Indian Psychiatric Society Publication

The Science and Art of Yoga in Mental and Neurological Healthcare

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Neurophysiology of Yoga

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INTRODUCTION

The exploration of the physiological benefits of yoga (which is one of the gems of Indian cultural heritage) has increased tremendously in the last few decades resulting in a plethora of scientific studies. These studies have looked into various physiological measures enhanced or improved by yoga through numerous well-structured research studies carried out globally. These physiological benefits of yoga have been extensively studied in healthy individuals who practiced short-term yoga, Siddhis (people who have mastered and attained extraordinary powers), and patients with various disorders. The cellular, molecular, and systemic effects of yoga have been well documented through studies that looked into electrical activities of the heart [electrocardiogram (ECG)], brain [electroencephalography (EEG)], and muscles [electromyography (EMG)], and assessment of the regulation of the autonomic nervous system (ANS), neuroendocrine axis, and radio imaging.

The human body tries to maintain homeostasis of various interconnected systems through several neurochemical, immunological, and molecular pathways. This homeostasis is altered in various disease conditions as a result of several cumulative factors, of which stress is of primary importance.

Yoga, an ancient Indian discipline known to bestow good health, is practiced widely across the globe. It has evolved over thousands of years as a way to control the mind and behavior. In its traditional context, yoga had its roots in the yoga sutras of Patanjali, from which many interpretations and translations have been made. Practicing yoga aims to develop a state of physical and mental well-being, inner harmony, and ultimately an experience involving the union of the self with the supreme. Yoga has become increasingly popular in the West, also because of its positive effects on health. These encouraging effects of yoga generated enhanced interest among the scientific community, resulting in growing numerous research studies exploring the positive impacts of yoga on multiple dimensions, including physiological parameters, emotional perceptions, and cognitive functionality.[1] In recent decades, publications on yoga-related research have exponentially increased. In general, physiological measures such as brain activity (electrophysiology and imaging measures), cardiorespiratory measures (pulse rate, respiratory rate, blood pressure, and variability of these measures over time), biochemical and immunological variables are the most commonly assessed parameters in both healthy volunteers and patients with various disorders to understand the physiology of yoga.

Yoga appears to be a perfect antidote for stress, effectively tackling the dreaded effects of stress acting via the modulation of sympathovagal, neuroendocrine and psycho-neuro-immunological balance, resulting in restoring good health. Although overall background ideas of yoga modulating the

homeostasis are well established, there needs to be more long-term, in-depth and well-controlled studies to understand the complex interactions of yoga and stress coping mechanisms and provide scientific credibility to yoga research. These steps would hopefully enable mankind to adopt a disease-free and healthy lifestyle.

A neurophysiological overview suggests that control over respiration (breath, prana) seems to be a fundamental factor in controlling higher cortical functioning, leading to control over: lower medullary centers (seat of control of the visceral autonomic functions, cardiovascular and vagal regulation), emotional centers, and the hypothalamus.[2] The human body tries to achieve homeostasis by balancing neural, endocrine, and immunological functions in coherence with other systems. Further, these systems function as a coordinated orchestra at various molecular, cellular, and tissue levels to achieve homeostasis. However, in physical as well as mental disorders, the ability of these regulatory systems to achieve this balance is lost and this imbalance could be normalized with the practice of yoga. In this chapter, we will outline the major neurophysiological processes and neural circuits that are influenced by the practice of yoga.

THE BEGINNING OF YOGIC RESEARCH IN NEUROPHYSIOLOGY

Research on the psychophysiological correlates of yoga dates back to the 1920s with the work of Swami Kuvalyananda at Kaivalyadhama, Lonavala, Maharashtra. During that time, some yogis claimed that they could stop their heart from beating or survive without air. A study by Kothari et al. (1973) showed that yogis could control their heart rate by significantly reducing their metabolism and oxygen utilization.[3] Bagchi and Wenger (1957), in their studies on yoga practitioners, suggested that yogic meditation is a form of profound relaxation of the ANS without sleep or drowsiness.[4] Of course, these extreme practices require intense dedication, regular practice, and higher levels of consciousness. These practices and higher-level skills might not be relevant to most people who practice yoga as a means to improve health and reduce the risk of disease.

