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Research Paper

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Effect of Anuloma Viloma Pranayama on Selected Respiratory Variables

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INTRODUCTION

The application of modern science and technology to sports in an effort to analyses and improve performance is not a new idea. These efforts commanded little attention until the number of imitative countries began to organize programmer dedicated to scientific development of Olympic athletes, the world of sports then become intrigued with sports science areas of biomechanics physiology , sports medicine and sports psychology and application of practical methods including carbohydrates loading blood doping, slow analysis, attitude training, relaxation techniques and nemeouous others.

Approach used by most countries is inefficient; time has produced a number of excellent programmers. Thus although science has introduce innovative addition to program its major role has been one of making of yoga techniques. There is clear indication in the Ayurvedic literature that yoga techniques are applicable in the case of mental disorders too. In yoga texts too, creation practices to have not only been claimed to cure a number of aliments, but also to postpone decay and degeneration and even to some extent overcome death by prolonging the duration of life.

Thus, it has been concluded in the end that yoga in totality and in wide sense is medicine and useful therapeutic tool because it prescribes a number of phenomena and substances to tackle disease in order to realize its long-term goal

Today, yoga being a subject of varied interests, has gained worldwide popularity. Recent research trends have shown that it can serve as an applied science in a number of fields such as education, physical education and sports , health and family welfare, psychology and medicine and also one of the means for performance and productivity .

Statement of the problem

the effect of Anuloma- Viloma Pranayama on the selected respiratory variables among male students studying in Bachelor of Physcial Education degree at Dr. Subhash College of Physical Education, Junagadh.

Selection of Subjects

For this purpose of present study 30 male students studying in Bachelor of Physical Education degree at Dr. Subhash Institute of Physical Education, Junagadh were selected randomly as the subjects of the study

Selection of Variables

After gleaning through all the scientific literature, journals, magazines available in the library of Dr. Subhash Institute of Physical Education, Junagadh and keeping feasibility criteria in mind following variables were selected from the purpose of present study. Vital Capacity , Peak Flow Rate, Breath Holding time, Positive Breath Holding, Negative Breath Holding

Statistical Procedure

The investigate the effect of anuloma- Viloma pranayama on selected respiratory variables Analysis of co- variances was used at 0.5 level of significance.

Table -1
Analysis of covariance of the means of experimental group in vital capacity

Test	Groups		Df		Ss	Ms	F
	Experimental	Control					
Pre Test	3.38	3.38	A	1	0.0003	0.0003	0.0001
			W	28	8.769	0.313	
Post Test	4.28	3.40	A	1	5.896	5.896	19.19*
			W	28	8.258	0.2949	
Adjusted	4.28	3.40	A	1	6.067	6.067	189.37
			W	27	880	.032	

*Significant at 0.5 level

The analysis of variance for post test means of vital capacity revaluated that the obtained f ratio (19.99) is more than the tabulated (4.20) at 0.5 level of confidence. Similarly analysis of covariance for adjusted posttest was found significant as the obtained f value (189.37) is much more than the tabulated f value (4.21).

Table -3
Analysis of covariance of the means of experimental Group and control group in Peak Flow Rate

Test	Groups		Df		Ss	Ms	F
	Experimental	Control					
Pre Test	3.86	3.85	A	1	0.000	0.000	0.000
			W	28	23.8	0.85	
Post Test	4.64	3.80	A	1	5.12	5.12	4.83*
			W	28	29.79	1.06	
Adjusted	3.99	3.37	A	1	5.11	5.11	13.44*
			W	27	-10.26	0.38	

*Significant at 0.5 level

Further table 3 also revealed, the analysis of variance for post test means of peak flow rate revealed that the obtained F (value 4.83) is more than the tabulated (4.20) at 0.5 level of confidence. Similarly analysis of covariance for adjusted post test means was found significant as the obtained f value (13.44) is more than the tabulated f value (4.21).

Table -4
Analysis of Covariance of the means of experimental group And control group in Negative Breath holding capacity

Test	Groups		Df		Ss	Ms	F
	Experimental	Control					
Pre Test	66.53	66.6	A	1	0.13	0.13	0.003
			W	28	1187.07	42.39	

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Post Test	70.4	66.4	A	1	120	120	3.178
			W	28	1057.2	37.75	
Adjusted	70.6	66.36	A	1	127.37	127.37	47.17*
			W	27	73.156	2.70	

*Significant at 0.5 level

Further table 4 also revealed the analysis of variance for post test means of both groups were not significant as the obtained f value (3.178) is less than the tabulated F value (4.20). Similarly analysis covariance for adjusted posttest menas was found significant as the obtained f value (47.17) is much more than the tabulated f value (4. 21)

Table -5
Analysis of covariance of the means of experimental Group and control group in Positive Breath Holding Capacity

Test	Groups		Df		Ss	Ms	F
	Experimental	Control					
Pre Test	75.2	74.06	A	1	9.6366	9.6366	0.171
			W	28	1571.33	56.17	
Post Test	76.66	74.13	A	1	48.1333	48.133	1.031
			W	28	1307.066	46.68	
Adjusted	76.50	74.50	A	1	24.009	24.009	1.042
			W	27	621.56	23.02	

*Significant at 0.5 level

Which shows that pretest means do not differ significantly and the random assignment of the subjects to the two groups was quite successful? The analysis of variance for posttest means of positive breath holding time revealed that the obtained f value (1.031) is less than the tabulated f value (4.20) at 0.5 level of confidence. Similarly analysis of covariance for adjusted part test means was not found significant as the obtained f value (1.42) is less than the tabulated f value (4.21) The table 5 revealed that the analysis of variance for pretest means of positive Breath Holding time revealed that the obtained f value (0.171) was less than the required value (4.20) at 0.5 level of confidence. This shows that pretest means do not differ significantly and the random assignment of the subjects to the two groups was quite successful. The analysis of variance for posttest means of positive breath holding time revealed that the obtained f value (1.031) is less than the tabulated f value (4.20) at .05 level of confidence. Similarly analysis of covariance for adjusted part test means was not found significant as the obtained f value (1.42) is less than the tabulated f value (4.21).

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