

## Management of Stress through Yoga Practice in Academic Performance of College Students

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### Abstract

Due to fast life, vast syllabus, tension of examination and carrier, tight schedule of tuition and college, economic status always students show some stress symptoms. This stress affects on academic performance of students. Yoga acts as medicine in stress management which releases stress and enhances academic performance of stressed students.

The present study focused on influence of yoga module with yogasana + Pranayama + Meditation + Prayer + Value orientation programe in some stressed college students. The study is conducted at D. A. B. N. College, Chikhali. Tal . Shirala, Dist. Sangali. 200 students (girls and boys) from Art's and Science faculty are selected randomly for the test. Out of them stressed students are selected with the help of questioner and 25 students are taken as control. Training and practice of yoga module for selected students was arranged in college campus for 60 minutes in morning session per day about six months. The result shows that the students who practiced yoga performed better in academic performance.

**KEYWORDS:** Academic performance, stress, yoga, college students.

### INTRODUCTION:

An attained ability of competence in educational task is called as academic achievement. Usually it is measured by standard tests and expressed in grades or units based on norms derived from sampling performance (Trow, 1956). Study reveals that different levels of stress can interfere with task and reactions of stress result in the inability to concentration (Mottowildo et.al., 1986; Steers R.M., 1984; Sailer *et al* 1982). Yoga is way of life is Characterized by health, balance hiss and harmony. (Nagendra & Nagarathna, 1977). Meditation of yoga is controlled by the seventh limb of Ashtanga yoga. According to Maharishi M. Yogi, meditation is new technique called as transcendental meditation practicing yoga, a person who want to reach a state of mental stability. A science of yoga is powerful stream of knowledge which enable practitioners to achieve physical health, stable mind, continuous spiritual uplift and creates ability for harmonious society. Hatha yoga practices like asanas, pranayama, kriyas, mudras and bandh are taught as a physical practices where meditational techniques work at mental level and helpful to develop a certain type of awareness within oneself.

Yoga and meditation help to create positive effect in stress of adolescents. The processing of sensory information at the thalamic level stimulated by practice of pranayam and meditation. (Telles *et al*, 1992 Telles and Desi raju, 1993; Telles *et al*, 1994). Six months of yogic practices brings a feeling of well-being in body weight,

increased vital capacity and acceleration in endocrinal functions, improvement in nervous response and controlling headache, insomnia and nervousness (Udupa *et al*, 2001). Meditational practices reduce stress and improve academic performance, increases alertness and bring improvement in competitive performance (Sharma, 2002). Generally improved the quality of life (Dua J., 1998; Dr. Dhananjay Gunde, 1988)

The present study reveals the effect of yoga on academic performance of the college student in relation to their stress. The present study was conducted to find any effect of yoga on the academic performance in Science and Arts faculty study in relation to stress and the effect of yoga on academic performance in relation to stress.

### Materials and Methods

The study was conducted in Deshbhakt Anandrao Balwantrao Naik College, Chikhali, Dist.- Sangli (MS) India. 200 students were selected randomly for this test. The participants were 50 boys and 50 girls from Arts and Science faculty respectively. The stress questioner was administered to identify two levels of students with high stress and low stress. A code was provided to the students at the time of pretest to keep their personal identity closed. Yoga module was used as an intervention treatment for the experimental group for an hour daily in morning for six months. A yoga module consists of yogasana + Pranayama + Meditation + Prayer + Value orientation programme. It was scheduled for an hour in morning with the experimental group. Some academic performances was administered on the both group. To study an effect of yoga and stress on the academic performances by ANOVA test.

### Result and Discussion

The results are represented in table.1 and 2. Table.1 shows that the group means of students with low stress [ $M_{LS} = 30.24$ ] is greater than the group mean of the students with high stress [ $M_{HS} = 24.83$ ], meaning thereby that students with low stress performed better than the students with high stress. Thus, this study reveals that the high stress affects students' performance negatively.

**Table1.** Means of academic performance gain scores of the College students

Type of Stress	Experimental	Control	Mean
High Stress	$X_1 = 30.99$	$X_2 = 18.68$	$M_{HS} = 24.83$
Low Stress	$X_3 = 34.28$	$X_4 = 26.20$	$M_{LS} = 30.24$
Mean	$M_{EXP} = 32.63$	$M_C = 22.44$	-

Table.2 gives the details of means which depicts that the experimental group showed higher stress groups mean [ $M_{(Science\ Boys)} = 4.26$ ,  $M_{(Science\ Girls)} = 4.15$ ,  $M_{(Arts\ Boys)} = 4.40$ ,  $M_{(Arts\ Girls)} = 4.405$ ] and lower stress group means [ $M_{(Science\ Boys)} = 3.67$ ,  $M_{(Science\ Girls)} = 4.215$ ,  $M_{(Arts\ Boys)} = 4.25$ ,  $M_{(Arts\ Girls)} = 4.425$ ] than control. It is inferred that the students who experienced yoga module performed better than those students who never experienced it.

