

## Yogic Science for Human Resource Management in Business

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**Abstract:** Human resources management is the process of managing people in a structured manner with a focus on developing a work force which can effectively help the organisation to meet its objectives. Studies across countries show an increase in occupational stress which has an adverse effect not only on the health and wellbeing of the individual but also on the health of the organization. In the frenetic world of today where management principles are being turned on their heads there are some principles and precepts which are constant and which can help in the development of human resources in such a way that the health of the organization and the health of the bottom line is safeguarded. In this paper we will see how the techniques and practices of Yoga - a time-tested oriental science - may be helpful.

**Key words:** Yoga • Occupational health • Yoga techniques • Human Resource Development

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### INTRODUCTION

Human Resource Management as an academic discipline gained respectability in the early 20th century, when researchers began documenting ways of creating business value through the strategic management of the workforce. Due to scholarly research by the pioneers, technical advancements and globalisation, the function has moved beyond routine transactional work. The focus is now on strategic initiatives, like talent management and industrial relations and includes concepts like fairness and wellbeing. Raising the productivity of work force remains the main objective of Human Resource Management and the experts in this field are constantly scouring the world of ideas for adoption or adaptation in furtherance of this objective. The focus is on developing a work force which can effectively help the organisation to meet its objectives. There are three fundamental components of human resources development: individual development, career development and organisation development. Of these three the most important is the development of the individual which involves developing individual skills, knowledge and improving the psychosocial work environment. Strategic improvement in workplace performance depends, among other things, upon a healthy and mentally focused workforce [1]. Wellbeing and occupational health of the work force have a definite correlation with the bottom line. Workplace

stress and improving resilience to stress is engaging many organisations as they struggle to meet organisational restructuring demanded by globalisation and technology.

**Stress:** It is generally believed that the word 'stress' was coined by the scientist Hans Selye in the twentieth century. Now, in the twenty first century 'stress' is so ubiquitous that in the first instance it would seem that no definition is required. However, this may be an oversimplified view of a huge problem that has far reaching consequences. Therefore, it is important not only to define stress but also to look at ways to manage stress. The dictionary definition of stress reads thus- 'A mentally or emotionally disruptive or disquieting influence or alternatively, a state of tension or distress caused by such an influence.' According to Seaward [2], "Stress is the inability to cope with the perceived threat to one's mental, physical, emotional and spiritual wellbeing". Definitions found in psychological books also focus on the adverse effect of stress on the physical and mental body. Girdano *et al.* [3] are of the view that stress is a psycho-physiological (mind-body) arousal that can fatigue the body systems to the point of malfunction and disease. In extreme cases it can lead to acute stress disorder; a condition which has been recognized by the American Psychiatric Association.

**Stress at the Work Place:** Occupational stress is a widespread phenomenon and is a contributory factor to absenteeism, physical and psychological illnesses and lowered productivity. In the 1990s surveys conducted in the U.S.A by Northwestern National Life Insurance Company, Princeton Survey Research Associates, St. Paul Fire and Marine Insurance Company, Yale University and The Families and Work Institute revealed high levels of stress at the work place. The surveys also indicated that job stress was associated with health complaints (NIOSH). The 2000 annual "Attitudes in the American Workplace VI" Gallup poll sponsored by the Marlin Company found that 80% of workers feel stress on the job and nearly half of them say that they needed help in learning how to manage stress. A subsequent 2000 Integra survey also reported that nearly 65% of workers said that work place stress had caused difficulties. The survey also revealed that stress caused health related problems. 62% of the workers had work related neck pain; 44% reported stress in eye; 38% complained of hurting hands and 34% reported difficulty in sleeping because of stress.

The World Health Organisation has dubbed stress as an epidemic and a survey done in U.K. found that senior human resources professionals believe stress to be the biggest threat to the future health of the workforce. It is estimated that 175 million working days are lost each year in the U.K. due to sickness absence out of which half are stress related [4]. In the United States of America the number of employees calling in sick tripled from 1996 to 2000 and the European Agency for Safety and Health at Work reported similar figures. A 1992 United Nations report labelled job stress "The 20th Century Disease". A subsequent European Commission Survey found that occupational pressures were responsible for 30% of workers suffering from back pain, 20% complaining of 'stress'; 20% feeling fatigued and 13% with headaches. Job strain has also been related to hypertension and to conditions such as anxiety and depression [5].

