



Effect of Pranayama Practice on Emotional Adjustment in Professional College Female Students

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Abstract

Effect of pranayama practice on emotional adjustment in professional college female students was examined. Sixty female students from professional Colleges of Calicut between 19 to 24 years were selected as subjects randomly. The subjects were equally divided into control group and experimental group. Pranayama practice was assigned for twelve weeks to the experimental group. The control group was not allowed to participate in the training. To all the subjects a pre-test and a post-test data on emotional adjustment were collected through questionnaire. The data collected from the subjects was statistically analyzed with 't' ratio to find out the significant difference among experimental and control group on emotional adjustment. The analysis reveals that the Pranayama Practice has significantly improved the emotional adjustment of Professional college female students.

Keywords: Pranayama, Emotional Adjustment, Female Students.

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Introduction

The college years are a time of change that brings excitement, challenges, risks, and responsibilities. Making friends, being independent and learning new things are exciting, but they can also be stressful. It can be hard to deal with pressures related to food, drink, appearance and drugs. However, by taking small, daily steps, one can make the college years full of fun and health.

An appropriate way to assess health in apparently healthy people is to measure their health related fitness, defined as the dynamic state of energy and vitality that allows people to perform daily tasks, enjoy active leisure and cope with unexpected emergencies without undue fatigue. At the same time, health related fitness helps in the prevention of hypokinetic diseases is maximum development of intellectual capacity and in full enjoyment of life (Bouchard and Shepard, 1993).

Prana means breath, respiration, life, vitality, energy or strength, ayama means stretch extension expansion length breadth regulation prolongation restraint or control. "pranayama" thus means the prolongation of breath and its restraint. Pranayama is an art and has techniques to make the respiratory organs to move and expand intentionally, rhythmically and intensively. It consist of long sustained subtle flow of inhalation (puraka), exhalation (rechaka) and retention

of breath (kumbhaka). Puraka stimulate the system, rechaka throws out vitiated air and toxins, kumbhaka distributes the energy through out the body. The movements include horizontal expansion, vertical ascension and circumferential extension of the lungs and the rib cage. Pranayama is not just automatic habitual breathing to keep body and soul together. Breathing exercise in which a person switches from shallow rapid breathing to deeper breathing, the most refined of which were developed in yoga that allegedly improve blood circulation, calm nerves and reduce stress. It improves will power and self-confidence of the practitioner.

A study showed that every increase of maximal oxygen uptake reduces overall mortality in a clinical, adult population (Myers, 2002).

Emotional adjustment is the maintenance of emotional equilibrium in the face of internal and external stressors. This is facilitated by cognitive processes of acceptance and adaptation. An example would be maintaining emotional control and coping behavior in the face of an identity crisis. This capacity is an important aspect of mental health.

Berger et al. (1988) provide evidence that hatha yoga and body conditioning improved mood state and reduced state anxiety in students.

Hence, it was proposed to find out the effect of 12 weeks of breathing exercises on emotional adjustment in professional college female students. It was hypothesized that 12 weeks of pranayamic practice would significantly increase the emotional adjustment professional college female students.

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Methodology

This study was designed to determine the effects of 12 weeks of Pranayama practice on emotional adjustment in professional college female students. The subjects of the study were female students from professional colleges of Calicut between 19 to 24 years were selected as subjects randomly. These subjects were randomly assigned to two groups that is an experimental group and a control group. Each group consists with thirty subjects. The experimental group had undergone Pranayama practice in alternate days for a period of 12 weeks. Pranayama is the control of the prana or life force which is transmitted through the nadis. The pranayama has three stages, rechaka, pūraka and kumbhaka. Rechaka is exhalation, pūraka means inhalation and kumbhaka is the holding of the breath. Practice of exhalation and inhalation should be done as long as possible by the beginners and slowly the, the time length of the exhalation and inhalation should be extended. This has to be done for retention of breath also. The progressive ratio of inhalation, retention and exhalation was, 1:1, 1:2, 1:2:1, 1:2:2, 1:4:2, 1:4:2:3 ie in the later stages the retention would be double the period of inhalation and exhalation. In each round one does puraka through the left nostril followed by kumbhaka and rechaka through the right nostril, and then reversed the order to do puraka through the right nostril, then kumbhaka and rechaka through the left nostril. Thus one round of anuloma-viloma pranayama included two each of the three components. In all other varieties, only one each of the three components made each round. A round

consisted of all the set of procedure that was repeated again and again. Intensity of the breathing exercises increased after every two weeks by increasing the duration. The control group did not involve in any training programme. Before and after the pranayama practice emotional adjustment was assessed by the questionnaire. The questionnaire consisting of 16 statements that were ranged based on five point scale. The following score key was used for assessing the emotional adjustment

Response

Score	
Strongly Disagree	1
Disagree	2
Uncertain	3
Agree	4
Strongly Agree	5

The minimum score on emotional adjustment was 16 and maximum up to 80. The collected data were statistically analyzed by 't' ratio. 0.05 level of confidence was fixed to test the level of significance.

