

Impact of Yogic Training and Classic Strength -Power Training on Selected Variables Among Men Players

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ABSTRACT

Classic strength training tools such as dumbbells, barbells and kettlebells. Medicine balls or sand bags – weighted balls or bags. Weight machines – devices that have adjustable seats with handles attached. Yoga is excellent for increasing flexibility, muscle strength, and tone, and it boosts our energy and vitality and healthy of heart, respiratory and blood pressure level. To achieve this research study, subjects will be select from Jonah College of Physical Education, Aitipamula (village), Kattangur (Mandal) Nalgonda, Telugana 508205. Their ages ranges between 18-22 years. Training period will be 12 weeks. This study consists of two experimental groups and one will be act as Control group. Experimental Group –I acted as Control group, Experimental Group –II Yogic training, Group- III Classic strength –Power Training, each group considered fifteen. For this study two selected Peak Expiratory Flow Rate (PEFR) variable have been selected, to get accomplish of this research data will be taken pre and post-test. This research data measured by ANACOVA at 0.05 level of confidence. Results showed that there was a significant improvement showed in PEFR and this research concluded that there was a significant change in due to the Classic strength –Power Training impact of yogic training, classic strength power training.

Keywords: Yogic training, Classic strength power training, PEFR.

INTRODUCTION

Peak expiratory flow rate is how much air can be forcefully breath out in one expiration through lungs. The normal peak flow value can range from person to person and is dependent upon factors such as sex, age and height. Lung function parameters tend to have a relationship with lifestyle such as regular exercise and non-exercise.

METHODOLOGY

To achieve this research study, subjects will be select from Jonah College of Physical Education, Aitipamula (village), Kattangur (Mandal) Nalgonda, Telugana 508205. Their ages ranges between 18-22 years. Training period will be 12 weeks. This study consists of two experimental groups and one will be act as Control group. Experimental Group –I Control, Experimental Group –II Yogic training, Group- III Classic strength –Power Training, each group considered fifteen each of subjects. For this study selected variable is PEFR, it was assessed by multi para monitor device have been selected, to get accomplish of this research data pre and post-test have taken.

Rosemary Peter et.al., 2013 analysed in the present study was under taken to assess the effects of exercise in athletes and yogis on respiratory system and compared with sedentary group. to compare the differences in pulmonary function among the athletes, yogis and sedentary group. A total of 300 subjects comprising athletes, yogis and sedentary were assessed for pulmonary function test. Pulmonary Function Profile was analyzed and compared among the study groups. In our study the athletic group was having higher predicted percentage of mean value of FVC, FEV1, FEV3, PEFR, and MVV as compared to yogis and sedentary group. Yogis were having higher lung function values as compared to sedentary group and higher values of FEF25-75% and FEV1/FVC ratio than athletic group. All pulmonary function parameters were higher in athletes and yogis than in the normal sedentary control individuals. This study suggests that regular exercise has an important role in determining and improving lung functions.

Sheela Bargal et al 2022 evaluated in the effect of left nostril breathing (LNB) exercise on cardiorespiratory parameters and reaction time (RT) in young healthy individuals. In this study, 106 young healthy individuals between 18 and 25 years of age were included. The systolic blood pressure (SBP), diastolic blood pressure (DBP), pulse rate (PR), respiratory rate (RR), vital capacity (VC), peak expiratory flow rate (PEFR), and reaction time (RT) of volunteers were recorded at baseline (before exercise) and after two weeks of left nostril breathing exercise performed 45 minutes daily. There was a significant reduction in SBP (126.64 ± 15.51 mmHg versus 116.29 ± 11.91 mmHg; Cohen's d (effect size): 0.87; $p < 0.0001$), DBP (76.57 ± 14.87 mmHg versus 71.07 ± 11.39 mmHg; Cohen's d: 0.48; $p < 0.0001$), PR (85.32 ± 15.44 /minute versus 81.77 ± 13.02 /minute; Cohen's d: 0.27; $p < 0.0001$), and RR (14.26 ± 2.15 /minute to 13.17 ± 2.03 /minute; Cohen's d: 0.54; $p < 0.0001$). A significant increase was observed in VC (3.42 ± 0.62 versus 3.67 ± 0.65 ; Cohen's d: 0.39; $p < 0.0001$) and PEFR (467.81 ± 46.66 versus 498.29 ± 51.50 ; Cohen's d: 0.59; $p < 0.0001$). There was a significant decrement in auditory reaction time (ART) (164.36 ± 27.20 ms versus 143.84 ± 20.32 ms; Cohen's d: 0.85; $p < 0.0001$) and visual reaction time (VRT) (190.25 ± 31.48 ms versus 163.75 ± 21.72 ms; Cohen's d: 0.98; $p < 0.0001$). There was no significant change in maximum heart rate (MHR) after cardiorespiratory activity (CRA) ($p > 0.434$). Left nostril breathing is associated with a decrease in cardiovascular parameters and an increase in VC and PEFR. This technique may be useful for putting up a fight against the stress and strain of daily life. This simple exercise may also be a beneficial adjuvant to pharmacological therapy in hypertensive patients.