Realising the importance of work related stress, the Health and Safety Executive, U.K. an independent public body, identified six principal work stressors mentioned in Table 1. The Health and Safety Executive also recommended that employers should take the issue of work related stress seriously and it developed and laid down management standards. These management standards were to help organisations manage sources of work related stress and to help reduce the levels of work related stress.

**Management of Stress:** The state of stress is not fixed. It remains in a continuous state of flux in which the cognitive, behavioural and physiological processes interact. However, it is possible to aggregate information and come to a conclusion about the state of stress. Though the stress management field lacks strong theoretical foundation, there are some models which help to manage the stressors. One model of stress and health is Levi's [6] interactional model is illustrated in Figure 1. It argues that the magnitude of a stress response can be better predicted by understanding the stressor in the context of the disposition of an individual, thereby facilitating a better understanding of individual differences to stress response.

Business is concerned about labour productivity. Productivity is adversely affected by stress which can originate from the work itself or from external factors like financial problems [7]. Management of stress is one of the priorities in human resource management. While Levis' interactional model is a general model applicable to all situations of stress, Karasek's Job Strain model is helpful in identifying those work characteristics which might contribute to job stress. Occupational stress research has widely used this model. Karasek's Job Strain Model proposes that when the demands of an occupational situation exceed the levels of control over the job and the social support available to the individual then there is an increase in psychological and physical illness.

Table 1: Stressors of the work area

Demands	Including such issues as workload, work patterns and the working environment
Control	How much say the person has in the way they do their work
Support	Which includes the encouragement, sponsorship and resources provided by the organization, line management and colleagues
Relationships at work	Which includes promoting positive working practices to avoid conflict and dealing with unacceptable behaviour
Role	Whether people understand their role within the organization and whether the organization ensures that the person does not have conflicting roles
Change	How organizational change (large or small) is managed and communicated in the organization

Source: [4]

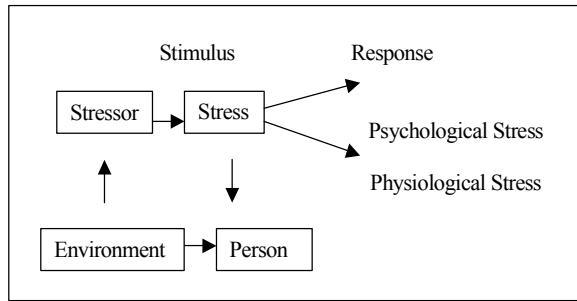


Fig. 1: Interactional model of stress

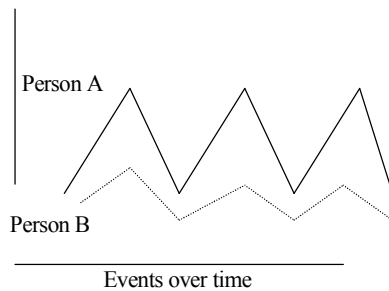


Fig. 2: Allostatic load variation

Levels of control over the job entail decision making authority, support from supervisors and colleagues and confidence to get the designated job done. Psychological health and job satisfaction are the two outcome variables frequently used to measure job strain. Psychological health is a sense of wellbeing which is context free, while job satisfaction refers mainly to the feelings that individuals have in relation to their jobs i.e. the feeling is specific to the job. The state of stress manifests where there are low levels of psychological health and job satisfaction [8].

A systems ability to achieve long term stability and health through ongoing adjustment change has been labelled allostasis [9]. Allostasis is an essential component of maintaining homeostasis. Allostasis presumes that physiological systems strive to remain within a healthy range of function that allows optimum response to external challenges while maintaining their own control functions. However, there could be stress situations where the recovery is delayed or does not happen. This condition has been termed allostatic load. Types of allostatic load include: frequent activation of allostatic systems, failure to shut off allostatic activity after stress and inadequate response of allostatic systems leading to increased activity. Allostatic load varies among individuals as shown in Figure 2.

The response of people to stressors has a wide variation and is dependent on factors such as heredity, personality, state of health etc. DeLongis *et al.* [10]

studied the impact of daily stress on health and mood and found significant individual differences in the extent to which daily stress was associated with health and mood.

