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THE INFLUENCE OF YOGA ON STRESS PRESSURE

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ABSTRACT:

Actually yoga combines several techniques to combat stress. That is powerful, that is very powerful! Even for people who have physical limitations yoga can be very beneficial just by practicing the breathing techniques, the meditation and the guided meditation. Just by doing this you can have great benefits with the practice of yoga. So in conclusion yes yoga can be a great remedy for stress and can offer some stress relief. Yoga has combined set of principles and exercises that can greatly benefit you and help you to deal with stress. Yoga provides a combination of benefits such as breathing exercises, stretching exercises, fitness program, and meditation practice and guided meditations all in one technique.

KEYWORDS: *Effect, Yoga, Stress, techniques, exercises, people, fitness program, human life.*

INTRODUCTION:

According to the National Institute for Occupational Safety and Health, 80% of workers experience job stress. Keeley and Harcourt in their study revealed that stress is caused by heavy work demands in the job itself, which the unskilled employee with little control over how the work is done, cannot adapt to or modify. Kulkarni, in an article "Burnout" published in Indian Journal of Occupational and Environmental Medicine, has said that the rapid change of the modern working life is associated with

increasing demands of learning new skills, the need to adapt to new types of work, pressure of higher productivity and quality of work, time pressure, and hectic jobs. These factors are increasing stress among the workforce. In an age of a highly dynamic and competitive world, man is exposed to all kinds of stressors that can affect him in all realms of life. Hans Selye first introduced the term stress into life science. The term *stress* is derived from the Latin word *Stringer*, which means "to be drawn

tight.” Stress is a complex, dynamic process of interaction between a person and his or her life. Stress can affect one’s health, work performance, social life, and the relationship with family members. The stress response is a complex emotion that produces physiological changes to prepare us for fight-or-flight, to defend ourselves from the threat or flee from it. Eminent behavioral scientist Stephen Robbins defines stress as that which arises from an opportunity, demand, constraint, threat, or challenge, when the outcomes of the event are important and uncertain. Stress can also be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury. Hence we can say that stress is a silent killer, and prolonged exposure to stress may exert harmful effects on physical, psychological, and behavioral well-being of an individual.

INFLUENCE OF STRESS

One of the studies quoted that stress-related disorders evolve gradually through four recognizable stages. First, psychological changes such as anxiety, irritability, and insomnia arise, due to over-stimulation of

the sympathetic nervous system. In the second stage symptoms such as high blood pressure, elevated heart rate, and increased intestinal motility surface. In the third stage, a more profound physical or biochemical imbalance sets in, while in the final fourth stage, irreversible symptoms that often require surgical or long-term management appear. Increased sympathetic activation and the release of stress hormones, including adrenaline, lead to increases in heart rate, blood pressure, breathing, body temperature, and muscle tension. In contrast, the relaxation response has been proposed as an antidote to stress; relaxation decreases heart rate, breathing, body temperature, and muscle tension.

Similar to stress in the workplace, college students are also often impacted by stress. Academic stress can result from many different imperative stressors, such as final grades, term papers, examinations, and excessive homework. Stress has exhibited a negative correlation with cognitive performance, thus negatively impacting academic performance.

YOGA

Yoga is an ancient discipline designed to bring balance and health to the physical,

mental, emotional, and spiritual dimensions of the individual. In a national, population-based telephone survey (n=2055), 3.8% of respondents reported using yoga in the previous year and cited wellness (64%) and specific health conditions (48%) as the motivation for doing yoga. Yoga has also found its special existence in Japan by its peculiarities like asana and pranayama. Yoga is often depicted metaphorically as a tree and comprises eight aspects, or limbs: yama (universal ethics), niyama (individual ethics), asana (physical postures), pranayama (breath control), pratyahara (control of the senses), dharana (concentration), dyana (meditation), and samadhi (bliss). Long a popular practice in India, yoga has become increasingly more common in Western society.

