

STRESS MANAGEMENT: A CASE STUDY OF PROFESSIONAL STUDENTS ON IMPACT OF MEDITATION & YOGA ON STRESS LEVELS

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ABSTRACT

Meditation is one of the Five Principles of Yoga. It is the practice by which there is constant observation of the mind. It requires you to focus your mind at one point and make your mind still in order to perceive the 'self'. Through the practice of Meditation, it will help achieve a greater sense of purpose and strength of will. It also helps you achieve a clearer mind, improve your concentration, and discover the wisdom and tranquillity within you. To Assess the Yoga and Meditation impact of Academic Stress among Professional Students like Medicos, Engineering students this study is undertaken. This study was conducted on a sample of 100 (Yoga=50 and Meditation=50) Professional Students in Tirupati of Chittoor District of Andhra Pradesh. In order to realize the objectives of the study, two hypotheses were formulated. (i) There would be significant impact of Yoga on Stress among Professional Students with regard to Pre-test and Post-test. (ii) There would be significant impact of Meditation on Stress among Professional Students with regard to Pre-test and Post-test. Stress index developed by A.K.Srivatsava and A.P.Singh (1984) was administered to the sample. It measures stress in 12 dimensions, namely, Role Over load, Role ambiguity, Role conflict, Unreasonable groups and political pressures, Frustration, Under Pressure For Exams, Competition in class, Poor peer relations, Financial burden, scholarship requirements, family-related pressures and course-related stress. Their age ranges from 21 to 25 years. Data was analyzed using Means, SD'S and t values. Results show that Yoga and Mediation training reduce the stress among Professional Students, and implications were drawn.

Keywords: Professional Students, Mind, Academic Stress Meditation, Yoga.

INTRODUCTION

Stress is a Sudden Biological Change. It has become the curse of 21st century and is silent killer in the modern world. Stress is the greatest danger in the information era. Stress is a deadly poison. It can disturb any one's physical, mental, emotional and behavioral balance. Stress can damage different parts of human body from muscles and tissues to organs and blood vessels. It can speed up pulse rate and respiration. It can raise blood pressure and body temperature. It can also interfere with the body metabolism, digestion, appetite, sleep, sexuality and even fertility.

Indian scholars viewed the phenomenon of stress from various perspectives ranging from stimulus oriented responses to psychodynamic point of view. A

comprehensive description of certain concepts which relate closely to the modern concepts of stress can be found in traditional texts like Charak Samhita, Yoga sutrar and Bhagavat Gita. Some of these, for example, are Dukha (pain/misery) Klsu (afflictions) Kama or trisna (desires) Atman and Ahankora (self & ego). It is interesting to note that the body - mind relationship, characteristic of modern stress studies with relevance to the holistic ancient Indian view of stress and management of stress are drawing the attention of scholars at international level. Yoga is an ancient art that is defined as the union of the soul with God (Anand, 2000). It is "a path of personal spiritual development that utilizes meditation to bring enlightenment, self-realization, and, ultimately, the attainment of God and bliss" (p. 109). Originally, the

ultimate goal of yoga was called Samadhi, or self-realization (Iyengar, 2001).

The word meditate comes from the Latin word *meditari*, which means, "to think or reflect upon" (Bonadonna, 2003). It is defined as a simple mind-body technique that allows you to gain a unique state of restful awareness or alertness. Mindful meditation is the more difficult of the two (Bonadonna, 2003). It is defined as attempting awareness of the whole perceptual field. More than 2 million Americans have learned meditation over the past years (Bonadonna, 2003). Recent studies and evidence have demonstrated that such yoga practices are effective in reducing stress.

Smith C, et.al. (2007) reported that Yoga was found to be as effective as relaxation in reducing stress, anxiety and improving health status on seven domains of the SF-36. Yoga was more effective than relaxation in improving mental health.

James D. et.al (2010) reported improved mood, and significantly Meditation training has become a popular intervention for the prevention and treatment of stress-related diseases and for the management of stress.

Manocha, et.al (2011) Conducted a study "A Randomized, Controlled Trial of Meditation for Work Stress, Anxiety and Depressed Mood in Full-Time Workers". Results show that there was a significant improvement in the meditation group compared to both the relaxation control and the wait-list groups.

Hartfiel et al (2011) results show that even a short program of yoga is effective in enhancing emotional well-being and resistance to stress in the workplace.

Mohan A et.al (2011) report a significant increase in physiologic Galvanic Skin Response (GSR), Heart Rate (HR), Electromyography (EMG), sympathetic reactivity(GSR, EMG, HR, QTc/QS2) and psycho logic (acute stress questionnaire scores) markers of stress. Meditation was associated with relaxation (significant decrease in GSR, EMG, QTc/QS2, and acute stress questionnaire scores). Meditation, if practiced before the stressful event, reduced the adverse effects of stress. Memory quotient significantly increased, whereas cortisol

level decreased after both stress and meditation. Visual-Choice Reaction Time (VCRT), showed no significant change.