There is a large body of literature documenting the relationship between stress and illness [11]. Research conducted by the U.S. National Institute for Occupational Safety and Health (NIOSH) show a direct link between job stress and health. It has been found that stress and negative emotions weaken the effectiveness of the immune cells. Stress not only lowers the immune response, it also has adverse effects on the cardiovascular system. Studies suggest that psychologically demanding jobs that allow the employees little control over the work process may increase the risk of cardiovascular disease [12]. Studies also indicate that job stress increases the risk for development of back and upper extremity musculoskeletal disorders. Other studies link occupational stress with anxiety disorders and hypertension and there is evidence of stress induced immune suppression [13]. Research also suggests that, the immune system parameters can be influenced by relaxation techniques [11].

**What is Yoga:** Yoga is an ancient science and an eastern perspective on physical and mental health [14]. It is being increasingly recognised as an applied science all over the world [15, 16]. Nintendo's reputation improved after it launched Wiihab and incorporated interactive yoga in it [17]. At the personal level, a large number of successful businessmen are practicing yoga. A book titled 'Autobiography of a Yogi' was the only book downloaded by Steve Jobs on his personal iPad 2 who died shortly after the launch of the product. A large number of companies are encouraging their employees to take up yoga.

In Yoga the body is looked upon as an instrument which enables the individual to evolve and to live and work fruitfully. A correct practice of Yoga is believed to fructify in health or wholeness through the rediscovery of the yoked reality of the experience of the individual of the body and mind. It brings the body and mind together into one harmonious experience. The body, mind and breath are connected to energise and balance the whole system. Routine practice of Yoga brings better health, mental peace and an integration which are precursors to a higher mental state. Yoga seeks to remove nine obstacles which are familiar to people of all places and in all eras: illness, mental stagnation, doubt, lack of foresight, fatigue, over indulgence, illusions about one's true state of mind, lack of perseverance and regression. The physical and

Table 2: Eight Limbs of Yoga

1.	Universal moral commandments of nonviolence, truthfulness, nonstealing, chastity and greedlessness.
2.	Self-purification by discipline: purity, contentment, austerity, self-study, devotion to a higher power.
3.	Postures/movements: a calm, firm steady stance in relation to life. Stable and comfortable.
4.	Breathing exercises: the ability to channel and direct breath and life energy
5.	Withdrawal of the mind from the domination of the senses
6.	Concentration; unwavering attention, commitment
7.	Meditation; mindfulness, being attuned to the present moment
8.	Becoming one with the object of meditation

Table 3: Components of a typical yoga class

Session Component	Description
Warm-up	Varies widely to include a question/answer period, light stretching, chanting, guided imagery, casual conversation, or silent focusing
Breathing regulation	Ranges from none to long periods of practicing a variety of breathing exercise, normally in a seated position; generally 5 to 10 minutes
Postures	Hundreds of variations, done in supine, prone, sitting, standing or inverted positions. Ranges from a few held for a long period of time to many done for 1 to 2 minutes. Can be static or strung together to flowing sequences. Intensity varies with the posture, the duration and the recovery periods allowed.
Relaxation/guided imagery	Usually done supine for 5 to 20 minutes toward the end of class
Meditation	Varies; sometimes not included, other styles can range from 5 to 30 minutes or more. Generally done in a seated position
Closing	Varies; ranges from a simple verbal salutation, to open discussion or quiet socializing after class

psychological guidelines for practicing yoga are classified as eight limbs given in Table 2. These eight limbs and other guidelines will be explored to see how they may contribute to the development and management of human resources.

Yoga probably arrived in the west in the nineteenth century but became widely known and accepted only in the twentieth century [16]. With the spread of knowledge of the beneficial effects of Yoga it gained wider acceptance and has also gained respect as a valuable tool for helping in the management of stress and improving health and general wellbeing. Whereas the western experience of Yoga is generally limited to the practice of pretzel like poses, breathing and meditation, Yoga also includes a large body of precepts, attitudes and techniques though only a handful of practitioners ever go beyond the level of posture practice [18].