Rapidly emerging in the Western world as a discipline for integrating the mind and body into union and harmony, when adopted as a way of life, yoga improves physical, mental, intellectual, and spiritual health. Yoga offers an effective method of managing and reducing stress, anxiety, and depression, and numerous studies demonstrate the efficacy of yoga on mood-related disorders. Currently, treatment for anxiety and depression involves mostly psychological

and pharmacological interventions; however, mind-body interventions are becoming increasingly popular as a means to reduce stress. Yoga, a form of mind-body exercise, has become an increasingly widespread therapy used to maintain wellness, and alleviate a range of health problems and ailments. Although yoga has been practiced for over 5000 years, it has only recently gained popularity in the United States and Europe. In America, the yoga market emerged as a 5.7 billion dollar industry in 2008, an increase of 87% from 2004. The practice originated in India and has been implemented to alleviate both mental and physical ailments including bronchitis, chronic pain, and symptoms of menopause.

INFLUENCE OF YOGA ON POSITIVE FITNESS

Yoga is an increasingly popular therapy, used to maintain wellness and assist with the management of a range of health complaints. A review of the literature identified two trials evaluating the effects of yoga on reducing anxiety and stress. In a trial of 114 subjects by Khasky and Smith, yoga and imagery were found to be more effective at increasing a relaxed state, compared to the control group ($p < 0.003$)

and guided imagery was more effective than yoga in reducing negative thoughts ($p < 0.03$). Malathi and Damodaran randomly assigned 50 stressed medical students to yoga or to a nonintervention control group. A reduction in stress, improved sense of well-being, and confidence was found in the yoga group ($p < 0.001$).

Campbell, Debra Elise, and Kathleen A. Moore (2004), researchers at Deakin University in Melbourne, Australia, with the dual aims of better understanding the contribution of yoga to positive mental health and exploring links between yogic philosophy and psychological theory, conducted a study on yoga as a preventative and treatment for symptoms of mental illness. The yoga classes were designed as a six-week program incorporating breathing techniques (pranayama); exercises for strength, vitality, and flexibility (asanas); guided relaxation (yoga-nidra); and meditation. Psychometric testing was used to assess symptoms of stress, anxiety, and depression across three groups: regular yoga practitioners, beginners entering the program, and people who did not practice yoga. These tests were re-administered after six weeks, and the yoga beginners group showed lower average levels of symptoms

of depression, anxiety, and stress than at commencement, but levels were stable for regular yoga practitioners and people who did not practice yoga.

The study of Galantino et al published a systematic review of the effects of yoga on children, contributing to the large body of research evidence attesting to the positive health benefits of yoga. Many of the studies compared yoga to other treatment modalities, most commonly to exercise, meditation, and traditional medicine. However, little has been written about what distinguishes yoga from other treatments. Yoga has recently been found to have beneficial effects on blood glucose levels in individuals with diabetes and other chronic health conditions. Yoga has been shown to be effective in relieving symptoms of mental illness including depression, anxiety, obsessive-compulsive disorder, and schizophrenia. Overall, the studies comparing yoga and exercise seem to indicate that, in both healthy and diseased populations, yoga may be as effective as, or better than exercise at improving a variety of health-related outcome measures, including HRV, blood glucose, blood lipids, salivary cortisol, and oxidative stress. Furthermore, yoga appears to improve subjective

measures of fatigue, pain, and sleep in healthy and ill populations.

Another Yoga-based program that has been widely studied in the use of stress reduction is the mindfulness-based stress reduction program (MBSR), which is taught, studied, and popularized by Jon Kabat-Zinn and the Center for Mindfulness in Medicine, Healthcare and Society at the University of Massachusetts Medical School. The mindfulness-based stress reduction program includes guided instruction in mindfulness meditation practices, yoga and gentle stretching, inquiry exercises to enhance awareness, individual instruction, group dialogue, and home assignments.

