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Effect of Kapalbhati on Hand Steadiness and Eye Hand Coordination

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Abstract – The present study was conducted on effect of kapalbhati on hand steadiness and eye hand coordination. The subject selected for this study were total 100 male, target games players in the age group of 16 to 35 years. The dependent and independent variables selected for this study were hand steadiness and eye hand coordination and kapalbhati respectively. Statistical technique used in this study was t-test. Results of the study showed that there is significant difference in hand steadiness ability as well as eye-hand coordination as a result of administration of kapalbhati.

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INTRODUCTION:-

Human being is an integration of mind and body. Both the components through their combination make human being more successful. The mental process and the physical expression are beautifuly interwoven in the mechanism of the whole man and wholeness of man in no case should be made to suffer by separating the mental and physical aspect. (Kamlesh, 1988) Kapalbhati is the process of forceful exhalation and inhalation after the manner of an iron. (Swatmaram)Like all the games the target games are also psychological as well as physical, because it is led by mental image and though patterns, your head or psyche or physical conditioning.

The purpose of the study was to determine the effect of kapalbhati on the hand steadiness and the eye-hand -coordination

METHOD

The subjects selected for this study were 100 male, target games players in the age group of 16 to 35 years. The dependent and independent variables selected for this study were hand steadiness & eye hand coordination and kapalbhati respectively. The subjects were divided in to two equal groups. Prior to the training a pre test was taken. The test was repeated at the end of second, fourth and six, eight, tenth an finally twelfth week. In order to compare the effectiveness of the programme on the target games players' t-test was employed. The level of significance was set at 0.05. To measure the hand- steadiness ability of the players' hand-steadiness tester was used and for eye hand coordination, eye hand coordination apparatus was used.

RESULTS

Table-1

t-TEST FOR THE DATA ON HAND STEADINESS IN EXPERIMENTAL GROUPS AND CONTROL GROUPS IN ALL THE SEVEN DURATION

Frequency of testing	Means		Mean difference	t-value	Standard error
	Experimental group	Control			
Start	9.78	8.94	0.84	0.44	1.90
After 2 week	7.79	7.94	0.04	0.34	0.12
After 4 week	7,12	7.70	0.58	0.29	1.98
After 6 week	7.10	8.06	0.96	0.36	2.68*
After 8 week	6.40	7.34	0.94	0.28	3.40*
After 10 week	5.38	6.76	1.38	0.29	4.62*
After 12 week	4.32	5.96	1.64	0.35	4.73*

*significant at 0.05
Tabulated t (.98) is 1.98

Table-2

t-TEST FOR THE DATA ON EYE HAND COORDINATION IN EXPERIMENTAL GROUPS AND CONTROL GROUPS IN ALL THE SEVEN DURATION

Frequency of testing	Means		Mean difference	Standard error	t-value
	Experimental group	Control			
Start	9.28	8.86	0.42	0.69	0.60
After 2 week	7.54	8.42	0.88	0.59	1.47
After 4 week	6.44	7.58	1.14	0.49	2.28*
After 6 week	5.78	7.48	1.70	0.39	4.34*
After 8 week	5.14	6.86	1.72	0.33	5.20*
After 10 week	4.44	6.20	1.76	0.34	5.31*
After 12 week	3.68	5.56	1.88	0.33	5.62*

*significant at 0.05
Tabulated t (.98) is 1.98

DISCUSSIONS

The results of the study showed that a significant difference was found in hand steadiness ability as a result of 12 weeks of training. It means that their hand position was firm their hands were not shaking at the time of the performance of the task. This is a very important aspect for the target games players. These players are required to stretch their arm for some duration without support and even slight of shaking movement may lead to missing the target.

The above findings may be attributed to the fact that regular and systematic indulgence in yogic practices stimulates the control arousal mechanism and a perfect coordination establishes between the control zones of brain and the muscles involved in the task. That is how the steadiness or firmness of hand is improved.

The study also reveals a significant difference in the eye hand coordination form after the expiry of fourth week onwards till the final test. This may be attributed to the fact that the kapalbhati is the process of forceful exhalation and inhalation increase the efficiency which is characterized by smoother and more integrated behavior. It also increase the coordination between the mind and the body.

The coordination which primarily is dependent on the motor control and regulation process of central nervous system. For any type of coordination the motor control and regulation process function in a definite pattern when a particular aspect of these functions are improved then the sports person is in a better position to do a certain group of movements which for their execution depends on the C.N.S. functioning pattern.

The literature reveals that when one rigorously indulge in the yogic practices it definitely enhances the functioning of the C.N.S. which ultimately effect the ability to coordinate. Similar results were found in the study conducted by M. Kesav Reddy and V. Raghavender Rao, Jonhson and Farrow.

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