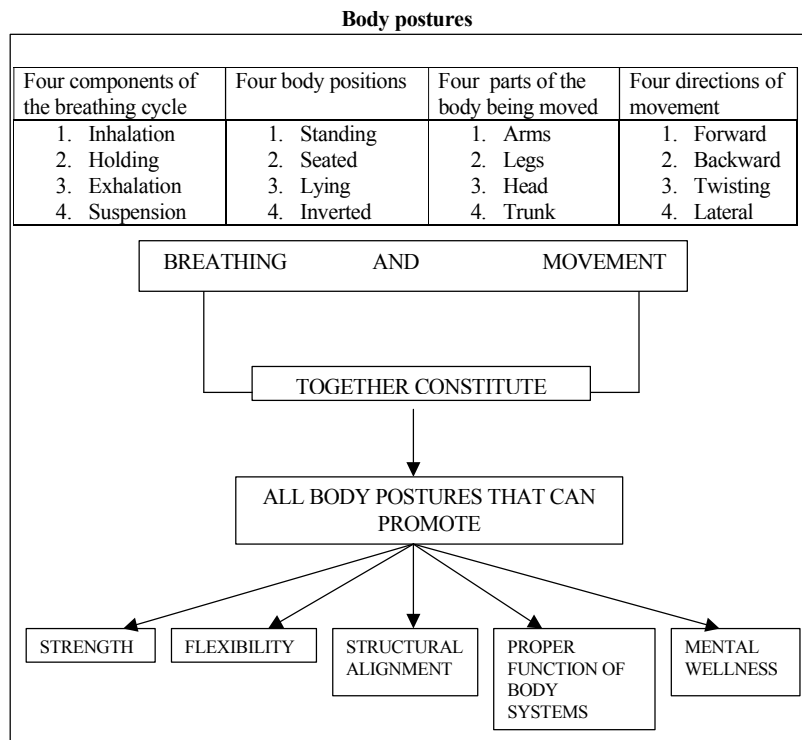
In the context of human resource development Yoga could be defined as a set of practices which could holistically develop an individual and equip him with many practical tools to deal with work and life. This paper complements the papers like that of Weick and Putnam [19] who build on 'eastern wisdom and western knowledge' in the context of human resource development.

**Yoga Techniques for Stress Management:** Yoga is probably the most effective way to deal with various

disabilities along the same, time honoured lines of treatment that contemporary medicine has just rediscovered and tested [20]. Yogic body postures are probably the best tools to disrupt any learned patterns of wrong muscular efforts. Controlled breathing and withdrawal of mind from the domination of senses are extremely efficient techniques to divert the attention of the individual from the objects of the outer environment, to increase every person's energy potential and 'interiorize' them, to achieve control of one's inner functioning.

In the early 1970's western science began looking at the system of integrated health and the physiologic benefits of meditation. This facilitated the mainstreaming of yogic science. During the last decades of the twentieth century, the work of pioneers like Benson, Ornish, Kabat-Zinn and Garfinkel brought yoga therapeutics into traditional medical awareness. Table 3 gives the components of a typical yoga class. The three yoga practices of body postures, controlled breathing and meditation commonly used in a typical yoga class will now be discussed in some detail.

**Body Postures:** The aim of the practice of body postures is to reduce the activity and inertia in the mind and reinforce clarity. In other words, body postures increase mental calm, clarity, steadiness and alertness.



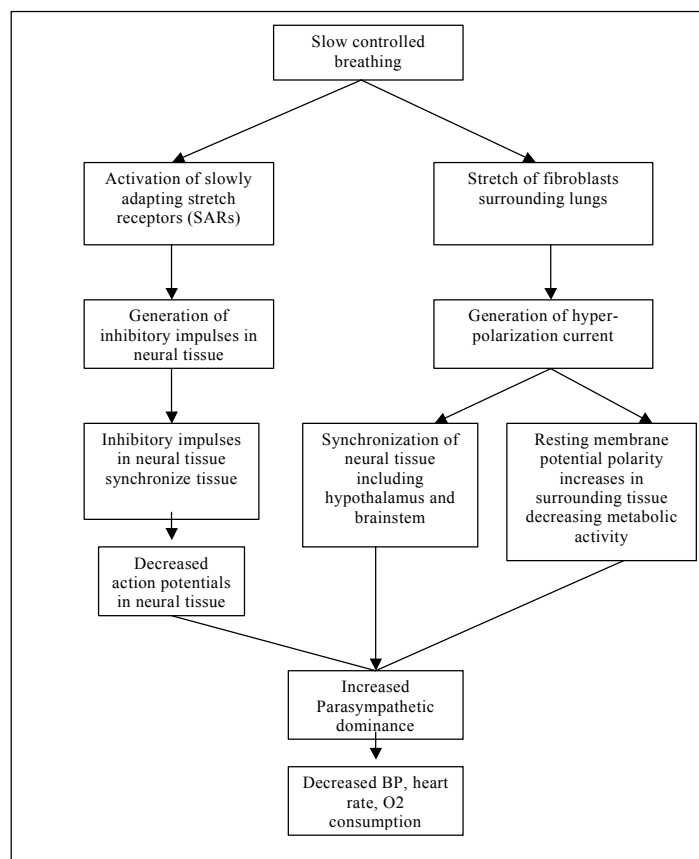
Source: [47]

