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In Pranayama practioners and Brisk Walking training among Sedentary Women Impact on Vital Capacity and Aggression

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ABSTRACT

The purpose of the investigation aim was to find out in Pranayama Practitioners and Brisk Walking training among Sedentary Women Impact on Vital Capacity Aggression. Fifty women in among that Forty-five will be selected as exact subjects in fifteen each of three groups (N=15) under the age 30-40year from Arivuthirukovil, BHEL Mandram, Kattur, Trichy- 620019. The subjects were involved in this study under voluntary basis. The ranges of the subjects age from 18 to 25 years. The chosen subjects were gone to Pranayama practitioners and Brisk Walk Training Groups. The Training Group-I Pranayama practitioners (PPG) & The Experimental Group-II Brisk Walking (BWTG) were subjects for five days for up to eight weeks. Control Group acted as Group –III they were not involved in any training. The Brisk Walking and Pranayama practitioners were selected as individualistic variable and the basis variables vital capacity and aggression were selected as measured variables. The chosen measured variables were estimated by the standardized test items. Aggression was measured by Dr. Smith's questionnaire and the unit of measurement in numbers. & vital capacity digital multi para meter (spirometer). The experimental design preferred variable for this investigation was before and after test randomized design. The data of the subjects were collected from each subject utilized tool and statistically investigated by applied ANACOVA. It was found that there was an outstanding development and significant increase exists due to In Pranayama practitioners and Brisk Walking training through Sedentary Women Impact on Vital Capacity, significant decrease in Aggression.

Keywords: *Pranayama practitioners Brisk Walking training, Sedentary Women, Vital Capacity and Aggression*

INTRODUCTION

In this study aimed to highlight some of the main proceeding in selecting and using credential equations and discuss how recent developments may have developed implication of pulmonary function results. Pranayama improved lung functions in innumerable studies.

Yoga presumes isometric contraction and develops skeletal muscle strength. Yoga training develops the strength of expiratory as well as inspiratory muscles. This investigation is done to evaluate the significant improvement in respiratory functions by pranayama training. The primary purpose of this exploratory analysis is to

investigate the priority of pranayama on pulmonary functions. Breathing techniques have since become improves popular due to a rising dividends in holistic and wholesomeness by passages to healthcare. The breath is the most vital process of the body which influences the activities of each and every cell. Most importantly is intimately linked with the performance of the brain.Thd breath is intimately connected to all the aspects of human experience.

Most people using only a small part of their lung capacity by breathing incorrectly. The breathing is then shallow, depriving the body of oxygen and prana essential to its good health. Expiration is generally passive, with the diaphragm returning to its puffed resting infrastructure, inducing the lungs to deflate and expel air. When breathing effort is evolved, as in though, the expiratory muscles become active; these encompass abdominal muscles which pull the abdominal wall entrails when compressed, forcing the diaphragm to rise superiorly into the ribcage and deflate the lungs (De Troyer A, Boriek). Practitioners develop sensitivity to the respiratory process and retrain the muscles of the pulmonary cavity by enhancing their vital capacity and preparing them for pranayama. Deep, rhythmic and slow respiration stimulates and us stimulated by calm, content, states of mind. Irregular breathing will be disrupted the brain rhythm and leads to physical, emotional and mental blocks.

Through the practice of pranayama, the energy was trapped in neurotic, unconscious mental patterns might be released for usage in more creativity and joyful activities. Brisk walking can be an excellent way to improve physical fitness and lose weight for overall body health.

Problem of the Statement

To assess the Pulmonary Function and Selected Variables of vital capacity and aggression in Pranayama practitioners and Brisk Walking Group among Sedentary Women

Purpose of the investigation

The purpose of the study is to find out the Pulmonary Function and Selected Variables in Pranayama practitioners and Brisk Walking Group among Sedentary Women

It may increase cardio respiratory parameter strengthens and physical fitness explosiveness (Chu, 1998). It may usually involve stopping, starting and changing direction

To determine the effects of pranayama practitioners' changes on pulmonary function and psychological selected aggression variable.

And brisk walking trainer's effects of pranayama practitioner's changes on pulmonary function and physiological selected – vital capacity variable.

Objectives of the study

It can provide both challenge to substances physical and mental abilities.

Hypothesis

1. There may be expressive changes on selected variables of vital capacity and aggression.
2. There may or may not be significant betterments on selected vital capacity and aggression.
3. There may be significant refinements on brisk walking and pranayama practitioners.
4. There may not be significant enhances on brisk walking and pranayama practitioners.