The possible mechanisms for the attainment of these skills could be neurophysiological [sympathovagal balance; fast (gamma and beta) and slow (theta and delta) frequencies of EEG; activation of default mode networks] and/or neurochemical [excitatory (glutamate and norepinephrine) and inhibitory (GABA) neurotransmitter balance] homeostasis. Once a constant periodic breathing control is established, there may be a reciprocal biochemical stability that helps to maintain that control. Further, autonomic control over the hypothalamus may also have a positive effect on endocrine functions. By willfully exercising the cortex, the individual can have complete control over the vital and emotional functions of the brain by creating a mutual link between the cortex, reticular system, and multiple centers of the brain. It is quite possible that in a yogi, both the reticular and the cerebral cortex are changed functionally and proliferated structurally.[2] In the 1970s, Elmer and Green from Menninger Foundation in Topeka, Kansas, conducted numerous biofeedback experiments on Swami Rama. They found Swami Rama could produce different brain waves at will, including theta and delta (sleep) waves while remaining aware of his environment. He was also able to create a temperature difference of 10°F between two points on the palm of his hand, evidently regulating blood flow through the radial and ulnar arteries. Thus, these "siddhis" (special powers) tend to have physiological bases, but we are still not clear about the cause/effect of these changes in the human body. In 1971, researchers proposed that transcendental meditation (TM) relaxes and

stimulates physical as well as mental health by reducing stress, increasing creativity, and other intellectual skills.[5]

Initial work in the area of yoga and neurophysiology was carried out at National Institute of Mental Health and Neuro Sciences (NIMHANS) in the department of Neurophysiology, led by Professor Desiraju. He pioneered the move "Project Consciousness" and it involved studying the brain in different states of consciousness. Drs Telles and Desiraju conducted numerous research studies on pranayama and found that different pranayama breathing led to different types of alterations in brain oxygen consumption and metabolic rate. These physiological and psychological modifications are connected with both short-term and long-term yoga practices. The practice of yoga resulted in reduced metabolic and oxygen consumption, enhanced cognitive and cerebral neurophysiology effects, and improved neuromuscular and respiratory function.[6]

MODERN NEUROPHYSIOLOGICAL RESEARCH TOOLS USED IN STUDYING THE EFFECTS OF YOGA

There have been several advances in understanding the psycho-physio-neurobiology of yoga. The effects of yoga have been assessed using the following tools to understand the physiological basis of yoga: EEG, evoked potentials, ECG, heart rate and blood pressure variability. Research studies have attempted to understand the cortical excitability changes in patients with neurological and psychiatric disorders using transcranial magnetic stimulation (TMS), a non-invasive mode of brain stimulation technique. These studies observed that a single session of yoga practice resulted in a significant lengthening of the cortical silent period in the yoga group as compared to intermittent walking, thereby showing enhanced cortical GABA tone following yoga.[7] Thus yoga training enhances the inhibitory control or "braking" to bring about optimal control system to attain higher precision in both motor as well as cognitive functions.

Efficacy of Yoga Assessed using Cardiorespiratory and Autonomic Variables

The ANS regulates the functioning of visceral organs involuntarily through its sympathetic and parasympathetic limbs. These two limbs function in a complementary manner to maintain the balance and obtain the optimal functioning of the system. This sympathovagal balance is known to be altered in various psychosomatic disorders and the usual pattern observed has been increased sympathetic activity and reduced parasympathetic activity. The practice of yoga has shown beneficial effects in the modulation or normalization of the sympathovagal balance of the ANS evidenced in the form of reduced heart rate, blood pressure, respiratory rate, intraocular pressure, fasting blood sugar in diabetes, increased breath holding time, galvanic skin response, and better sympathovagal balance with normalization of baroreceptor sensitivity, and blood pressure variability. Heart rate variability (HRV), an effective technique to assess the regulation of the ANS, has been widely used to understand the intrinsic mechanisms underlying the potential effects of yoga. Several studies have shown the beneficial effects of yoga on HRV in short- and long-term practices. The majority of studies provide evidence that yoga enhances HRV and improves cardiovagal balance.[8]