Fig. 3: Body postures

Finding the natural link between breath and movement is simple: on exhalation the body is contracted and on inhalation it is expanded. There are however some exceptions. There are two ways of practicing a body posture. The dynamic practice repeats the movement into the posture and out again in rhythm with the breath, whereas in static practice the posture is held for a certain number of breath cycles. The process involves moving into and out of that position with controlled breathing. Four starting body positions, four parts of the body and four directions of movement are involved as shown in Figure 3. The component movements, their interactions and their relationship to the breathing process and the spine are important. In therapeutic Yoga these are modified to meet the requirement of the individual.

The work place as also many sporting activities contribute to structural imbalance in the body. Body postures are useful in correcting structural imbalances by using movements to work on each side of the body separately. Ancient yoga texts emphasise the importance of maintaining the structure of the spine. Movements of the body as also breathing patterns affect the spine. With appropriate breathing and appropriate movement these postures can be used to maintain the strength and

flexibility of the spine. The postures must have the dual qualities of alertness and relaxation. These qualities are achieved by recognizing and observing the reactions of the body and the breath to various postures. What differentiates yogic body postures from other form of exercises? Perhaps the most important distinction is conscious involvement of the mind in the movement and placement of the body. The ideal plan would ensure that all joints from toes to fingertips, all sections of the body and the respiratory and the circulatory systems are adequately 'felt' and exercised. The guiding principal is step by step progression that has a beginning, middle and end. When applied to a particular posture progression begins with visualization, proceeds to the starting position with the incorporation of the breath into the movement. The performance concentrates on the flow of movement and smoothness of inhalation, exhalation and sometimes retention of breath and then towards a prescribed completion. Each step is a preparation for the next. And so it is with the sequence of body postures. These postures promote structural wellbeing, strength, flexibility, skeletal alignment and neuromuscular coordination and physiological wellbeing for optimum body function and psychological wellbeing. This leads to clarity and balance of the mind.



Source: [24]

Fig. 4: Diagram of the series of events that occur during the autonomic shift present in controlled slow breathing

**Controlled Breathing:** Breathing is a normal process of life, yet because of incorrect breathing practices sufficient blood does not reach the lungs, brains and other tissues. Under the state of stress, many people further restrict their breathing thereby increasing fatigue, muscular tension, irritability and anxiety [21]. Stressed and tense individuals are often recommended to change the way they breathe as shallow breathing leads to an anxious state. Paying attention to breathing significantly reduces respiratory rate and decreases tidal volume instability.

The yogic technique of controlled breathing has been found to be an effective tool in the management of stress. It is the conscious, deliberate regulation of breath replacing unconscious patterns of breathing. It involves the regulation of the inhalation, the exhalation and the suspension of the breath. The regulation of these three components is achieved by modulating their length and maintaining this modulation for a period of time, as well as directing the mind into the process. These components of breathing must be long and subtle.

Breathing is the one physical function which is both voluntary and involuntary. The breath therefore, can be used to control the autonomous nervous system. In order to understand the science of controlled breathing it is necessary to consider the nature and function of the nervous system, for this system coordinates the functions of all the other systems in the body. It is subdivided into the central and the autonomic nervous systems. The central nervous system consists of the brain, twelve pairs of cranial nerves, the spinal cord and thirty one pairs of spinal nerves. The cranial and spinal nerves spread throughout the body, forming a network of nerve fibres. The automatic nervous system is subdivided into the sympathetic and para-sympathetic systems. These two systems work in harmonious regulation. The parasympathetic system, for instance, slows down the heart while the sympathetic system accelerates it and between these two opposing actions the heart rate is regulated. Research suggests that long controlled breathing activates the parasympathetic system and lowers stress [22]. Figure 4 shows the effect of controlled breathing on the parasympathetic system.

