

EFFECT OF YOGA ON FLEXIBILITY, REACTION ABILITY AND KINESTHETIC PERCEPTION OF DEAF AND DUMB STUDENTS

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ABSTRACT: *The study was to find out the effects of yoga on flexibility, reaction ability and kinesthetic perception of deaf and dumb students. The following components were taken as variables for the study flexibility, reaction ability, and kinesthetic perception. The subjects for this study were total 200 and age categories 12 to 14 years. The subjects of the study were selected at purposively. The computed by employing the statistics of 't' ratio at 0.05 level of significance with 58 degree of freedom. The experiment was conducted for a period of sixteen weeks. The subjects had undergone through selected Yogic asana, Pranayama and Omkar practices for 30 min and 4 days per week. Frequency, duration, and repetition of asanas pranayams and Omkars were determined in a steady progressive manner from the first day to last day of the treatment.*

Keywords: *flexibility, reaction ability, kinesthetic perception, Pranayama, Omkar.*

INTRODUCTION

Now –a –day's use of machine is very frequent and it also is a sign of development. But no machine is more sophisticated and better than the human machine (body and mind). So why not to use this God gifted finest machine for the progress of densely populated country like India.

Yoga; "Yogasacha citta vritti nirodha"

Modern living being is very fast. We are living under a big umbrella of stress, strain, anxiety, fear and frustration. At the result that we often fall victims to psychosomatic disease which adversely affects our feeling of wellbeing and improved quality of life. 80% of all modern disease have their origins in stress. Yoga is an only process their prevent and control them. Yoga refers to traditional physical and mental disciplines that originated in India. The world is associated with meditative practices in Hinduism it also refers to one of the six orthodox (aesthetic) school of Hindu philosophy, and to the goal towards which that school direct its practices. In Jainism yoga is the sum total of all activities mental, verbal and physical.

Human beings are not alike in every respect individual differ in respect of strength, speed Health and wellbeing. Liking or disliking, Interest, Concentration Motivation, Personality and in many other human traits. The difference may be less or greater in one or the other trait deaf and Dumb persons are exception.

the people of ancient Greece believed in the principle. "A sound mind in a sound body" the whole system of their education was based on this principle.

There are seven ways for the elimination of waste matter produced in the body by daily physical activities and functioning of the digestive system; i) through left and right nostrils ii) through left and right eyes iii) through left and right ears, iv) through the mouth v) through the anus vi) through genital vii) through the skin. Most diseases are the result of the absence of sufficient and regular elimination of waste matter such as urine and stool from the body. Yogic exercises help the process of elimination of waste matter from the body and keep them in perfectly sound health.

Materials and Methods

The subjects for this study were total 200 and age categories 12 to 14 years. The subjects of the study were selected at purposively. Computed by employing the statistics of 't' ratio at 0.05 level of significance with 58 degree of freedom. The experiment was conducted for a period of sixteen weeks. The subjects had undergone through selected Yogic asana, Pranayama and Omkar practices for 30 min and 4 days per week. Frequency, duration, and repetition of asanas pranayams and Omkars were determined in a steady progressive manner from the first day to last day of the treatment. For the true representation of the subjects the scholar selected them only from the Private Schools, since students of original natives of that particular area whose parents had been spanning the entire strata in terms of economic consideration belong to those schools. The subjects belonged to different socio-economic background. The flexibility was measured by the help of sit and reach test of each subject and the distance was recorded in nearest inch. The reaction time was measure by the help of Nelson hand reaction test of each subject and the time was recorded in centimeter. Kinesthetic perception was measured by the half of distance perception jump and the distance was recorded in nearest inch.

The reliability of the data was established through test- retest method. Subject was tested ones and again providing the same condition the same subjects were tested after a day rest. The results of the two test were reviewed and it was found that there is a high positive co-relation between the data of two days. This procedure was employed both in cases of gathering data in pre treatment and post treatment tests. So the data for the present study should be considered as reliable enough.

Results

The results found after analyzing the data have been presented in the following tables.

Table-1
“t” ratio of Flexibility.

Variable	Before Treatment		After Treatment		Mean Difference	Standard Error	‘t’-ratio
	Mean	SD	Mean	SD			
Flexibility	13.28233	4.211569	10.279	2.526815	3.00333	0.8966	3.35*

Significant at 0.05 level. Tab value-‘t’₅₈ =2.02

From the above table it is clear that, the computed ‘t’ value (3.35) is greater than tabulated ‘t’ value (2.02) at 0.05 level of significance. So it can be concluded that the significant difference mean gains in the performance of Flexibility between two (pre and post) test after a period of sixteen week yogic exercise on Deaf and dumb students.

Table -2
“t” ratio of reaction time.

Variable	Before Treatment		After Treatment		Mean Difference	Standard Error	‘t’-ratio
	Mean	SD	Mean	SD			
Reaction time	0.187219	0.035497	0.182223	0.033348	0.00499	0.00889	0.5619

Significant at 0.05 level. Tab value-‘t’₅₈ =2.02

From the above table it is clear that, the computed ‘t’ value (0.56) is less than tabulated ‘t’ value (2.02) at 0.05 level of significance. So it can be concluded that there was no significant difference in case of Reaction time between two (pre and post) test after a period of sixteen week yogic exercise on Deaf and dumb students.

Table -3
“t” ratio of kinesthetic perception.

Variable	Before Treatment		After Treatment		Mean Difference	Standard Error	‘t’-ratio
	Mean	SD	Mean	SD			
Kinesthetic perception	28.54333	6.14276	26.1966	4.82253	2.34666	1.4257	1.645

Significant at 0.05 level. Tab value-‘t’₅₈ =2.02

From the above table it is clear that, the computed ‘t’ value (1.65) is less than tabulated ‘t’ value (2.02) at 0.05 level of significance. So it can be concluded that there was no significant difference in the variable of Kinesthetic perception between two (pre and post) test after a period of sixteen week yogic exercise on Deaf and dumb students.

Discussion and Conclusions

The findings have showed that in case of flexibility there was significant difference between two (pre and post) test after a period of sixteen week of yogic treatment where as no significant difference was found in kinesthetic perception and reaction time after sixteen week of yogic treatment on Deaf and Dumb students.

In case of increasing flexibility, the reasons may be attributed to the cause that flexibility depends on the joints of the bones. Joints are flat and smooth. Synovial fluid keeps the surface of the joint of smooth. Asanas helps us produce more of this liquid matter which tones up the sinews. Due to constant flexion, extension and relaxation of all the body part and the stretching ability of the joints highly improve by the yogic exercise. Hence it is observed that yogasana is one of the best flexible exercises.

In case of kinesthetic perception & reaction time the reasons may be attributed to the cause that kinesthetic perception & reaction time does not rises with hearing impaired students other factors are also responsible for this recent observation indicate that the mental pressure which reached; in improved does not normally raise with age any more. In moderate long time exercise there is a slight raise of kinesthetic perception and reaction time. Hence, the exercises should be done regularly to increase the level of kinesthetic perception and reaction time. Thus it is concluded that after a sixteen weeks treatment of yogic exercises on 200 deaf and dumb students their kinesthetic perception, reaction time was insignificant. But their flexibility showed significant improved after treatment.

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