Although numerous studies have evaluated the impact of stress on college students (e.g., Edwards, Hershberger, Russell, & Market, 2001; Misra, McKean, West, & Russo, 2000; Reifman & Dunkel-Schetter, 1990; Zaleski, Levey-Thors, & Schiaffino, 1999), there has been a dearth of studies on international students. Both American and international students share common academic stressors such as family-related pressures, scholarship requirements, financial burdens, competition in class, and course-related stress (Cheng, Leong, & Geist, 1993). However, perceptions of academic stress and coping strategies might differ across cultures. Hence, American and international students may differ in their perceptions and reactions to academic stressors.

Cutshall SM, et.al.(2011) report that self-directed, computer-guided meditation training program is useful for stress reduction in hospital nurses. This pilot study suggests the feasibility and efficacy of a biofeedback-assisted, self-directed, meditation training program to help hospital nurses reduce their stress and anxiety. Optimal frequency of use of the program, as well as the duration of effects, should be addressed in future studies.

Feuerstein, et.al (1998); examine connections between art, yoga, and human behavior, specifically the interface between sublimation in art and tantric practices. The presentation begins with a definition of yoga and tantric traditions. Then sublimation and art are discussed in terms of related tantric principles. Yoga is a vast subject, likely originating with indigenous shamanic societies, that spans a time period over 5,000 years. Tantra, an offshoot of yoga traditions, can be partially defined as a set of practices and rituals geared towards awakening awareness and cultivating conscious action.

Sao, Akhileshwar et.al (2011) reported that intervened yoga practices caused significant beneficial effect on the psychological disorders. It has various gentle asanas, pranayama, and relaxation techniques. Two groups of experimental and control subjects were used. Yogic

management programme consist of regulated breathing, physical postures (asanas) and relaxation for interaction. Significant reductions were shown for stress, depression, anxiety, and reduction in fatigue was observed in the experimental group (yoga group).

Birinder S et.al (2011) report that findings may assist in implementing practical interventions such as yoga in the workplace to mitigate stress, enhance health status and reduce the risk of cardiovascular and metabolic diseases. Statistical significance and clinical significance will be interpreted and will be used to express group differences. Changes between groups will be determined by analysis of covariance of the post-treatment score controlling for the baseline score.

Objective

- To study the effects of Yoga and Meditation in reducing stress among Professional Students.

Hypotheses

- There would be significant impact of Yoga on Stress among Professional Students with regard to Pre-test and Post-test.
- There would be significant impact of Meditation on Stress among Professional Students with regard to Pre-test and Post-test.

Methods and Tool

Yoga is the most recognized form of Exercise, Stretching, Aerobic exercise and Meditation. The definition of yoga is "to yoke or joint together", (Tylor2003). It integrates the Mind and Body focusing on Balance posture, deep breathing, stretching and relaxation. Yoga evolved from the Hindu, Jaina, and Buddhist religious traditions in India. Yoga alters stress response and person's attitude, towards stress along with improving self confidence, increasing one's sense of well being, and creating a feeling of relaxation and calmness (Malathi Damodaran, 1999).

Meditation is an ancient technique to revive your weary soul and help you deal effectively with stress, and helps you rediscover a sense of profound peace and inner calmness., Meditation one of the eight limbs of yoga outlined in Patanjali's Yoga Sutra, is the final step before attaining spiritual bliss. The great seer has described yoga

as-yogas chittavrittinirodhah, which means completely shutting out all kinds of mental fluctuations. When such a stage is reached, meditation (dyana) is perfected, resulting in yoga (union of individual consciousness with the cosmic consciousness). That is the zenith of meditation.

Stress

Stress is defined as Physical or psychological disorder associated with an Surrounding environment and manifests itself in symptoms such as extreme anxiety, or tension, or cramps, headaches, or digestion problems.

Stress Index developed by A. K. Srivastava and A. P. Singh (1984) was used. It consists of 46 items, 28 are 'true-keyed' and the rest, 18 are 'False keyed items (No.14,15,38,6,18,30,40,7,19,31,8,32,41,21,33,10,22& 43.) It provide measures on 12 factors. For each statement there are five response categories i.e. 1 = 'strongly disagree', 2 = 'Disagree', 3 = 'Undecided', 4 = 'Agree', 5 = 'Strongly Agree'. High score indicates more educational stress and least score indicates less Educational stress. It measures stress in 12 dimensions, namely, Role Over load, Role ambiguity, Role conflict, Unreasonable groups and political pressures, Frustration, Under Pressure For Exams, Competition in class, Poor peer relations, Financial burdens, scholarship requirements, family-related pressures and course-related stress.

