 9 Table value 2.26

It observes from the Table- I that the experimental group’s means value for pre test was 2.573 and post test was 4.259. The standard deviation for the pre test was 1.13 and post test 3.18. The mean difference for the pre test and post test was 1.686. The standard error of the difference between the mean was 0.701. It revealed that the obtained ‘t’ ratio 2.40* it was significant at 0.05 level of confidence. The results of the study indicated that there was a significant improvement in the balance due to adapted yogic practice training.

It may be seen that the control group’s mean value for pre test was 2.850 and post test was 2.830. the standard deviation for the pre test was 0.58 and post test 0.41. The mean difference for the pre test and post test was 0.019. The standard error of the difference between the mean was 0.132. It revealed that the obtained ‘t’ ratio 0.145 was insignificant at 0.05 level of confidence.

**FIGURE - I
BAR DIAGRAM SHOWING THE MEAN VALUE OF PRE AND POST TEST OF
EXPERIMENTAL GROUP AND CONTROL
GROUP ON BALANCE**

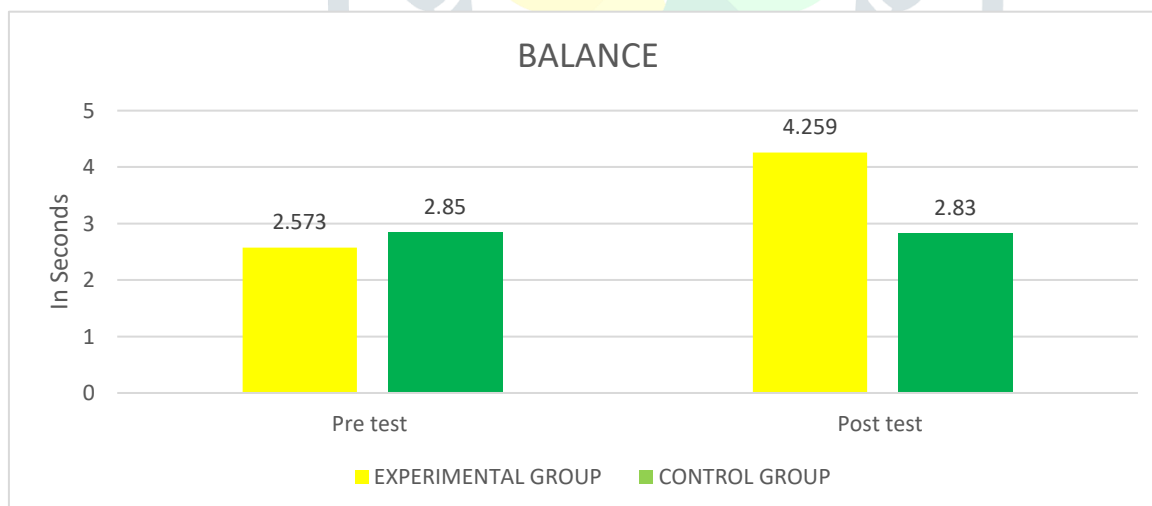


TABLE - II

**COMPUTATION OF PAIRED ‘t’ RATIO BETWEEN THE PRE TEST AND POST TEST
MEANS VITAL CAPACITY OF
EXPERIMENTAL GROUP AND
CONTROL GROUP**

Variable	Group	Test	Mean	S.D	D.M	σ DM	‘t’
VITAL CAPACITY	Experimental	Pre Test	3.075	0.23	2.70	3.091	8.734*
		Post Test	3.345	0.34			
	Control Group	Pre Test	2.670	0.404	0.50	1.166	
		Post Test	2.66	0.402			

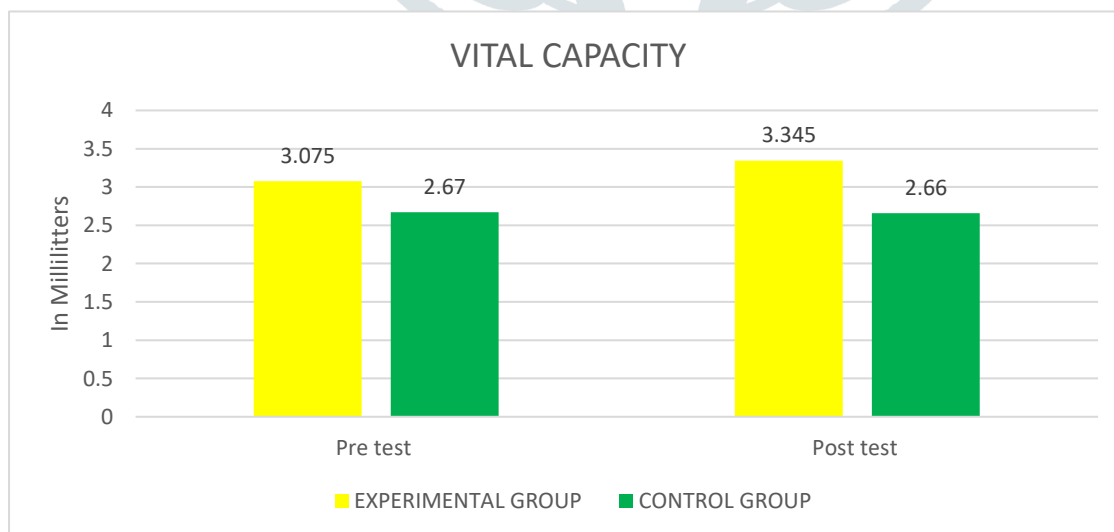
*Significant at 0.05 level of confidence

It observes from the Table-II that the experimental group’s means value for pre test was 3.075 and post test was 3.34. The standard deviation for the pre test was 0.23 and post test 0.34. The mean difference for the pre test and post test was 2.70. The standard error of the difference between the mean was 3.091. It revealed that the obtained ‘t’ ratio 8.734* it was significant at 0.05 level of confidence. The results of the study indicated that there was a significant improvement in the vital capacity due to adapted yogic practice training.

It may be seen that the control group’s mean value for pre test was 2.67 and post test was 2.66. The standard deviation for the pre test was 0.404 and post test 0.402. the mean difference for the pre test and post test was 0.50. The standard error of the difference between the mean was 1.166. It revealed that the obtained ‘t’ ratio 0.429 it was insignificant at 0.05 level of confidence.

FIGURE - II

**BAR DIAGRAM SHOWING THE MEAN VALUE OF PRE AND POST TEST OF
EXPERIMENTAL GROUP AND CONTROL
GROUP ON VITAL CAPACITY**



DISCUSSION ON FINDINGS

From the result of the study, it was found that the adapted yogic practice training significant improvement in the balance and vital capacity of student with hearing impairment. The result of the study is in consonance with the research done by **Ali and Hamed (2019)** and **Saminathan et al.**,

CONCLUSIONS

- There was a significant improvement on Balance between pre and post tests of experimental group as a result of 8 weeks of specific adapted yogic training programme.
- There was a significant improvement on Vital capacity between pre and post tests of experimental group as a result of 8 weeks of specific adapted yogic training programme.
- The control group did not improve criterion variables of balance and vital capacity.

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