A simple breathing practice (pranayama) ensures better use of oxygen and lung surface areas leading to the enhanced circulation of oxygenated blood throughout the body. Studies have shown that pranayama influences the ANS by exhibiting an increase in high-frequency (HF) power in HRV, reflecting increased vagal tone.[8] It also decreases the low-frequency power, denoting a reduction in sympathetic tone, thereby shifting the autonomic balance

toward relative parasympathetic dominance.[9] Pranayama also inhibits the sympathetic tone of the skeletal muscle blood vessels leading to vasodilation, thereby reducing vascular resistance and diastolic blood pressure. The therapeutic benefits of breathing practice are mainly accomplished by the modulation of the ANS: by reducing the sympathetic tone and increasing the parasympathetic tone to normalize the altered sympathovagal balance.

Research from NIMHANS has found that yoga helps in modulating autonomic dysfunction, which is a known element in many ailments such as epilepsy, migraine, neurodegenerative disorders, depression, bipolar disorders, and schizophrenia. In one study, children with Duchenne muscular dystrophy were assessed for modulation in HRV measures following yoga therapy and it showed equal and beneficial effects compared to physiotherapy.[10] Similarly, it has been reported that individuals who practiced yoga had a significant reduction in seizure recurrence, needed lower doses of antiepileptic medications, and had fewer side effects of medications. Another study from NIMHANS found that the practice of yoga reduced seizure frequency and modulated the ANS by enhancing parasympathetic activity.[11] Meditation stimulates the vagus nerve and could reduce the seizure frequency by 28–38% by modulating the limbic system and ANS activity via the hypothalamus.[12] The conditioning of these brain regions by the practice of meditation is proposed to assist in maintaining normal homeostasis. Hence, stress reduction may play a pivotal role in the clinical improvement of these patients.

Effects of Yoga Assessed using Evoked Potentials and EEG

Evoked potentials indicate the response and the degree of attention of the subject to an individual stimulus. Studies on the peak latency and peak amplitude of the P300 auditory event-related potentials have shown that yoga reduces peak latencies, indicating better cortical inhibition and sensory discrimination. In cyclic meditation (CM) studies, participants showed a greater ability in the P300 auditory oddball test to distinguish hearing sounds from various pitches. These sustained latencies of evoked potentials, generated in the cerebral cortex following CM, support the concept of cortical inhibition following CM.[13] The mid-latency auditory evoked potential also showed a change in meditators suggesting that the neural generators in cortical regions are of longer latency.[14] This signifies greater cortical inhibition and effective subcortical neural modulation that leads to optimum autonomic neural functioning. EEG shows how the brain's coherent status is processed during cognitive and sensory inputs. The practice of Sudarshan Kriya Yoga (SKY) was shown to increase the beta activity of the brain in EEG studies. Similarly, TM practitioners showed an increase in alpha/delta power and a decrease in beta/alpha power.[15] Thus, neurophysiological evaluations of yoga using EEG studies have demonstrated the calming effects of yoga/meditation in terms of potentiation of slow waves, modulation of faster waves, and better discrimination abilities in cognitive processing tasks.

Effects of Yoga on Neuroplasticity

Yoga and its effect on neuroplasticity are evident from the fact that age-related gray matter volume (GMV) decline is reduced in individuals practicing meditation regularly. Brain-derived neurotrophic factor (BDNF), which is known to play a pivotal role and is positively correlated with enhanced neuroplasticity and neurogenesis, tends to increase with the practice of yoga. This enhancement has been seen at the level of morphometric, neural network, and molecular levels. As the key regulators of neuroplasticity, BDNF and its signaling cascades: receptor tyrosine kinase B (TrkB), and mechanistic

target of rapamycin (mTOR) contribute to complex functions of the brain such as cognition and emotion. The practice of meditation reduces inflammation by reducing the levels of inflammatory marker interleukin-6 (IL-6) and down-regulation of the nuclear factor kappa B (NF-κB) pathway, an effect opposite to that of chronic stress on gene expression, leading to an increase in neuroplasticity. Yoga also helps achieve and maintain optimum cellular health by enhancing genomic stability, chromosomal integrity, and telomere length.[16]