Sample and Procedure

The investigator personally contacted Professional Students in Chittoor District, Andhra Pradesh. After establishing rapport with the students, the following questionnaires were administered with necessary instructions. Educational stress questionnaire was administered using instructions. The data was collected from pre-test of stress, and after 3 months training like Yoga and Meditation, post test (100) of stress (Table 1).

Statistical Analysis

Data was analyzed using Means, SD'S and 't' values.

Pre-Test		Post-Test	
Yoga	Meditation	Yoga	Meditation
50	50	50	50

source : primary data

Table 1. Yoga and Meditation Pre-Test and Post-Test (100) of Stress

Discussion & Analysis

't' values of 38.69,26.53,33.53,32.87,7.06,39.30,30.70,43.25,33.68,34.66,45.47,and 11.14 which are significant, clearly indicate that Yoga has a significant impact on stress factors, that is, Role overload, Role ambiguity, Role conflict, Unreasonable group & political pressures, Frustration, Under Pressure For Exams, Competition in class, Poor peer relations, Financial burdens, scholarship requirements, family-related pressures and course-related stress, respectively (Table 2) Figure 1. Hence hypothesis-1 suggesting there would be significant impact of Yoga on Stress among Professional Students with regard to Pre-test and Post-test is accepted. The results of the present study corroborate the results of the Studies conducted by Hartfiel et al.(2011), Sao, Akhileshwar et.al (2011) showing that even a short program of yoga is effective in enhancing emotional well-being and withstanding stress in the workplace.

't' values of 34.85,35.69,30.94,37.67,30.57,46.62, 34.83,51.39,38.90,34.19,47.57,and 31.07 which are significant, clearly indicate that Meditation has a significant impact on stress factors, that is, Role overload, Role ambiguity, Role conflict, Unreasonable group & political pressures, Frustration, Under Pressure For Exams, Competition in class, Poor peer relations, Financial

S.No	Stress Factors	N	Pre assessment value (Mean ±SD)	Post assessment value (Mean±SD)	't' Value	Level of Significance
1	Role Overload	50	22.76 ± 3.00	6.93±1.02	38.69**	< 0.01
2	Role ambiguity	50	12.05 ± 1.43	5.43±1.30	26.53**	< 0.01
3	Role Conflict	50	14.3 ± 1.71	5.81±0.96	33.53**	< 0.01
4	Unreasonable grp.& Political pressures	50	12.71±1.46	5.15±1.02	32.87**	< 0.01
5	Frustration	50	10.33 ± 1.13	4.55±1.32	7.06**	< 0.01
6	Under Pressure For Exams	50	12.55 ± 0.96	5.18±1.09	39.30**	< 0.01
7	Competition in class	50	11±1.08	4.66±1.18	30.70**	< 0.01
8	Poor peer relations	50	13.61±1.07	5.16±1.07	43.25**	< 0.01
9	Financial burdens	50	12.95±1.39	5.16±1.13	33.68**	< 0.01
10	scholarship requirements	50	11.16±1.12	4.41±1.01	34.66**	< 0.01
11	family-related pressures	50	13.53±1.19	4.91±0.86	45.47**	< 0.01
12	course-related stress	50	13.53±1.76	2.56±0.62	11.14**	< 0.01

Source : Primary Data

Table 2. Yoga Impact on Stress (Pre-Post) on Professional Students

burdens, scholarship requirements, family-related pressures and course-related stress respectively (Table 3) Figure 2. Hence hypothesis-2 suggesting there would be significant impact of Meditation on Stress among Professional Students with regard to pre-test and post-test is accepted. The results of the present study corroborate the results of the studies conducted by Cutshall SM, et.al. (2011), Manocha, et.al (2011) which state that, meditation training program to help hospital nurses reduce their stress and anxiety. Optimal frequency of use of the program, as well as the duration of effects, should be addressed in future studies.

Conclusion

- Yoga has a significant impact on stress factors, that is, Role overload, Role ambiguity, Role conflict, Unreasonable group & political pressures, Responsibility for persons, Under participation, Powerlessness, Poor peer relations, Intrinsic impoverishment, Low status, Strenuous working conditions, and Unprofitability.
- Meditation has a significant impact on stress factors that is Role overload, Role ambiguity, Role conflict, Unreasonable group & political pressures, Responsibility for persons, Under participation, Powerlessness, Poor peer relations ,Intrinsic impoverishment, Low status, Strenuous working conditions, and Unprofitability.