The findings of this study reveal that the students who experienced yoga module performed better academics as well as in their separate subject than those students who did not experience yoga module. The results are good agreement with earlier studies of Rahi, (1987), Sahasi *et al*, (1989) and Kauts Amit and Neelam Sharma (2009). Other researchers found that meditation improves academic performance and increases problem solving capacity and ability. Further the findings

reveal that excessive stress affects overall academic performances negatively and the results is in favor of Kenistons (1970); G. Padma & Dr. Arun Mande, (2012) and Katz *et al.*,(1968).

More over, when academic performance in individual subjects was analyzed the performance was considered in high stress and low stress group but having values very close to significant values.

So it may be concluded from the finding of study that with the intervention of yoga, academic performances improves by optimizing the stress level. So it is suggested that yoga module should become a regular in school and colleges.

**Table. 2** Means of academic performance gain scores of Science and Arts faculty students in high stress and low stress group with and without yoga intervention

Stress	Experimental				Control			
	Science		Arts		Science		Arts	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
High Stress	X <sub>1</sub> = 5.74	X <sub>1</sub> = 5.73	X <sub>1</sub> = 5.52	X <sub>1</sub> = 5.67	X <sub>2</sub> = 2.78	X <sub>2</sub> = 2.57	X <sub>2</sub> = 3.28	X <sub>2</sub> = 3.14
Low Stress	X <sub>3</sub> = 4.48	X <sub>3</sub> = 5.34	X <sub>3</sub> = 5.04	X <sub>3</sub> = 5.45	X <sub>4</sub> = 2.86	X <sub>4</sub> = 3.09	X <sub>4</sub> = 3.46	X <sub>4</sub> = 3.45
Mean (H.S.)	4.26	4.15	4.40	4.405	--	--	--	--
Mean (L.S.)	3.67	4.215	4.25	4.45	--	--	--	--

## REFERENCES

Dua J. Meditation and its effectiveness. In: Pestonjee DM, Pareek U, Aggarwal R, editors. *Studies in Stress and its management*. Delhi: Oxford and IBH;(1998).

Gunde Dhananjay Yoga and Health, Kavita Gunde, Kolhapur. (1988).

Hirsch S, Keniston K. Psychological issues in talented college dropouts. *Psychiatry*. 33:1 (1970).

Kashap Mangesh. *Yoga for Health* Metha Publishing House, Pune.- 30(2005).

Kauts Amit and Neelam Sharma Effect of yoga on academic performance in relation to stress. *Int J Yoga*. Jan-Jun; 2(1): 39–43(2009).

Maharishi Mahesh Yogi. *The Science and art of living*. Los Angeles. New York: International SRM Publications; (1972).

Mottowildo SJ, Packard JS, Manning MR. Occupational Stress: Its causes and Consequences for job performance. *J Appl Psychol*.71:618–29 (1986).

Nagendra HR, Nagarathna R. *New Perspective in stress management*. Bangalore, India: Vivekananda Kendra Parkashana; (1977).

Padma G. and Mande Arun, Rohan Publication, Pune (2012).

Rahi A. Bisht Battery Stress Scale, National Psychological Corporation, 4/230,

Kacheri Ghat, Agra, UP, India.(1987).

Sahasi G, Mohan D, Kacker C. Effectiveness of yogic techniques in the management Of anxiety. *Journal of Personality and Clinical Studies*. 1:51–5 (1989).

Sailer H.S., Schlacter J., Edwards M.R. Stress-causes, consequences and coping strategies *Personal*.59:35–48 (1982).

Sharma P.D. *Yogasan*, Navanit Publication, Mumbai.400 028.

Sharma R. Yoga for sports and health. *The Tribune, Sports Feature*; p. 24 (2002).

Steers R.M. *Organizational Behaviour*. In: Foresman S, editor. 2nd ed. Glenview, I.L.: (1984).

Telles S, Desiraju T. Recording of auditory middle latency evoked potentials during the practice of meditation on the syllable 'OM' *Indian J Med Res*. 98:237–9 (1993).

Telles S, Hanumanthaiah BH, Nagarathana R, Nagendra HR. Plasticity of motor control systems demonstrated by yoga training of school children. *Perceptual and Motor Skills*. 76:1264–666(1994).

Telles S, Joseph C, Venkatesh S, Desiraju T. Alterations of auditory middle latency evoked potentials during yogic consciously regulated breathing in an attentive state of mind. *Int. J. psychophysiology*. 14:189–98 (1992).

The Times of India. News item 'Stress and Performance' 7:12 (2007).

Trow W.C. *Psychology in Teaching and Learning*. Boston: Houghton Mifflin Company; (1956).

Udapa K.B., Singh R.H., Dwivedi K.N. Biochemical study on meditation. Paper presented at the international seminar on stress in Health and Diseases. Varanasi: Banaras Hindu University, 2001.