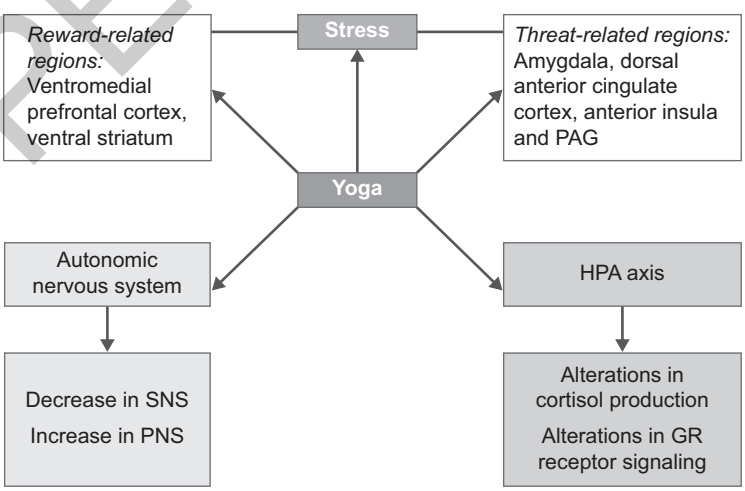
YOGA AND STRESS

Yoga practice is especially effective in combating the negative effects of stress. Compared to other exercise modalities, practicing yoga has superior effects on certain stress tolerance and mood measures. Persistent activation of the "fight-or-flight" reaction is linked to the onset of psychiatric disorders such as anxiety and depression. A trial by Rocha[17] compared salivary cortisol concentrations in a 6-month-trained yoga and a periodic physical exercise group. The yoga group demonstrated considerably lower levels of cortisol than those of the physical exercise group following the program.[17] Another study with electroencephalographic recordings and measures of serum cortisol showed an increase in alpha rhythm frontally and a decrease in cortisol after a single yoga session.[18] In a study by Streeter,[19] an analysis of yoga practice on gamma-aminobutyric acid (GABA) levels suggested that yoga is effective in conditions with low-GABA such as depression, anxiety, and epilepsy. Further, the neurohemodynamic correlates of audible "OM" chanting were assessed using functional magnetic resonance imaging (fMRI) in right-handed healthy volunteers and the results showed significant deactivation of the limbic system, i.e., the bilateral orbitofrontal, anterior cingulate, parahippocampal gyri, thalami, and hippocampi.[20] Thus, yoga practice appears to balance emotional regulation in response to stress **(Flowchart 1)**.

YOGA AND CARDIOVASCULAR DISORDERS

Cardiovascular disorders (CVDs) are known to be associated with adverse changes in autonomic function, with elevated sympathetic

Flowchart 1: Diagrammatic representation of the effects of yoga in reducing stress and its physiological effects on the body.



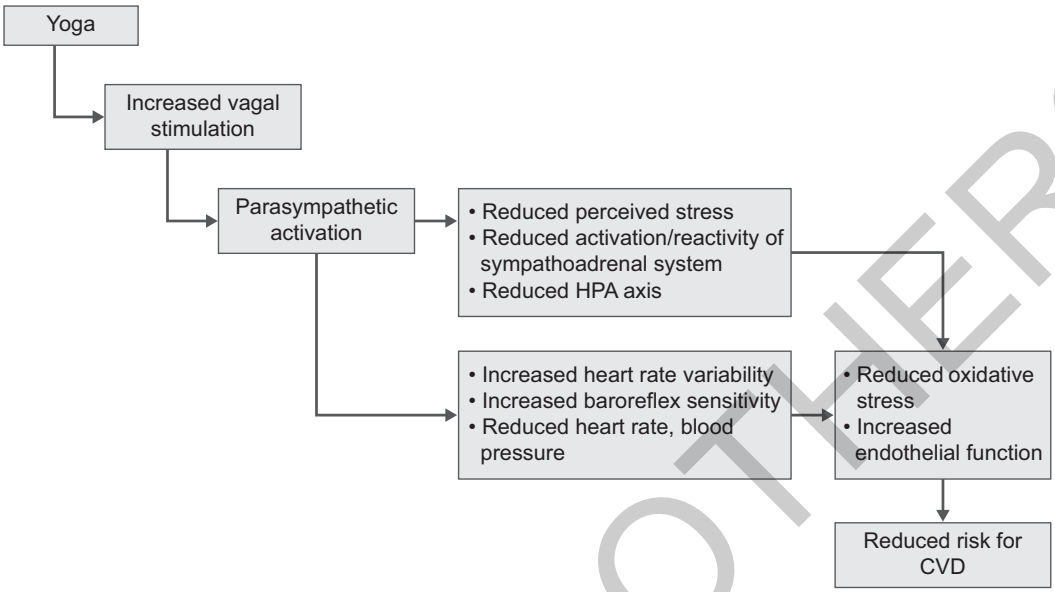
(GR: glucocorticoid receptor; HPA: hypothalamic-pituitary-adrenal; PNS: parasympathetic nervous system; SNS: sympathetic nervous system)

