

Cause Of Pranayama And Asana On Psychological Parameters

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Abstract

The purpose of the present search was to find out the cause of pranayama and asana training on psychological parameters. To achieve this purpose, thirty boys were selected randomly as subjects. They were assigned randomly into two experimental groups. Group I underwent asana training and group II underwent pranayama training group of fifteen each. All the subjects of two groups were tested on selected dependent variable such as stress and aggression before and after the treatment. The data pertaining to the variables in this study were examined by analysis of covariance (ANCOVA). Two experimental groups' namely asana and pranayama training groups have achieved significant reduction stress and aggression. In view of improvement in stress and aggression was concerned, the pranayama training was best training when compared to asana training.

KEYWORDS:Pranayama, Asana, Stress and Aggression.

INTRODUCTION

The philosophy of Yoga and the psychology behind its practice the two are bound up together in such a way that any consideration of the one inevitably has to simultaneously take into account the other, because the practice of Yoga is laid upon the basis of a psycho-philosophical background. The philosophy of Yoga and the psychology of Yoga are present not only as a background to this science of Yoga, but also as the basis for the practice of the Yogic processes. It is upon this basis that the different practices have been formulated and presented and this point should be borne in mind always, not only when we make a study of Yoga, but also when we actually practice the different Asana of Yoga. Only then will the practice become more meaningful to us and only then can the practice itself be done in a right way and in a rational way. (Pereverzeva and Pereverzev, 2010).

The present day world, full of stress and strain for people to maintain their physical and mental health. For several thousands of years Ancient Yoga Psychotherapy has played an important role in protecting health and preventing diseases of the people. Modern life does not give enough exercise, one easily develop faulty postures and defective respiratory mechanicals. The approach in Yoga psychotherapy is different from individual to individual. Many of the people, although convinced of the important role, Yoga Psychotherapy can play in making their daily life healthy and happy but do not know where to learn it, whom to approach and what actually to do.

Yoga, in and of its own nature, is naturally a form of psychology which was devised several thousand years ago to help individuals gain a better understanding of the personal experience of life and the world around them. While traditionally yoga is considered a philosophy and custom of spirituality, it

can also be considered a form of psychology because it addresses some of the most contemplative questions regarding human life. Psychology, traditionally defined by Western characterization, is a study of the functions and processes of human consciousness, awareness, and thoughts in relationship to the process of the human brain and the governing factors that determine our thoughts and actions.

For some time now, it has been common knowledge that exercise is good for one's physical health. It has only been in recent years, however, that it has become common place to read in magazines and health newsletters that exercise can also be of value in promoting sound mental health. Although this optimistic appraisal has attracted a great deal of attention, the scientific community has been much more cautious in offering such a blanket endorsement. Consider the tentative conclusions from the Surgeon General's Report on Physical Activity and Health (Landers, 1996) that "physical activity appears to relieve symptoms of depression and anxiety and improve mood" and that "regular physical activity may reduce the risk of developing depression, although further research is needed on this topic."

METHODOLOGY

The investigator selected 30 boys students randomly from Rani Seethaiachi Higher Secondary School, Annamalai Nagar. Selected subjects were divided into two experimental groups. The age of the subjects were ranged from 12 to 14 years. Stress and aggression was measured by using John D. and Catherine T. Macarthur and Bandara, 1973 questionnaires respectively.

TRAINING PROGRAMME

During the training period, the experimental groups underwent their respective training programmes for three days per week on alternate days for twelve weeks. Group I underwent asanas training (ATG) (i.e. Trikonasana, Vrikshasana, Paschimottanasana, Gomukasana, Bhujangasana and Navasana) and group II underwent pranayama (PTG) training programme (i.e. Nadi shuddhi, Kapalapathi, Bhastrika, Bhramari and Surya bedhana). The duration of training session was one day with 40- 60 minutes approximately, for the excluding warming up.

ANALYSIS OF DATA

The pretest and posttest random group design was employed as experimental design for the study. Prior to and after the training Programmed the subjects were tested and Collected data on stress and aggression. The Collected data were analyzed statistically by analysis of covariance (ANCOVA). The level of significance was fixed at 0.05 level of confidence. Analysis of covariance on selected variables of ATG and PTG have been given in table I.

RESULTS

Table – I
ANALYSIS OF COVARIANCE ON SELECTED PHYSIOLOGICAL PARAMETERS OF PRANAYAMA AND ASANA TRAINING GROUPS

Parameters	PTG	ATG	Source of variance	Sum of squares	df	Mean squares	'F' ratio
Stress	26.61	33.46	Between	309.423	1	309.423	54.5*
			Within	153.324	27	5.679	
Aggression	13.39	12.15	Between	11.51	1	11.51	21.43*
			Within	14.502	27	0.537	