Sajid et.al., 2013 analysed in pulmonary functions are significantly affected by the chronic smoking. Study has done to investigate relationships between heavy cigarette smoking (20 cigarettes/bidis per day) and pulmonary function in adult men. Objective is to find out If Chronic heavy smoking start affecting the lung functions as early 5 years of habit. A cross-sectional study on 112 individuals, selected randomly from general population of Ahmedabad city was performed. A thorough history analysis (Height, Weight, BMI), Physical examinations Spirometry were done on all individuals after explaining them procedure and taking their consent. Parameters measured by the spirometer were FEV1, FVC, FEV1/FVC, PEFR, MEF75, MEF50, MEF25, VC. Among the measured parameters of PFT, smokers have significantly decreased values ($p < 0.05$) of FVC, FEV1, FEV1/FVC & PEFR. Chronic heavy smoking leads to significant decrease in pulmonary functions in smokers' group, and It can be concluded that chronic smoking affects the health of the individuals. Therefore, smoking habit should be avoided for better health.

Maulik Varu and others 2013 investigation done in air conditioners are one of the luxurious needs of human being and their use has been increasing day by day. According to few studies, inhalation of cold dry air leads to alteration in pulmonary functions. The present study was aimed at considering whether intensive use of air conditioner affected pulmonary functions. Method: 50 male subjects having age group of 25-50 years and using air conditioners since at least last 6 months and for a minimum duration of 6 hours per day were selected for the study. 50 males of same age group who did not use air conditioners at all were taken as control. In all the subjects, computerized spirometric parameters were measured by SPIRO EXCEL. The parameters between both the groups were compared by applying unpaired 't' test. P value less than 0.05 was taken as statistically significant. Result: There was statistically significant reduction in PEFR (Peak Expiratory Flow Rate), FEF25 (Forced Expiratory Flow at 25% of Forced Vital Capacity), FEF50 (Forced Expiratory Flow at 50% of Forced Vital Capacity), FEF25-75 (Mid Expiratory Flow Rate), and MVV (Maximum Voluntary Ventilation) in air conditioner users as compared to that in non air conditioner users. Intensive use of air conditioner may predispose to respiratory dysfunction in form of early small airway obstruction. However further studies including a large sample size is indicated for in depth evaluation.

RESULTS

This research data measured by ANACOVA at 0.05 level of confidence.

Table-1: Analysis of Covariance of Data on Peak Expiratory Flow Rate between Pre and Post-Test Cg Ytg and Cspgt Groups

Test	CG	YTG	CSPTG	SOV	Sos	df	MS	Obtained 'F' ratio
Pre test Mean	2.75	2.73	2.65	B	3.07	2	1.53	1.04
SD	1.61	1.53	1.24	W	60.15	42	0.47	
Post test Mean	2.08	3.30	3.21	B	13.05	2	6.53	3.37*
SD	1.20	1.82	1.32	W	59.90	42	1.47	
Adjusted post-test mean	2.11	3.33	3.23	B	14.33	2	7.17	4.47*
				W	89.54	41	2.13	