activity for a prolonged period along with parasympathetic withdrawal. This rise in the sympathetic nervous system (SNS) activity mediates modification in the neuroendocrine system through the hypothalamic-pituitary-adrenal (HPA) axis. Bringing a change in the level of stress hormones (e.g., adrenaline, aldosterone, cortisol, and norepinephrine), leading to an increase in heart rate, blood pressure, and concentrations of blood glucose and lipids. This mechanism contributes to the advancement of atherosclerosis and CVDs, especially in people with chronic stress and a sedentary lifestyle. Various investigators have evaluated several cardiovascular indicators before and after a program/practice session of yoga and found decreased total peripheral resistance and enhanced arterial compliance, stroke volume, and cardiac output. Studies that looked at blood pressure and HRV have found that yoga significantly improves HRV and modulates the sympathovagal balance suggesting that yoga enhances the vagal tone and reduces sympathetic activity. Yoga is known to effectively tackle the dreaded impacts of stress on physiological systems mainly by achieving sympathovagal balance (short-term regulation) and helps to maintain homeostasis and restore health by modulating the long-term mediators (HPA axis, biochemical and inflammatory markers of stress). Thus yoga achieves homeostasis in various disorders by modulating the ANS, neuroendocrine, and psycho-neuro-immunological axis, and effectively integrating the functions of various systems of the body.

The neurohumoral mechanism which is found to be dysregulated in CVD can be favorably modulated through yoga, by reducing serum cortisol, aldosterone, and catecholamine levels. Moreover, the regular practice of yoga is known to improve nitric oxide bioavailability leading to reduced oxidative stress and enhanced endothelial function. Besides, yoga also reduces the rate pressure product (a measurable index of myocardial oxygen consumption and load on the heart), lipid profiles, and even enables atherosclerosis regression when combined with dietary and other lifestyle changes.[21] Systemic inflammation has been considered as a strong predictor of mortality in CVD. Yoga is found to reduce inflammation by reducing proinflammatory response genes and reverse the NF-κB-related transcription of proinflammatory cytokines. Thus yoga provides relief from the effect of stress and provides a sense of well-being.

A study by Huang et al., 2013 found that the practice of hatha yoga can reduce perceived stress and salivary cortisol, a major effector of SNS and HPA pathways, and enhance cardiometabolic health. Also, this study noted that even a single hatha yoga session (90 min) could significantly increase the HF power component of HRV.[22] In a 12-week yoga study by Hari Krishna et al., 2014, they showed that yoga in addition to standard medical treatment had significant improvement in parasympathetic activity and decreased sympathetic activity in patients with heart failure.[23] In another study by Muralikrishnan et al., 2012 Isha yoga practitioners had balanced positive vagal efferent activity and improved HRV while resting and breathing deeply compared to nonyoga practitioners.[24] A study by Patil et al., 2015 of elderly subjects with arterial stiffness found that yoga helped in reducing arterial stiffness along with a reduction in blood pressure when compared to brisk-walking. This study further showed that yoga helped to reduce sympathetic activity and enhance endothelial function with increased nitric oxide bioavailability.[25] Even in resting conditions, regular yoga practitioners have increased vagal tone as compared to nonyoga practitioners. These changes in autonomic balance coupled with positive changes in the HPA axis, endothelial functions, and oxidative stress mechanisms possibly

Flowchart 2: Diagrammatic representation of the effects of yoga in reducing cardiovascular disorders (CVD) and its pathophysiological steps.



