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Effect of Kapalbhati pranayama on core strength in overweight individuals

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Abstract

Aim: To Study the Effect of Kapalbhati Pranayama on Core Strength in overweight individuals.

Methodology: Subjects in the age groups of 20-40 years were selected and were divided into their respective groups. In Experimental group, Subjects were asked to perform Kapalbhati pranayama daily for 10 minutes for 4 weeks.

Result: Significant Difference was observed.

Conclusion: The study suggests that experimental group showed superiority over control group for improvement of core strength.

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Discussion

Subjects and Method

Keywords: kapalbhati, yoga, core strength

Introduction

Yogic exercises are useful in integrating mind & body. It is useful to cope up with all stresses of this clock bound life ^[6]. The technique of Pranayama is one part of eightfold system "Ashtangayoga"; which was introduced to the world by the Indian seer Patanjali. Pranayama is a set of breathing exercises that helps to reduce the activity of sympathetic nervous system ^[7]. It appears that Pranayama is the only method available for exercising internal organs and systems, from nasal system and sinuses all the way to urinary and GI tracts [3]. The word "Kapalbhati" is from Sanskrit language in which 'Kapal' stands for forehead and meaning of 'bhati' is light. In other words after performing this pranayama technique the forehead becomes luminous and body becomes disease free and happy^[2]. Development of core muscle strength is important to maintain functional stability of spine.^[1] Core involves the anterolateral abdominal muscles (transverses abdominis, internal obliques, external oblique and rectus abdominis), the muscle that form the roof (diaphragm), floor (pelvic floor muscle) and posterolateral muscles (quadrates lumborum and psoas) ^[1, 3, 4]

Results

Table 1

	Age	BMI
Group 1	26.73_+1.93	27.69+_0.43
Group 2	25.33+_4.96	27.48+_1.42

The result showed significant difference between pre Session & post session on core strength (p = 0.00) in experimental group. Also there was significant difference in pre session &

post session on core strength in control group (p=0.01). Difference between experimental & control group is not significant (p=0.13).

Subjects in the age groups of 20-40 years were selected and

were divided into their respective groups. In Experimental

group, Subjects were asked to perform Kapalbhati pranayama

daily for 10 minutes for 4 weeks. In control group, Subjects

didn't perform breathing techniques. For both the groups pre

& post session core muscle strength were checked by using

Present study confirmed the positive Effect of Kapalbhati

Pranayama on core strength in overweight individuals over 4

weeks. Figure shows significant difference between mean

values of pre core strength and the post core strength of

experimental group after doing Kapalbhati pranayama for

4weeks. It also shows difference between mean values of pre

&post core strength in control group after yogasanas only. The

significance observed in control group also may be due they

were practicing yogasanas in which core is activated.

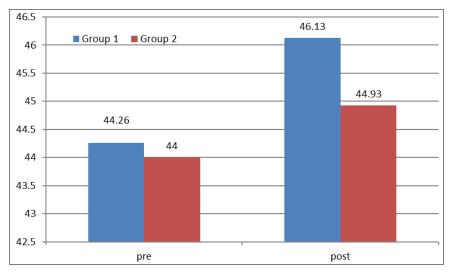


Fig 1: Pre and post session values of core strength in experimental (Group 1) and control (Group 2) groups.

Conclusion

The study suggests that experimental group showed superiority over control group for improvement of core strength. Kapalbhati pranayama helps to improve core strength Yogasanas also helps to improve core strength within four weeks of practice.

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