Delimitation of the study

The following delimitations were set for the present study.

1. To this investigation normal healthy forty five subjects were involved.
2. The students were selected from BHEL Mandram Katur, Trichy, Tamilnadu.
3. The subject's of women were included that their age ranges between 30-40 years.
4. The selected subjects were divided in to 3 equal groups of fifteen each .the data acted as namely control group-I they have not perform any training, Group-II Pranayama Practioners, Brisk Walking Training Group. The selected exercises were given to respected oriented group.
5. The tenure of this training programme period was designed in to eight weeks for weekly five days of forty-five minutes daily.
6. Physiological and psychological variables were evaluated by using standard device and standard tools.

Limitation of the study

The following criteria were measures for this investigation.

1. The external and hereditary content which would impact the criterion variables were recognized as limitation.
2. Geographical and methodological variations air, temperature, weather condition, atmospheric pressures relative humidity etc., during testing periods could not be controlled and the possibility influence on the result.
3. Day to day activity, foot habits and resting period lifestyle could not be controlled.

Significance of the study

1. The significance of the study is also known as rationale of the study.
2. This study academic under peer viewed by professional examiner.
3. This investigation is two parts based a).general contribution b) specific contribution.
4. This research is purely for students and non-students to get a clear idea of regularize.
5. The purpose of the research mainly concentrating physiological and psychological awareness now days mainly avoiding distractions for subjects.
6. Above all the criteria are hypothetical study oriented phenomenon focused with subjects and showed their original results.

MATERIALS AND METHODS

Subjects

Fifty women in among that Forty-five will be selected as exact subjects in fifteen each of three groups (N=15) under the age 30-40year from Arivuthirukovil, BHEL Mandram, Kattur, Trichy- 620019. The criterions were evolved in this investigation under spontaneous basis.

This research is to perform after attaining sanction from the respected working constitutional and justified allowance from quite the subjects. Women who had ahead endured yoga training, women with any disorders and women who had endured any surgery were rejected for this research. This study is to be conduct in the Yoga center. They will be given yoga practice for eight weeks. They received information to do yoga for 45 min daily under the guidance of a trained yoga instructor. Vital Capacity (VC), Aggression is to be assess before and after eight weeks of yogic training. The variable was evaluated using digital multi para meter device (Spirometer) and psychological Variable-Aggression, subjects assess by standard Dr. Smith questionnaire before and after training period. The results will be given using ANACOVA-SPSS software for all statistical analysis in given below variables:

Independent Variables

Physiological

Psychological

Dependent Variables

Physiological

1. Vital capacity

Psychological

2. Aggression

Before start: -Pranayama Practioners Group (PPG) and Brisk walking group training Group (BWTG) session for 35 minutes, warming up and warming down both are 10 minutes each needed to give the subjects totally 45 minutes' session.

Test Administration

The Physiological variable- Vital capacity measured by digital multi para meter device (Spirometer). Psychological Variable-Aggression used only standard questionnaire -Dr. Smith. The obtained data will be statically analyzed to assess the significance of the attained controversies. 'F' ratio has calculated test for intention along 0.01 level of assurance. Since it is a three group design, the degree of freedom chosen are N=3. The reading of pre and post test scores will be presented in tabulated and for clarity of interpretation.

Discussion of the study

Allison N Abel and others (2012) in the Western world yoga is very familiar structure, and yoga's effects on pulmonary function have been research studied as earlier. Yoga developed pulmonary function, as justified by forced vital capacity, forced expiratory volume in 1 second,

and peak expiratory flow rate, in all (N=9), but one study.

Shawn Kumar and others 2020 in their study notion is Pranavaha Srotas (respiratory channels) is well reviewed and many herbs are specified to efficiently treat the disorder. Besides, Ayurveda as in holds list of plenty manners that can be ensued in times of medical emergency like COVID 19. Thereupon, parading the consequence of Ayurveda in today's date.

Kristina Zaičenkovienė (2018) Hatha yoga breathing has the high potential of workout the respiratory system in such a way that it helps a specimen to cope with the respiratory demand (Ray et al., 2011). Research aim was to compare pulmonary function variables between physically inactive subjects and the ones practicing hatha yoga and to evaluate changes after 6 months of yoga practice in the latter group. As a results showed that there was a significant increase in pulmonary parameters.

William Fernando Benavides-Pinzón and José Luis Torres 2017 research proved that developing advantages of yoga. The study revealed that there were showed forced significant improvements in vital capacity, forced expiratory volume in one second and lactate level significance differences too in among Yogic and Control groups.