Reibel, D. K., J. M. Greeson, G. C. Brainard, and S. Rosenzweig (2001) conducted a study which examined the effects of mindfulness-based stress reduction (MBSR) on health-related quality of life and physical and psychological symptomatology in a heterogeneous patient population. Patients participated in an 8-week MBSR program and were required to practice 20 minutes of meditation daily. Pre- and post-intervention data were collected, and after a one-year follow-up, revealed maintenance of initial improvements on several outcome parameters. The author concluded that a

group mindfulness meditation training program can enhance functional status and well-being, and reduce physical symptoms and psychological distress in a heterogeneous patient population, and that the intervention may have long-term beneficial effects.

YOGA FOR STRESS RELIEF:

Yoga is most Recognized form of Exercise, Stretching, Aerobic exercise and Meditation. The definition of yoga is “to yoke or joint together” it integrates the mind and body focusing on balance posture, deep breathing, stretching and relaxation. Yoga evolved from of 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 wellbeing, and creating a feeling of relaxation and calmness. Yoga is an ancient art that is defined as the union of the soul with God. It is “a path of personal spiritual development that utilizes meditation to bring enlightenment, self-realization, and, ultimately, the attainment of God and bliss”. Originally, the ultimate goal of yoga was called Samadhi, or self-realization. Patanjali is father of yoga around the sixth century B.C. appeared in the massive epic The

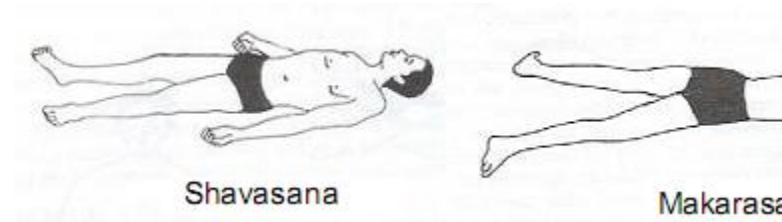
Mahabharata written by sage Vyasa and containing The Bhagavad Gita. Krishna explains to Arjuna about the essence of Yoga as practiced in daily lives ('Song of the Lord'), uses the term "yoga" extensively in a variety of ways. In addition to an entire chapter dedicated to traditional yoga practice, including meditation, it introduces three prominent types of yoga: Karma yoga: The yoga of action Bhakti yoga: The yoga of devotion, note Krishna had also specified devotion itself was action similar to above. Jnana yoga: The yoga of knowledge. Patanjali introduced -Ashtanga or Power yoga - a more demanding workout where you constantly move from one posture to another ("flow"). The dimensions of yoga are

- Pranayama (breathing) • Asana (postures) • Yama (restraint) • Niyama (healthy observances) • Pratyahara (sensory withdrawal) • Dharana (concentration) • Dhyana (meditation) • Samadhi (higher consciousness)

TYPES OF ASANAS (POSTURES):

They work at the chitta (subtle aspect of consciousness) level that eliminates the physical and mental tensions. They are trained in supine and prone position of the body respectively. Shavasana and Makarasana, Vijrasana, Bhujangasana,

Trikonasana, Virabdrasana, Pranayama, Siddhasana with Kumbhaka, Padmasana, Yogamudras are important relaxative asanas (Figure 1).



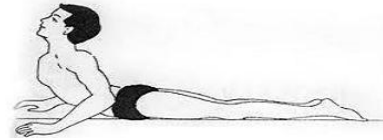
Vajrayana: Vajrasana is best asana of Stress & Tension and Anxiety it makes the body exceptionally strong and healthy. Vajra means Diamond in Sanskrit. During this asana, feel the sensations in the body as you move them. Do the Movement slowly and in a relaxed manner. Inhale and exhale slowly. While drawing the abdominal region inwards and expanding the chest, focus the attention on these body parts. The way the muscles move must be felt. Relax before, during and after the yoga posture. 1. With knees, ankles and big toes touching the ground, take a kneeling position. 2. One should sit on the heels and place palms on the knees. 3. The Spine should be erect and breath should be deep. 4. Draw the abdominal region inside and expand the chest (Figure 2).



The triangle poses – Trikonasana: The legs are spread apart and the body stretches to the left, moving from the pelvis and extending over the left leg. Both arms are perpendicular to the floor, the left hand on the floor, or resting on the calf or the outer ankle of the left foot, and the right hand reaching up straight. The spine is straight, chest open, the body facing to the front (Figure 3).