Implications

The performance and productivity of students under stress

S.No	Stress Factors	N	Pre assessment value (Mean ± SD)	Post assessment value (Mean ± SD)	't' Value	Level of Sig
1	Role Overload	50	23.2± 3.40	7.05 ±1.15	34.85**	< 0.01
2	Role ambiguity	50	12.15±1.42	4.75 ±0.75	35.69**	< 0.01
3	Role Conflict	50	14.3±1.74	6.16 ±1.06	30.94**	< 0.01
4	Unreasonable grp.& Political pressures	50	12.61±1.43	4.80 ±0.73	37.67**	< 0.01
5	Under Pressure	50	10.36±1.07	4.25 ±1.00	30.57**	< 0.01
6	For Exams	50	12.56±0.96	4.96 ±0.82	46.62**	< 0.01
7	Competition in class	50	11.01±1.11	4.38 ±0.97	34.83**	< 0.01
8	Poor peer relations	50	13.63±1.07	4.96 ±0.75	51.39**	< 0.01
9	Financial burdens	50	12.75±1.33	4.98 ±0.79	38.90**	< 0.01
10	scholarship requirements	50	11.26±1.13	4.36 ±1.08	34.19**	< 0.01
11	family-related pressures	50	13.55±1.15	4.98 ±0.79	47.57**	< 0.01
12	course-related stress	50	7.56±1.15	2.48 ±0.53	31.07**	< 0.01

Source : Primary Data

Table 3. Meditation Impact on Stress (Pre-Post) on Professional Students

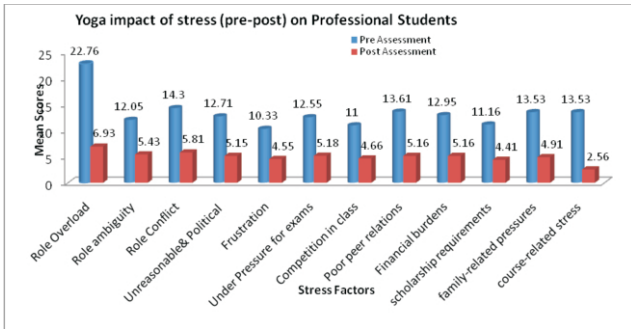


Figure 1. Yoga Mean Scores for Pre-Post

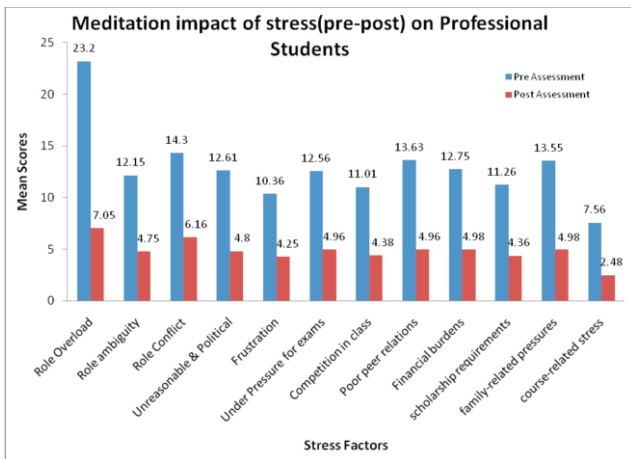


Figure 2. Meditation Mean Scores for Pre-Post

will be very low. So students participating in Yoga and Meditation Training Programmes is the best way to reduce the stress. We have practically proved it. So we suggest college managements, to provide practice of yoga and meditation regularly to their students.

Appendix

Instruction to Reduce Stress Techniques

- Breathe deeply slowly and exhale out slowly. Deep breath helps you get plenty of oxygen and may give you instant stress relief. For better results, as you breathe out, speak "rel-a-a-a-a-x" in your mind very slowly. You can speak anything like 1-2-3-4-5 or Om or 5-4-3-2-1 or any God. Do it 10 times, you will feel stress relief immediately.
- Sit with your back straight in the Chair.
- Include time for stress reduction as a part of your schedule.
- Plan your strategies to overcome these stressors.
- Going on vacation for some days.
- Talk to your colleagues, friends, family members,

teachers, neighbors, or counselors. This will reduce sadness,

- Physical activity plays a key role in reducing and preventing the effects of stress. Take a walk for example. Or do any activity that you like most. Consider gardening, jogging, swimming, cycling, dancing, playing table tennis, mowing grass, playing with your dog or cat, or similar activities. Such activities can relieve your tension. Exercising with stress balls is good stress reduction technique.
- Avoid smoking, caffeine, alcohol and other stimulants.
- Maintain your sleep times.
- Eat healthy, nutritious, soft foods like vegetables and fruits daily.
- Take up a new hobby or interest to take your mind off things.
- Have some fun - meet your friends or do something you love.
- Take a look at your relationships with your colleagues - do you treat each other with respect and consideration? If not, try to find a way to improve relationships with your colleagues.
- Always maintain a smile.
- Listen to Soft music like Devotional music, Classical music or melody songs.

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