Yoga breathing is considered fundamental for wellbeing, awareness and meditation. In fact, yogic breathing is considered to be a form of meditation in itself and also a preparation for deeper meditation [23].

**Meditation:** Yoga has two traditional complementary meanings. The first is to 'bring two things together' and the second meaning is to 'converge the mind'. The Yoga tradition places great importance on the mind as it believes that the mind is the cause of bondage and liberation of humans. Yoga is the cessation of the whirling thoughts in the mind. According to yoga the mind has a significant role to play in all disorders. A disturbed mind lowers the immunity of the body and makes it vulnerable to diseases. Every psycho-physiological disturbance, every negative emotion, apart from causing distress also interferes with the rhythm of muscles. This disturbance not only affects the skeletal musculature but the body as a whole thereby changing the entire postural substrate of the person. This along with disturbance in glandular secretions makes the body more prone to infections and disorders. Yoga prescribes various methods to quieten an agitated, restless mind. Persistent practice and detachment from cravings is suggested. Yoga also advises an attitudinal change to purify the mind. Changing dysfunctional habits and thoughts is largely a matter of mind. The prescription is to develop an attitude of friendliness, compassion, joyfulness and equanimity. Yoga shows ways of understanding the functioning of the mind and helps to quieten the movements leading to mastery over the mind and the emotions [24]. It is interesting to note that the ways and means to achieve a balance described by Yoga are similar to the 'Rational Emotional Therapy' described in modern psychology.

Yoga is a contemplative tradition. Consciousness and attention are actively cultivated in Yoga as shown in Table 1 are employed for meditation. Besides the spiritual benefits of meditation, there are a wide range of physical and psychological benefits which are manifested through the practice of meditation. Reduction in levels of stress is one such benefit.

**Mindfulness Meditation Based Stress Reduction:** Mindfulness is inherently a state of consciousness. Although awareness of and attention to present events and experiences are present in all individuals, there could be a wide variation in the quality. The concept of mindfulness has roots in Buddhist and other contemplative traditions like Yoga where conscious awareness and attention are actively cultivated. Mindfulness is usually defined as the state of being

attentive and aware of what is happening at the present moment. According to Thera [25] "mindfulness is clear and single minded awareness of what actually happens to us and in us at the successive moments of perception". Hanh [26] has a similar definition of mindfulness- "keeping one's consciousness alive to the present reality". Therefore, an individual can, at any given moment, be conscious of thoughts, motives, emotions as well as sensory and perceptual stimuli.

Consciousness encompasses both attention and awareness. Awareness provides a background to consciousness where inner and outer environment is continuously monitored. An individual may be aware of a sensory stimuli without the stimuli being the focus of attention. On the other hand attention focuses conscious awareness by directing heightened sensitivity to a limited range of experience. But what actually happens is that awareness and attention are intertwined and there is a constant interplay between the two. Although attention and awareness are relatively constant features of the normal functioning of an individual, mindfulness leads to focused attention to and awareness of the reality of the moment or the experience of the event taking place at the moment. For example, while holding a baby a mother may be aware of the physical sensation of holding the baby as also the emotion of love. However, awareness or attention may be diluted if the individual is multi-tasking or can be compromised when an individual behaves impulsively. In such states which are less mindful, emotions may occur outside awareness and may commit an individual to behaviour not under the control of the individual. Mindfulness, thus, is associated with clarity and sensitivity of the experience of the individual at a given moment and is differentiated from automatic functioning. Ryan and Deci [27] are of the view that mindfulness can be engaged to delink an individual from automatic thoughts, habits and unhealthy behaviour patterns leading to maintenance and enhancement of psychological and behavioural functioning and wellbeing. For example, an open awareness may be useful in deciding on the choice of behaviour which are of relevance to the needs, interest and values of an individual. It is thought that attention is the key to the communication and control processes that underlie the regulation of behaviour.