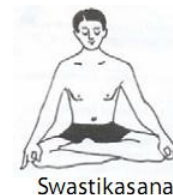
The cobra poses – Bhujangasana: The pose starts from a downward facing position with hands flat on the floor below the shoulders. The spine is lengthened and the buttocks firmed as the head and chest is slowly lifted. The elbows stay close to the body and the eyes look up. The neck is kept neutral (Figure 4).



The warrior poses – Virabhadrasana: From a standing position, feet are jumped apart approximately 4 feet. Arms are raised parallel to the floor, gaze is forward. Left foot is turned 90 degrees to the left and the knee is bend (keeping the knee above the ankle) (Figure 5).



Padmasana: 1. Sit on the ground by spreading the legs forward. 2. Place the right foot on the left thigh and the left foot on the right thigh. 3. Place the hands on the knee joints. 4. Keep the body, back and head erect. 5. Eyes should be closed. 6. One can do Pranayama in this asana (Figure 6).



Siddha Sana: 1. Place the left heel at the anus, the terminal opening of the alimentary canal or digestive tube. 2. Keep the right heel on the root of the generative organ. 3. It

should be in a way that the knees and the heels, both lie upon the other. 4. The hands must be placed on either sole of the feet. Keep the eyes half closed (Figure 7).



Breathing exercise: Pranayama, the breathing exercise, may rejuvenate you, to carry on your work with extra energy. 1. Put your right thumb on your right nostril 2. Deeply inhale air using your left nostril 3. Close your left nostril with your right index finger and hold breath for few seconds 4. Exhale through left nostril 5. Do it similarly with left nostril closing right nostril 6. Now inhale through left nostril, hold breath and exhale through right nostril and do the other way (Figure 8).



BENEFITS OF YOGA:

Mental calmness: Yoga asana practice is intensely physical. Concentrating so intently on what your body is doing has the effect of

bringing calmness to the mind. Yoga also introduces you to meditation techniques, such as watching how you breathe and disengagement from your thoughts, which help calm the mind.

Stress reduction: Physical activity is good for relieving stress, and this is particularly true of yoga. Because of the concentration required, your daily troubles, both large and small, seem to melt away during the time you are doing yoga. This provides a much-needed break from your stressors, as well as helping put things into perspective. The emphasis yoga places on being in the moment can also help relieve stress, as you learn not to dwell on past events or anticipate the future. You will leave a yoga class feeling less stressed than when you started. Read more about yoga for stress management here.

Body awareness: Doing yoga will give you an increased awareness of your own body. You are often called upon to make small, subtle movements to improve your alignment. Over time, this will increase your level of comfort in your own body. This can lead to improved posture and greater self-confidence.

CONCLUSION:

Most importantly, yoga is also a strong practice for the prevention against painful ailments. Being doctors, we think that we are healthy, though affected by enormous stress, and we tend to neglect due to our busy schedule. This is occupational stress that does not spare even doctors. As doctors are already aware of the prolonged stress and its physical and mental effects, it is very important that one knows how to manage stress and protect their positive health. In this regard, even doctors can start practicing yoga that has been scientifically proven to reduce stress and improve positive health, and thereby can also advise patients to overcome their problems. Yoga is said to be a complete science, as it fulfills the WHO's definition of health by addressing the individual at all physical, psychological, and social levels. Stress affects individuals of all age groups, and people of all sectors and occupations, including doctors. Though many modalities of treatments are available for reducing stress, people are trying to find an alternative to be relieved from stress without medications. Yogic science, having persisted for 5000 years and known to be spiritual for many years, is now being proven through scientific studies to have significant benefits on health. Yogic science includes Yogasanas (postures), pranayama

(breathing practices), Dhyana (meditation), and relaxation techniques which benefit human beings at every level. Through research studies, yoga has proven effective in many physical and psychological ailments. Apart from the management of diseased condition, it also has been proven to improve the positive health and quality of life of the healthy.

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