*Significant at 0.05 level of confidence *P<0.05

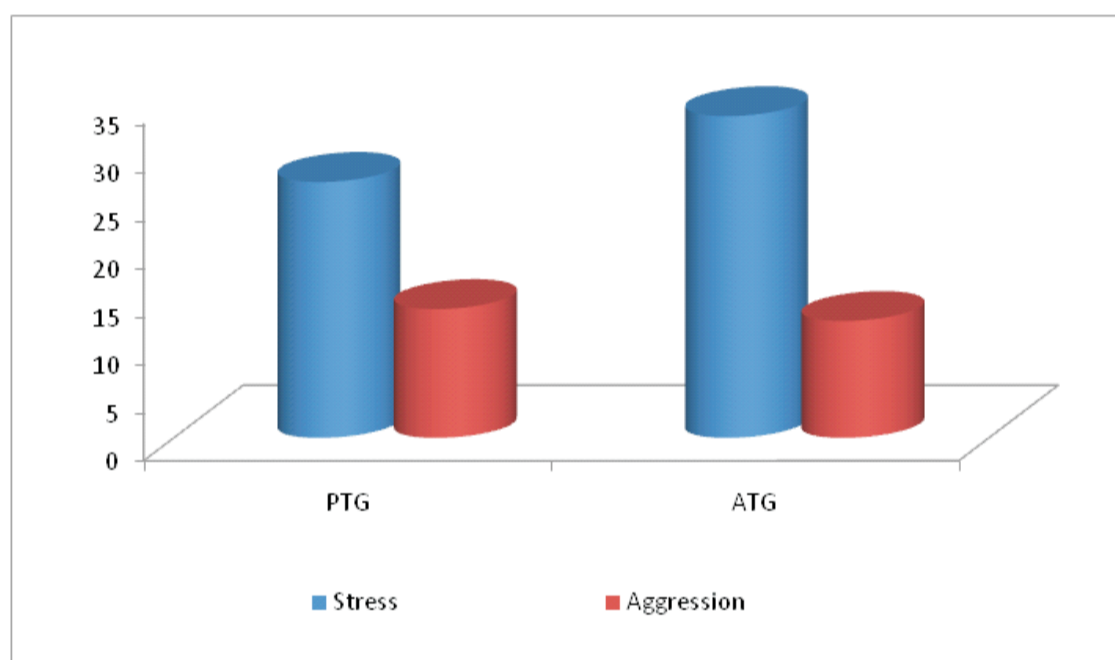
(The table value required for significance at 0.05 level with df 1 and 27 is 4.21)

The adjusted post-test means on stress of pranayama and asanas training groups are 26.61 and 33.46 respectively. The obtained 'F' ratio value of 54.50 of adjusted post-test data on stress is greater than the table value of 4.21 required for significance at 0.05 level of confidence with degrees of freedom 1 and 27.

The adjusted post-test means on aggression of pranayama and asanas training groups are 13.39 and 12.15 respectively. The obtained 'F' ratio value of 21.43 of adjusted post-test data on aggression is greater than the table value of 4.21 required for significance at 0.05 level of confidence with degrees of freedom 1 and 27.

Figure – I

CYLINDER DIAGRAM SHOWS THE ADJUSTED POST TEST MEAN VALUES ON SELECTED PHYSIOLOGICAL PARAMETERS OF PRANAYAMA AND ASANAS TRAINING GROUPS



The results of the study showed that there were significant reduction in stress and aggression between the pre and post test of the experimental periods. The result of the study implied that pranayama training group (PTG) has got more improvement of stress and aggression when compared to ATG.

DISCUSSIONS

The result of the study on aggression reveals that the experimental group namely asanas and pranayama training groups had significantly reduced after the training. Due to the regular physical activities namely aerobic exercises, physical exercises reduce the level of stress. (Roth, (1989), Calfas, et al., (1994). Steptoe, et al., (1993), Roy and Steptoe, (1998) and Bonhauser, et al., (2005)).

CONCLUSIONS

From the analysis of the data, the following conclusions were drawn.

1. Due to the influence of pranayama and asana training improve the stress and aggression.
2. Pranayama training was identified as the best training method for improving the stress and aggression when compared to the asanas training.
3. Future research may also benefit from long term asana and pranayama practice studies. The current research looks only stress and aggression changes in acute time frames.
4. The results of the study may be recommended to the coaches and physical educators to adopt these

findings to improve the psychological qualities.

REFERENCES:

- 1.Landers, Daniel M., (1996), "The Influence of Exercise on Mental Health", Arizona State University, 2(12), PCPFS Research Digest.
- 2.Pereverzeva EV, and Pereverzev VA., (2010), "A Novel Psychophysiological Model of the Effect of Alcohol Use on Academic Performance of Male Medical Students of Belarusian State Medical University", IJCRIMPH., 2 (6), pp.183-197.
- 3.Roth, D.L. (1989), "Acute Emotional and Psychophysiological Effects of Aerobic Exercise. Psychophysiology, 27, pp.694-701.
4. Steptoe, A., Kearsley, N. and Walters, N. (1993). Cardiovascular Activity During Mental Stress Following Vigorous Exercise in Sportsmen and Inactive Men", Psychophysiology, 30, 245-252.
- 5.Steptoe, A., et al., (1998), "Exercise and the Experience and Appraisal of Daily Stressors: A Naturalistic Study", Journal of Behavioural Medicine, 21(4), pp.363-374.
- 6.Bonhauser, M. et al., (2005), "Improving Physical Fitness and Emotional Well-Being in Adolescents of Low Socioeconomic Status in Chile: Results of a School-Based Controlled Trial", Health Promot. Int. (June 2005) 20 (2): 113-122.