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IMPACT OF MEDITATION, PRANAYAMA AND COMBINED PRACTICE ON CONCENTRATION AMONG MIDDLE AGED SEDENTARY MEN

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ABSTRACT

The purpose of the study was to find out the impact of meditation, pranayama and combined practices on concentration among middle aged sedentary men. To achieve the purpose of the study, 45 middle aged sedentary men with age ranged from 35 to 50 years. Were randomly selected as subjects from the administrative work of various departments in Chennai, Tamilnadu. The selected subjects were divided into three experimental groups and were subjected to a training program for 12 weeks. Meditation was administered to group I (n =15) and pranayama was administered to group II (n = 15) and group III (n = 15) as a combined practices group. Test was conducted for meditation, pranayama and combined practices group before and after 12 weeks training program. The tachistoscope was used to measure the concentration. The data was collected and analyzed statistically by Analysis of covariance (ANCOVA) to find out the significant differences. The level of confidence was fixed at 0.05 levels. Result: the experimental group had achieved significant improvement on meditation when compared to pranayama and combined practices group. It was also observed that the 12 weeks of meditation, pranayama and combined practices program have significantly improved the meditation practices the focusing ability and concentration on particular object and administrative work performance of middle aged sedentary men.

KEYWORDS: Meditation, Pranayama, Combined practice and Tachistoscope.

INTRODUCTION

PRANAYAMA

The word yoga means 'union': union of mind, body and spirit - the union between us and the intelligent cosmic spirit of creation- 'the oneness of all things'. So pranayama—literally, "control of prana"—isn't just breathing exercises. Through pranayama, you use the breath to affect the constellation of energy that is your body mind.

Prana - "life force" or "life energy"
Yama - "discipline" or "control"
Ayama - "expansion", "non-restraint", or "extension

The five principles of yoga are relaxation, exercise (asanas), pranayama (breathing control), nourishing diet, and positive thinking and meditation, pranayama are yogic breathing techniques that increase the

capacity of lungs. Pranayama which is control of inspiration and expiration. The inspiration of prana-vayu is shwasa and expiration is prashwasa and cessation of both is characteristic of pranayama. Pranayama improves overall performance of the body. The regular practice of pranayama increases chest wall expansion and almost all lung functions. The beneficial effect of different pranayama is well reported and has sound scientific basis. Pranayama makes efficient use of abdominal and diaphragmatic muscles and improves the respiratory apparatus Yoga strengthens the respiratory musculature due to which chest and lungs inflate and deflate to fullest possible extent and muscles are made to work to maximal extent.

MEDITATION

Providing scientific conceptualizations of meditation practices has been one of the major concerns of recent scientific studies of meditation One of the first scientific conceptualizations of meditation was proposed by Herbert Benson, who defined meditation as a technique that generates a "relaxation response''. Benson conducted his studies on Transcendental Meditation (TM), where the meditator recites a mantra provided to him or her by the meditation instructor, as well as on Mindfulness meditation, which is a form of meditation that emphasizes the stabilization of attention by acknowledging discursive sensory events as momentary, and observing them without affective reaction or attachment. Benson showed that TM and Mindfulness meditation result in physiological changes indicative of a heightened activation of the parasympathetic nervous system and lowered sympathetic activity, such as decreased oxygen consumption and carbon dioxide elimination, lowering of heart and respiratory rates, and a marked decrease in arterial blood lactate concentration (e.g., as well as psychological outcome measures that indicate relaxation.

METHODOLOGY

The present study consists of 45 middle aged sedentary men from the administrative work of various departments in Chennai, Tamilnadu. The subjects were randomly selected and their age ranged from 35 to 50 years. They were divided into three groups namely meditation group (n =15), pranayama group (n = 15), and combined practices group (n =15). Concentration was selected as dependent variable for this study. Concentration was measured using tachistoscope. Meditation, pranayama and combined practice group were given training for a period of 12 weeks for 6 days per week in the morning session. The training program was administered for 30 minutes per session. The pre and post- test were taken before and after training program and were statistically analyzed with Analysis of covariance (ANCOVA). The level of confidence which was fixed 0.05 level of significance.