The table 4.9 shows that the pretest mean value on PEFR for CG, YTG and CSPTG, were 2.75, 2.73 and 2.65 respectively. The obtained 'F' ratio value 1.04 for pretest scores on PEFR which is lesser than the table value 2.24 for significance with df 2 and 42 at 0.05 level of confidence. The post-test means values on PEFR for CG, YTG and CSPTG were 2.08, 3.30 and 3.21 respectively. He obtained 'F' ratio value 3.37* for post test scores on PEFR, which was greater than the table value 3.22 for significance with df 2 and 42 at 0.05 level of confidence. The adjusted post-test means values on PEFR for CG, YTG and CSPTG were 2.11, 3.33 and 3.23 respectively. The obtained 'F' ratio value 4.47* for adjusted post test scores on PEFR, which was greater than the table value 2.24 for significance with df 2 and 41 at 0.05 level of confidence. The results of the study showed that there was a significant difference among CG, YTG and CSPTG on PEFR. However, the improvement was in favor of YTG.

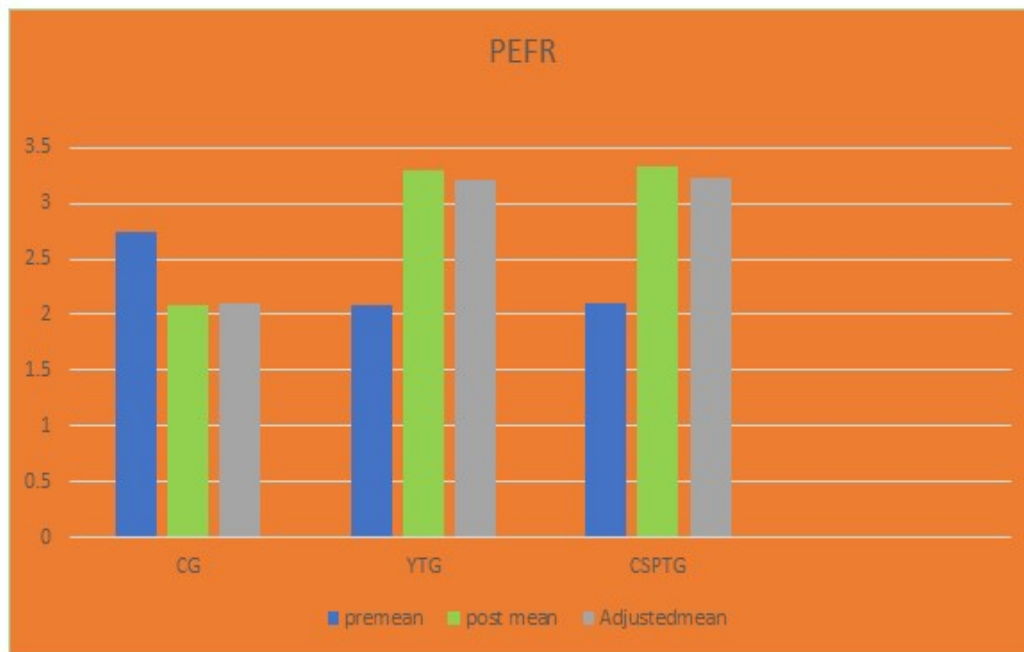
Since three groups were involved the Scheffe's post hoc test was applied to find out the paired mean difference if any, and it is presented in the given table.

SCHEFFE'S POST HOC TEST FOR THE DIFFERENCE BETWEEN THREE PAIRED ADJUSTED POSTTEST MEANS OF PEAK FLOW RATE

Adjusted Post Mean Test			Mean Difference	Confidence Interval
CG	YTG	CSPTG	-	
2.11	3.32	-	1.12	1.27
2.11	-	3.23	1.21	1.27
-	3.32	3.23	0.09	1.27

The table shows that the adjusted posttest **PEFR** mean difference of CG, YTG and CSPTG were 2.11, 3.32 and 3.23 respectively. They were greater than the confidence interval value 1.27 at 0.05 level, which indicates that there was a significant difference among all of CG, YTG and CSPTG.

MEAN VALUE ON PEAK EXPIRATORY FLOW RATE BETWEEN PRE POST AND ADJUSTED POST TEST MEAN OF CG YTG AND CSPTG



CONCLUSION

Impact of yogic and classic strength power training got a significant difference produced in Peak expiratory flow rate in college players.

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