(HPA: hypothalamic-pituitary-adrenal)

protect an individual from cardiovascular morbidities. Thus, by improving cardiovagal activity and reducing sympathetic function, yoga modulates the neuro-cardiac regulation and reduces the risk of CVDs **(Flowchart 2)**.

NEUROPHYSIOLOGY OF PRANAYAMA

Pranayama or regulated breathing is an integral component of yoga, which is said to affect the physiological process. The voluntary control of the breath serves as a link between the brain and the body. Pranayama has shown beneficial effects on biochemical, psychophysiological, neurocognitive, and metabolic functions in healthy volunteers and subjects with various clinical conditions.[26] David S Shannahoff-Khalsa and his group unveiled the complexities of mind–body interactions and demonstrated how the nasal cycle is closely related to the ultradian rhythm of the cerebral hemispheric activity.[27] Using EEG they demonstrated that unilateral forced nostril breathing has a selective hemispheric activation, i.e., forced nostril breathing in one nostril generates a significant rise in EEG amplitude in the contralateral hemisphere.[28] Further, studies on yogic breathing evaluated the effect of Kapalabhati (15 min) on electroencephalogram activity.[29] The analysis revealed that there was enhanced alpha activity during the initial 5 minutes of Kapalabhati practice and in the later 15 minutes, theta activity was found to be enhanced in the occipital region. A study by Telles et al., 2013 on Bhastrika Pranayama, which was practiced for 18 minutes showed a reduction in anticipatory responses.[30] Mukha Bhastrika for nine rounds showed a significant reduction in visual reaction time and auditory reaction time in 22 healthy school children.[31] A study comparing the cumulative effect of slow and fast pranayama on cognitive functions in healthy volunteers has reported significant improvement in executive functions, perceived stress scale, and reaction time in both fast and slow pranayama groups, except reverse digit span, which showed improvement

only in fast pranayama group.[32] Practicing Bhramari pranayama (female honeybee humming breath) has been shown to cause nonepileptic paroxysmal gamma waves in the EEG.[33] Also, the practice of Bhramari for 10 minutes improved inhibition and reaction time in the stop-signal task that involves cognitive inhibition.[34] A study by Telles et al., 2013 assessed the effect of alternate nostril yoga breathing (nadishuddhi pranayama) on P300 auditory evoked potentials compared to breath awareness. There was a significant increase in peak amplitudes of the P300 at various scalp locations, along with a decrease in peak latency in the frontal scalp region, which suggests a positive influence on the cognitive processes required for sustained attention.[35] Experienced yoga practitioners during consciously-controlled rhythmic breathing with breath-holding, showed an increase in Na-wave amplitude and decrease in latency, although no changes were observed in the Pa-wave.[36]

Hemodynamic observations were made on a yogic technique that claimed to help eliminate and prevent heart attacks. The technique is a breath per minute (BPM) respiratory exercise with slow inspiration for 20 seconds, breath retention for 20 seconds, and slow expiration for 20 seconds, for 31 consecutive minutes. Recordings were carried out at three time points: pre-exercise resting period, a 31-minute exercise period, and a postexercise resting period. Around fourteen beat-to-beat parameters were measured noninvasively along with the left stroke work index and stroke systemic vascular resistance index. This breathing technique induced a profound shift in all hemodynamic variables during the one BPM exercise and the postexercise resting period, seeming to have a particular effect on the cardiorespiratory center regulating the Mayer wave patterns (0.1–0.01 Hz) of the cardiovascular system.[37]

EFFECT OF PRANAYAMA ON PSYCHOPHYSIOLOGY

In humans, respiration is the only neurological system that is under both autonomic and voluntary nervous control. Yogic breathing techniques have a significant influence on the modulation of autonomic nervous system functioning (AFT). A three-arm randomized controlled trial (RCT) using HRV as the measure of autonomic activity showed sympathetic arousal in the right uninostril breathing (UNB) group, and vagal dominance in the left UNB group following 6-week nostril breathing.[38] An RCT found that 20 minutes of alternate nostril breathing for a week increased galvanic skin resistance (GSR), which denotes enhanced parasympathetic activity and reduced sympathetic tone.[39] Nadishuddhi pranayama at a rate of one BPM has been found to enhance sinus arrhythmia and reduce the low-frequency component of HRV.[40] Slow breathing at a rate of 6 BPM with or without Ujjayi Pranayama has demonstrated an increase in baroreflex sensitivity (BRS) and a decrease in blood pressure.[41]