Ofuebe Justina Ifeoma andother 2017 Yoga, a mind-body practice, of health and aging promotion as well as lifestyle modification is indeed reflecting in all domains via: cognitive, aggression, affective and psychomotor.

Baljinder Singh Bal 2016, the effects ofKapalabhati pranayama on respiratory parameters- Vital capacity and Expiratory Reserve Volume, and Inspiratory Capacity, inspiratory reserve volume were observed in Inspiratory Reserve Volume of university level girls.

Meta-awareness (Ayduk and Kross, 2010) or decentering (Fresco et al., 2007), perspective of one's world-view and habits, and increases the likelihood of behavioral change, (Critchley et al., 2004; Vago, 2014) Furthermore, the de-centered perspective allows one to experience thoughts and emotions in terms of their subjectivity (rather than an assumed validity) and their transient nature (rather than their assumed permanence; Fresco et al., 2007). Psychological variables significant differences due to their observations, assessed in (Baumeister et al., 2011). More rapidly improve behavioral correction processes pyruvates when enhancing emotional responses to reduce stress (Compton et al., 2008).

Cheng and others study tested compared the weekly effects of a walking training 12 weeks programme on PD patients and community-dwelling seniors. They then participated in a 36-session, 12-week treadmill walking training program. The walking training program achieved significant velocity improvements in PG. Differences in improvement between PG and CG in terms of velocity) were also identified. Conducting the economic evaluation and neurology studies of the 12-week walking program walking program were suggested.

Klára Novotováet.al. 2022 evidence exists on how walking influences lung function in seniors. In this study, their aim to evaluated the effect of different types of walking on lung function in healthy seniors. While the methodological quality was assessed by the RoB2 tool. Studies (RCTs) published between 2002–2022 that met the eligibility criteria were reviewed in this research. participants were older adults aged 60 and above without any specific associated disease. The interventions included walking led to improved lung function in healthy elderly subjects. However, the prescribed Stepper walking program proven that there was not any improvement in lung function as specifically in healthy seniors.

TABLE 1: Analysis of covariance of data on Vital capacity among pretest and posttest of CG, PPG and BWTG

Test	CG	PPG	BWTG	Sov	SOS	df	MS	Obtained 'F' ratio
Pretest Mean	1045.97	1044.82	1044.83	B	13.07	2	6.53	0.020
SD	18.09	18.33	18.31	W	13963.21	42	332.46	
Posttest Mean	1046.05	1068.16	1064.14	B	4156.00	2	2078.00	5.44*
SD	15.51	20.66	21.89	W	16053.55	42	382.23	
Adjusted post mean	1045.73	1068.31	1064.30	B	4350.81	2	2175.41	6.60*
				W	13508.74	41	329.48	

*Significant at 0.05 level of confidence

The Table-I value needs for improvements results at 0.05 levels with df 2 and 41 are 3.23 and 2 and 42 are 3.22 respectively. The Table-I contents displayed that before of the test mean value on VC for Control Group, Pranayama Practice Group and Brisk Walking Training Group were 1045.97, 1044.82 and 1044.83 respectively.

The obtained 'F' ratio value 0.02 for before of the training test values scores on VC which lower than the table value 3.22 for significance with df 2 and 42 at 0.05 level of confidence.

The posttest means values on VC for Control Group, Pranayama Practioners Group and Brisk Walking Group were 1046.05, 1068.16 and 1064.14 respectively.

The obtained 'F' ratio value6.60 for adjusted post test scores on VC, which was greater than the table value3.22 for significance with df 2 and 42 at 0.05 level of confidence. The adjusted posttest means values on VC Control Group, Pranayama Practioners Group and Brisk Walking Training Group were 1045.73, 1068.31 and 1064.30 respectively.

The obtained 'F' ratio value 6.60 for adjusted post test scores on VC which was greater than the table value 3.22 for significance with df 2 and 41 at 0.05 level of confidence.

The results of the study showed that there was a significance difference among Control Group, Pranayama Practioners Group and Brisk Walking Training Group on VC. At all over the improvement was in favor of Pranayama Practioners Group.

Since 3 groups were involved the Scheffe's post hoc test was applied to out the paired mean difference if any, and it is presented Table-II.