Analysis of Data and Interpretation of Results

The data was collected before and after the training period for both control and experimental groups on emotional adjustment. The data was statistically analyzed by 't' ratio. The level of significance was fixed at 0.05 level of confidence.

Table 1. Computation of 't' ratio on emotional adjustment of experimental group and control group

Groups	Pre-test mean	Pre-test S. D (±)	Post-test mean	Post-test S. D (±)	't' ratio
Experimental Group	38.5	2.92	47.5	5.08	13.19*
Control Group	40.2	3.58	41.2	3.74	1.51

* Significant at 0.05 level for the degrees of freedom 1 and 29, 2.045

Table shows that the 't' ratio on emotional adjustment of experimental group was 13.19. Since the value was higher than the required table value of 2.045, it was found to be statistically significant at 0.05 level of confidence for degrees of freedom 1 and 29. And the obtained 't' ratio between pre and post test of control group 1.51 was lesser than the required table value of 2.045, found to be not statistically significant.

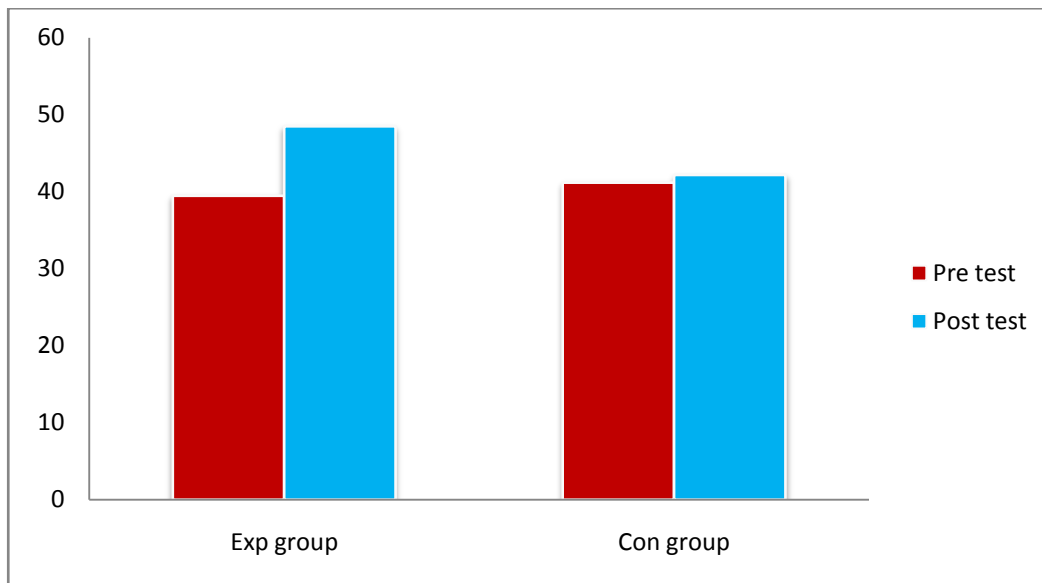
This significant change may be due to the effect of 12 weeks of pranayama practice on experimental group. The results of this study indicate that there was a significant improvement in emotional

adjustment of the professional college students (experimental group) after 12 weeks of pranayama practice. So the hypothesis is accepted.

The results of this study indicate that there was a significant improvement in emotional adjustment of the subjects (experimental group) after twelve weeks of pranayama practice programme.

The above finding of the present study is in agreement with the studies conducted by Bhattacharya, *et al* (2002), Lavey, *et al* (2005) and Gupta, *et al* (2006).

Figure I. Bar diagram showing the mean values of emotional adjustment for experimental and control groups



Conclusion

With the limitation of the study, the following conclusion is drawn.

Results of the study showed that pranayama practice programme significantly increased the emotional adjustment in professional college female students.

Reference

- Berger, Bonnie, G. and Owen, David R. (1988), 'Stress Reduction and Mental Enhancement in Four Exercise Modes', Swimming Body Conditioning, Hatha Yoga and Fencing" Research Quarterly, 60: 148-159.
- Bhattacharya Set al. (2002) "Improvement in oxidative status with yogic breathing in young healthy males", *Indian Journal of Physiology and Pharmacology*, 46(3):349-54.
- Bouchard C and Shepard RJ (1993), "*Physical activity, fitness and health: the model and key concepts*", Champagne, USA, Human kinetics, pp: 11 -24.
- Gupta Nidhi et al. (2006) "Effect of Yoga Based Lifestyle Intervention on State and Trait Anxiety", *Indian Journal of Physiology and Pharmacology*, 50 (1): 41-47.
- Lavey Roberta et al. (2005) "The effects of yoga on mood in psychiatric inpatients" *Psychiatric Rehabilitation Journal*; 28 (4): 399-402.
- Myers (2004), "Fitness versus physical activity patterns in predicting mortality in men", *American Journal of Medicine*, 117 (9), 12 -18.