EFFECT OF PRANAYAMA ON RESPIRATORY SYSTEM

Yogic breathing technique is an effective way of improving pulmonary functions. Slow breathing at a rate of 6 BPM showed an increase in vital capacity, forced vital capacity, forced inspiratory vital capacity, and peak inspiratory flow rate.[42] A 12-week training in slow and fast pranayama on pulmonary function testing revealed that in the slow pranayama group, peak expiratory flow rate and forced expiratory volume were significantly improved, whereas, in the fast pranayama group, ratio of forced expiratory volume in first second to forced vital capacity was improved significantly[43] indicating the differential effects of these practices. Further, studies linking the effects of pranayama on

respiratory regulatory centers and thereby on to pulmonary functions have to be performed.

EFFECT OF PRANAYAMA ON METABOLISM

Oxygen consumption has been used as a means to understand the body's metabolic activity. Research investigating the effects of Ujjayi Pranayama along with short and prolonged Kumbhaka (breath-hold) has shown that oxygen consumption rose with short Kumbhaka and decreased with prolonged breath-holding.[6] The immediate effect of Kapalabhati (1 min) showed a decrease in blood urea, and an increase in creatinine and tyrosine levels, possibly due to decarboxylation and oxidation mechanisms.[44]

YOGA AND BODY AWARENESS

Fiori et al. (2014) evaluated proprioceptive and vestibular body signals, and the presence of self-transcendence (ST) in a group of advanced yoga practitioners and controls without any experience in yoga.[45] Body signals were processed using the rod and frame test (RFT) and ST was measured using the temperament character inventory (TCI) subscale. Overall, yoga professionals demonstrated greater precision in RFT and higher ST scores on the TCI. These results suggest that yoga professionals are more aware of their bodies and can relate to ST elements. Yoga practitioners tolerated pain better (as measured by the time they kept their hand in cold water) and they had more GMV in several regions such as the insula, cingulate cortex, medial prefrontal cortex, inferior and superior parietal lobule, and increased intrainsular white matter connectivity. Furthermore, insular GMV had a positive correlation with pain tolerance (left and right insula) and years of yoga practice (left insula only). Yoga also had a huge impact on attention, memory, and executive domains. Yoga practice also improved visual attention ability by enhancing the ability to detect flicker frequencies and visual color discrimination.[46]

CONCLUSION AND FUTURE DIRECTIONS

The practice of yoga has been shown to change several physiological functions in the human body and brain, including neurocognitive capacities, maintaining the homeostasis of neurotransmitters, and modulation of autonomic functions. Most of these changes seem to correspond to the traditional understanding of the flow of *Prana* (vital energy) controlling the physical functions of the body. Thus, several research studies have found beneficial effects of yoga in coordinating various physiological systems to face challenges and threats. This balance is achieved by strengthening the inhibitory control through GABA, vagal activities, and other molecular mediators to potentiate quality checks in the system. Further studies are needed to prove whether this is the cause or effect of yoga-mediated positive changes. This needs long-term studies with a multitude of parameters (including GABAergic inhibitory control and vagal modulation of autonomic balance), to understand the coordination of various systems in bringing homeostasis. Also, there needs to be more long-term, in-depth and well-controlled studies to help us understand these complex interactions of yoga and health: this will add scientific credibility to yoga.

ॐ सर्वे भवन्तु सुखिनः। सर्वे सन्तु निरामयाः।
सर्वे भद्राणि पश्यन्तु।मा कश्चिद्दुःखभाग्भवेत् ।
ॐ शान्तिः शान्तिः शान्तिः॥

(Aum, May All be Happy, May All be Free from Illness. May All See what is Auspicious, May no one Suffer. Aum, Peace, Peace, Peace)

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Printed in India

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ISBN 978-81-948028-1-5