TABLE 2: Vital capacity difference of three paired adjusted post-test means of Scheffe's post hoc test

Adjusted post Mean Test			Mean Difference	Confidence Interval
CG	**PPG**	**BWTG**		
1045.73	1068.31	-	25.58	18.93
1045.73	-	1064.30	18.57	18.93
-	1068.31	1064.30	4.01	18.93

The table- II shows that the adjusted posttest vital capacity mean values difference of Control Group, Pranayama Practices Group and Brisk Walking Training Group, were 1045.73, 1068.31 and 1064.30 respectively. They were increased than the confidence interval value 18.93 at 0.05

levels, which denotes that there was a significant difference among all of Control Group, Pranayama Practices Group and Brisk Walking Training Group.

Graphically represents the adjusted mean values of vital capacity among control group, pranayama practioners group and Brisk Walking Training group

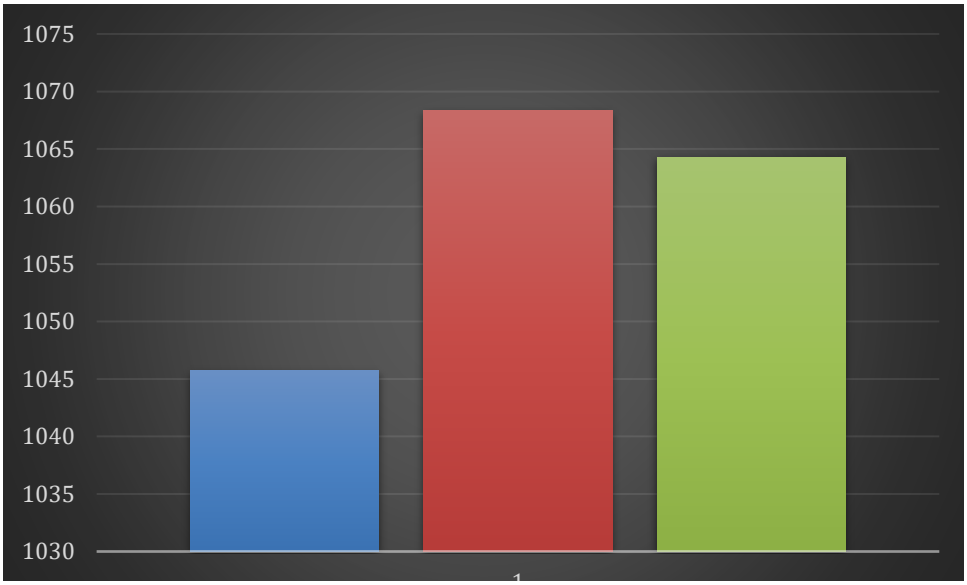


TABLE 3: Analysis of covariance of data on aggression between pretest and posttest of control group, pranayama practioners group and brisk walking training group

Test	CG	PPG	BWTG	Sov	Sos	df	MS	Obtained 'F' ratio
Pretest Mean	15.22	15.35	15.29	B	0.11	2	0.55	0.052
SD	1.00	1.32	0.64	W	42.25	42	1.05	
Posttest Mean	15.24	13.83	13.97	B	18.32	2	9.16	5.87*
SD	1.03	1.44	1.62	W	65.59	42	1.57	
Adjusted Post Mean	15.25	13.82	13.97	B	18.59	2	9.30	5.86*
				W	65.00	41	1.59	

*Significant at 0.05 level of confidence

The above table value required for significance at 0.05 levels with df2 and 41 are 3.23 and 2 and 42 are 3.22 respectively. The table-III shows that the pretest mean value on Aggression for Control Group, Pranayama Practioners Group and Brisk Walking Training Group, were 15.22, 15.35 and 15.29 respectively.

The obtained 'F' ratio value 0.05 for pretest scores on Aggression which lower than the table value 3.22 for significance with df 2 and 42 at 0.05 level of confidence. The posttest means values on Aggression for Control Group, Pranayama practioners Group and Brisk Waking Training Group, were 15.24, 13.83 and 13.97 respectively. The obtained 'F' ratio value 5.87*

for post test scores on Aggression, which was greater than the table value 3.22 for significance with df 2 and 42 at 0.05 level of confidence.

The adjusted posttest means values on Aggression Control Group, Pranayama Practioners Group and Brisk Walking Training Group, were 15.25, 13.82, and 13.97 respectively. The obtained 'F' ratio value 5.86 for adjusted posttest scores on Aggression, which was greater than the table value 3.22 for significance with df 2 and 41 at 0.05 level of confidence.

The results of the study showed that there was a significance difference among CG, PPG and BWTG on Aggression. However, the improvement was in favor of PPG.