Mindfulness which is an attribute of consciousness has long been associated with the promotion of wellbeing. Mindfulness based approaches are now increasingly being put to use for the treatment and management of a wide range of physical and psychological disorders. Such mindfulness based approaches include group based standardised mediation such as mindfulness based stress

reduction and psychological interventions such as mindfulness based cognitive behaviour therapy. A review of the different mindfulness based approach with respect to philosophical underpinnings, techniques, aims, outcomes, neurobiology and psychological interventions reveal wide differences in the ways mindfulness is conceptualised and practiced [28]. However, the common ground is the mind. All the forms of mindfulness reflect cognitive operations on the aspects of the self through self-study [29].

Mindfulness based stress reduction programs which were introduced in 1979 in the health clinic of University of Massachusetts generally consists of 8 to 10 weekly group sessions. The format has been designed to be skill based with a fair amount of interaction and discussion among the participants. Psychophysiology of stress is discussed and opportunities are provided to the participants to apply mindfulness skills to specific situations. Practice of meditation is taught and participants are also guided to bring mindfulness to everyday activities.

Mindfulness based stress reduction program is a patient centred educational approach that uses training in mindfulness meditation to teach people how to take better care of themselves so that they could lead a healthy and productive life. It is helpful in reducing everyday stress. It is also useful for people experiencing physical and psychological disorders. The advantage of mindfulness based stress reduction program is that it can be used with heterogeneous groups and is amenable to adaptation to different settings. Mindful meditation involves focusing attention without judgment, on the moment. It is to be adopted as a way of life and is not situation specific. Mindfulness can disrupt the impulsive fight and flight reaction which depends on the sympathetic system thereby allowing the individual to consciously address a situation or event instead of reacting to it in an automatic fashion based on past experiences. It orients the individual to holistically look at inner resources for personal growth, learning and healing.

Research in mindfulness based approaches demonstrates that mindfulness is related to positive psychological and physical outcomes [30, 31]. It has also been found that mindfulness meditation based stress reduction programs are effective in decreasing mood disturbance and stress symptoms in patients with various stages of illness and of various ages [32]. Another study examined the effects of mindfulness based stress reduction program on health related quality of life in a heterogeneous group. The study concluded that mindfulness meditation training program reduced physical

and psychological symptoms of distress and contributed to wellbeing. One year follow up showed maintenance of initial improvements on several outcomes [33].

Mindfulness based stress reduction techniques are now widely used and they are considered to be safe and effective [34]. Several meta analyses done over a period of years [35-37] conclude that mindfulness based stress reduction programmes are helpful in a broad range of heterogeneous group with clinical and non-clinical disorders. However, the studies also indicate that further research needs to be done about the specificity of this treatment intervention.

#### **Review of Yoga Studies for Stress Management:**

Yoga practices have been successfully used to manage stress. A 'Yoga for Stress Management Program' that served as a complementary alternative mental health resource in a university counselling centre was implemented with success at a mid size predominantly undergraduate university. Participants in this stress management program included students, staff and faculty members. They found the program useful [38]. A comparative trial of Yoga techniques and relaxation techniques to reduce stress and anxiety was conducted over a period of the weeks in South Australia. The study found that Yoga appears to provide a comparable improvement in stress, anxiety and health status compared to relaxation [39]. Researchers at Deakin University in Melbourne, Australia conducted a study of Yoga as a preventative and treatment for depression, anxiety and stress. The Yoga classes were designed as a six week program incorporating breathing techniques exercises for strength, vitality and flexibility, guided relaxation and meditation. The aim was to enhance self-awareness, encourage the perspective that emotional states are somewhat transient and encourage a calm attitude through concentrating on synchronizing gentle movements and breathing. It was hypothesized that this six week Yoga program would strengthen resistance to stress. At the end of six week the Yoga group showed lower average levels of anxiety and stress [40]. A randomized study of Cognitive Behaviour Therapy and Yoga was conducted for stress management in a large Swedish company. The program was conducted over a period of four months. However, no significant difference was found between the two programs. The results indicate that both cognitive behaviour therapy and yoga are useful stress management techniques [41]. This could perhaps be due to fact that both Cognitive Behaviour Therapy and Yoga use techniques to change thought processes.