RESULTS AND DISCUSSIONS

TABLE-I
ANALYSIS OF COVARIANCE ON CONCENTRATION OF EXPERIMENTAL GROUP

Mean	Meditation Group	Pranayama Group	Combined Group	SOV	Ss	df	M.sq	'F' ratio
Pre-test mean	70.88	68.29	67.75	B	84.31	2	42.16	**2.65**
				W	669.60	42	15.94	
Post-test mean	73.63	69.15	70.23	B	158.04	2	79.02	**5.89***
				W	563.87	42	13.43	
Adjusted post-test mean	71.94	69.71	71.22	B	37.28	2	18.64	**7.65***
				W	99.98	41	2.44	

*The required value for df (2, 42) at 0.05 level = 3.21
*The required value for df (2, 42) at 0.01 level = 5.14

The table I reveal that the pre-test means in resting pulse rate of the meditation group is 70.88, the pranayama group is 68.29, and the combined group is 67.75 and the 'F' ratio 2.65 is found to be not significant at 0.05 level of confidence. The post-test means of the meditation group is 73.63, the pranayama group is 69.15 and the combined group is 70.23 and the 'F' ratio is 5.89. This shows that there is significance difference among the three groups of the post test means. The calculated 'F' ratio 7.65 is higher than the table value of 5.14 at 0.01 level of confidence, for adjusted means of the meditation group, pranayama group and the combined group which shows that there significant difference among the groups in the psychological variable namely concentration.

TABLE-II
SCHEFFES POST-HOC TEST FOR MEAN DIFFERENCE BETWEEN GROUPS FOR CONCENTRATION

Mean Value			Mean difference	C.I Value
Meditation group	**Combined group**	**Pranayama group**		
71.94	71.22		**0.74**	NS
	71.22	69.71	**1.52**	NS
71.94		69.71	**2.24***	

*Scheffes C.I values at 0.05 level = 1.83

Scheffes post hoc test however showed that mean difference between meditation and combined group are 0.74 which is found to be not significant at 0.05 levels. The difference between combined and pranayama group are 1.52 which are found to be not significant at 0.05 levels. Finally the difference between the meditation group and the pranayama group are 2.24 which are also found to be significxant at 0.05 levels. The training has influenced the concentration of the middle aged sedentary men. Meditation group has revealed significant changes than pranayama and combined group.

CONCENTRATION

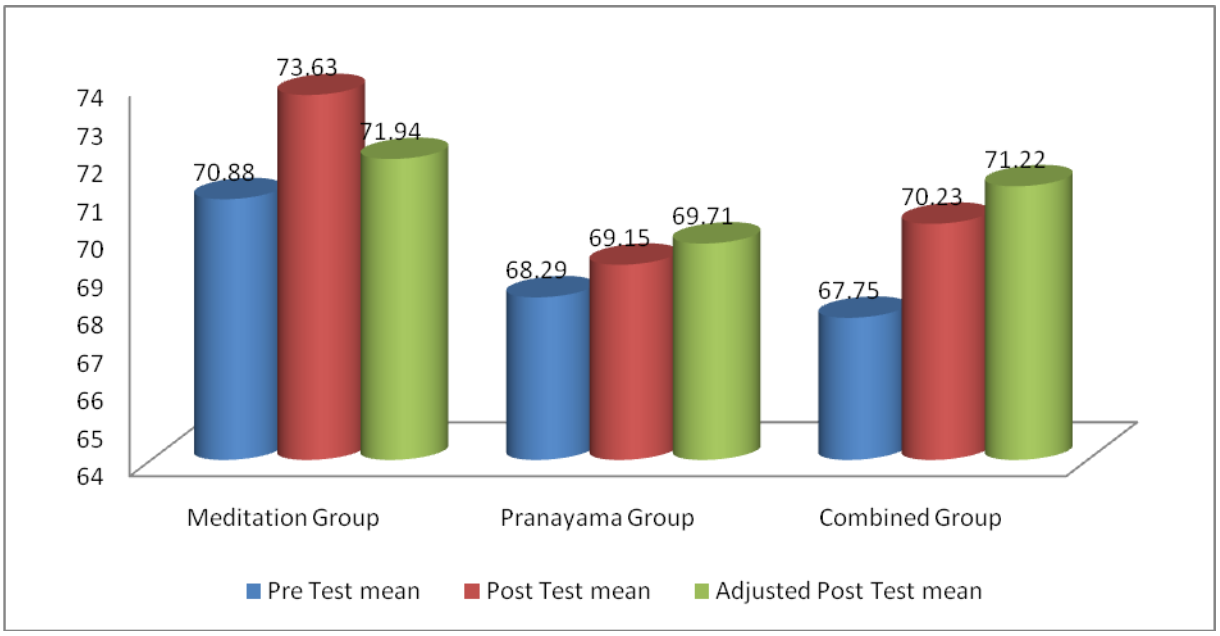

Figure-I

CONCLUSION

The result shows that meditation, pranayama practices and combined practices significantly influences the performances of concentration of middle aged sedentary men. For applying the multiple comparisons test meditation group shows significant improvement than other two groups. Which means meditation practices increases the concentration. The improvement of concentration will enhance the administrative work performance of middle aged sedentary men, if implemented as administrative way.

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