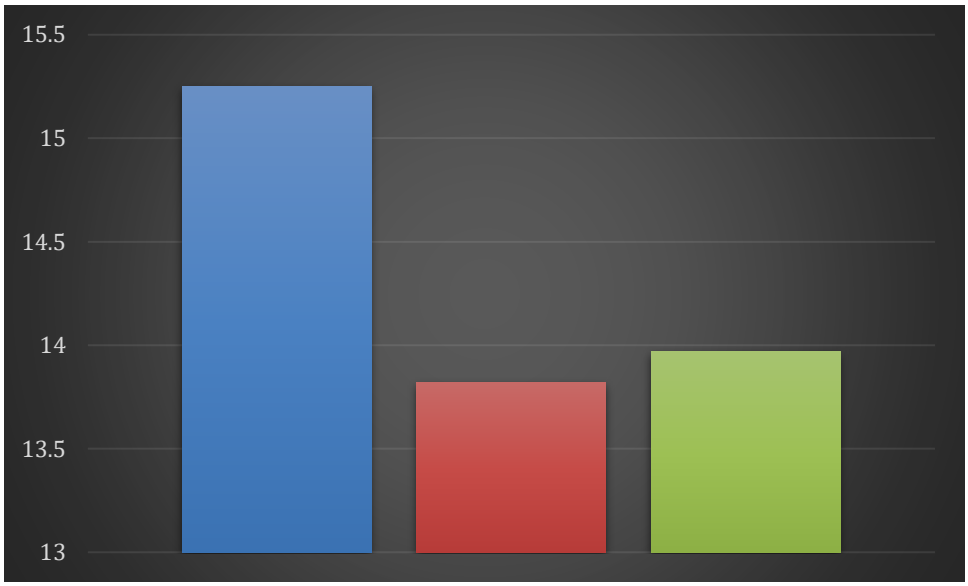
Since three groups were involved the Scheffe's post hoc test was applied to find out the paired mean difference if any, and it is presented in the table-III.

TABLE 4: Schefee's post hoc test for the difference between three paired adjusted posttest means of aggression

Adjusted Post Mean Test			**Mean Difference**	**Confidence Interval**
CG	**PPG**	**BWTG**		
15.25	13.82	-	1.43	1.31
15.25	-	13.97	1.28	1.31
-	13.82	13.97	0.15	1.31

The table-IV shows that the adjusted posttest muscle strength means difference of Control Group, Pranayama Practioners Group and Brisk Walking Training Group, were 15.25, 13.82 and 13.97 respectively. They were developed than the confidence interval value 1.31 at 0.05 levels, which denotes that there was a significant decrease in difference between all of Control Group, Pranayama Practioners Group and Brisk Walking Training Group.

Graphically represents the adjusted mean values of vital capacity among control group, pranayama practioners group and Brisk Walking Training group



RESULTS AND DISCUSSION

Brisk walk training makes an excellent additional to a units of total physical fitness Brisk walk training can enhance agility of practioners and also may develop the cardio respiratory function well in condition. (Twist and Benickly, 1995) brisk walk gives it. Ground reaction times are decreased with brisk walk training. Song C. et.al.,2014 in their research concludes, which exhibit the psychological benefits of walking in an urban park, are partly consistent with previous findings mental health problems associated with living in urban environment are profound. In modern times, for example, McKenzie et al. reported that are associated with higher rates of psychotropic medication prescriptions for aggression, depression, and psychosis urban living environments.

Kristina Zaičenkovienė(2018) interventions training the respiratory system in such a way that it helps an individual to cope with the respiratory demand (Ray et al.,total volume inspired FVC IN (L) in men practicing yoga, than in men not practicing yoga. William Fernando Benavides-Pinzón and José Luis Torres 2017 analyzed were forced vital capacity (FVC), forced expiratory volume in one second (FEV1) and FEV1/ FVC ratio. Proven concludes that the Significant differences were found in FVC, FEV1 and lactate among Yogic Group and Control Group.

The effects of short and long bouts of brisk walking in sedentary women. Thus short bouts of brisk walking resulted in similar improvements in fitness and were at least as effective in decreasing body fatness as long bouts of the same total duration in Madhav Goyal, Sonal Singh and group (2014) study compared.

Literature demonstrating pranayama and walking training that effects of a single session on healthy women found that relative to a control group woman who are all experienced in training session reported less emotional liability, excitability, and aggressiveness, and improvement in vital capacity.

RESULTS

Results showed significant differences in variables.

CONCLUSION

The research showed that there was significant increase in variables, analysis proven that there was improvement in vital capacity, and significant development that showed decrease level of aggression among students after the training program while compare to control group, when comparatively overall three group PPG group showed it best results other than two group even training group.

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