Table 4: Yoga Intervention

Stage	Description
Activation exercises (10 minutes)	Flowing warm-up movements aimed at enhancing circulation, releasing tension and preparing the body for movement.
Energy-block release movements (20 minutes)	A sequence of 12 movements, including stretching, twisting, bending (forwards, backwards and side-ways) and squatting intended to increase circulation and 'energy flow', performed slowly with joints unlocked and slightly flexed and the limbs and torso relaxed.
Postures (20 minutes)	Four postures were chosen: the crocodile pose, bridge pose, cobra pose and sitting forward bend. All postures are performed slowly with joint unlocked, with spinal wave and conscious intention.
Relaxation (10 minutes)	Guided relaxation involved three parts: breathe and relax, visualize and affirm and stretch and awaken. This activates the parasympathetic nervous system to achieve greater physical and emotional balance.

Source: [42]

In yet another study conducted in 2008 it was found that even a short program of Yoga is effective for enhancing the wellbeing and resilience to stress in the work place [42]. The classes conducted over a period of six months included flowing movements, directed breathing and relaxation techniques as given in Table 4.

A recent study by Posadzhi and Parekh [43] reviewed the physical and psychological benefits of Yoga. There were benefits in many areas and yoga seemed to bring about reduction in stress, improved cardiopulmonary and central nervous system function, reduced respiration rate, lowering of blood pressure, fatigue and the symptoms of anxiety and depression.

**Time Management:** Studies suggest that the practice of yoga increases awareness and mindfulness [44]. This is helpful for managing time which is recognized as a significant 'stressor' at the work place. Bad time management leads to build up of stress. Symptoms of inappropriate time management include: rushing, fatigue or listlessness with many slack hours of non-productive activity, vacillation between unpleasant alternatives, chronic missing of deadlines, insufficient time for interpersonal relationships and the sense of being overwhelmed by demands and details. Most methods of time management include three steps: establishing priorities, eliminating low priority jobs and learning to make decisions. Effective time management has been found to minimise stress, anxiety and job fatigue [21].

**Food and Yoga:** According to yogic science, the food that nourishes brings harmony of body and mind, provides energy for clarity in thought and action and the food that consumes brings disease and illness. Yoga practices have been used as an experiential adjunct to other forms of therapy in the treatment of eating disorders [45]. The study found Yoga useful in increasing self-

awareness, reflection and the ability to self soothe thereby mitigating the desire to use food to fill an emotional void created by stress.

Studies have found that high levels of cortisol are related to stress and that these high levels of cortisol stimulate feelings of hunger. Stressed emotional eaters ate more sweet high fat foods and a more energy dense meal than unstressed eaters [46]. Besides, a malnourished diet-one that is deficient in essential amino acids, essential fats, vitamins and minerals is itself a stressor on the body. Research has shown that some foods actually induce a state of stress. Excess amounts of sugar, caffeine, salt and foods poor in vitamins and minerals weaken the resistance of the body to the stress response and may make a person more vulnerable to disease and illness. Food can either boost the immune system or suppress it. Food affects not only the physical body, but the mental, emotional and spiritual aspects as well. Eating disorders are to a large extent emotionally rather than physiologically based, ranging from bulimia and anorexia to overeating. All of these conditions have serious consequences if not resolved. Changes in diet including reducing or eliminating consumption of caffeine, refined sugar, sodium and fats are helpful in bringing down the risk of stress related problems.

## CONCLUSION

Rene Descartes, the seventeenth century French Philosopher and mathematician was of the view that the mind and body are separate entities and therefore demand separate examination and separate treatment. This dichotomy between the mind and the body continued till Einstein brought them together. His theory of unified field also extended to the human entity (physical, mental, emotional and spiritual components). Research of the late twentieth century is supporting this

theory that the physical, mental, emotional and spiritual aspects of the individual are all interconnected and influence each other. Yoga - an ancient Indian tradition - has a holistic view of the human being. There is a practical orientation of the psychological aspects of yoga. The theory - practice continuum, the psycho- integrative and experiential matrix of the concepts of yoga lay a fertile ground for the growth of the best techniques in the development and management of human resources. To get the best of yoga it has to be adopted as a technique and tool to manage life and work. Studies have validated the physical and psychological benefits of Yoga. A holistic discipline now calls for holistic adoption so that human resources are developed in a manner which contribute to the growth and wellbeing of the organization as also the individual.

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