

# Yoga Nidra as a Stress Management Intervention Strategy

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## Abstract

*The objective of the research paper is to explore the role and effectiveness of Yoga Nidra in mitigating the stress level of the employees at the workplace. The paper is conceptual and qualitative in nature in which Yogic technique- Yoga Nidra has been used as a stress management intervention strategy. This study is based on the content analysis of the similar researches already conducted in the past and also the interviews of the employees practising Yoga Nidra and has drawn useful inferences regarding the role of Yoga Nidra in managing the employees' stress at the workplace. It has been found that Yoga Nidra has a great potential to mitigate the stress level among the people. The paper also gives new insight to the organizations where effective mechanism of Yoga Nidra increases the parasympathetic system and decreases the sympathetic system which results into physical, mental and emotional relaxation in our body.*

## 1. Introduction

Stress is considered to be a severe problem nowadays due to changing competitive environment. People differ in their perception, beliefs, attitude, likes and dislikes, societal and cultural background and so forth, these factors in turn create conflict at the workplace and family life. In organization, managers are under constant pressure to meet the deadlines for fulfilling the targets. This may result in increased profits and faster growth in short-term but in turn deterioration of the health of the employees facing distress in the organisation. As a result, this would decrease the productivity, increase the job dissatisfaction level and increase the stress level among the employees. It gradually hampers the economy of the country as a whole. Stress is an unavoidable component of life due to uncertainty and competitiveness in modern life. In the fast changing world of today, no individual is free from stress and no profession is stress free. Everyone experiences stress, whether it is within the family, business, organization, study, work, or any other social or economic activity. Stress, long considered alien to Indian lifestyle, is now a major health problem hazard. In America, it has been found in survey conducted on workers in 2007, nearly

three-quarters of workers reported experiencing physical symptoms of stress due to work. According to statistics from the American Psychological Association (APA), two-thirds of Americans consider the work as a main source of stress in their lives and roughly 30 percent of workers surveyed reported "extreme" stress levels. The uncontrollable major factors causing stress are faltering economy, shrinking incomes and rampant layoffs whereas on-the-job stressors are unclear job expectations, time pressures and noisy work stations etc. The work/life balance is another challenging task especially for the women who are primary caretakers of children and elderly loved ones faced the problem of stress.

## 2. Conceptual Framework

Stress has been defined by Selye (1936) as "the non specific response of the body to any demand for change". Selye (1976) added another definition of stress as "a state manifested by a specific syndrome which consists of all the non specifically induced changes within the biological system". Newman and Beehr (1979), Cox (1978, 1990), Cox and Mackay (1981) Fletcher (1988) cited the engineering approach of stress defined as a stimulus characteristic of the person's

environment, usually conceived in terms of the load or level of demand placed on the individual, or some aversive (threatening) or noxious element of that environment. Juniper (2003) viewed the stress from the different perspective as the dysfunctional, psycho-physiological response to excessive emotional challenges or inordinate instinctual demand. Seaward (2012) observed the stress as the inability to cope with a perceived threat to one's mental, physical, emotional and spiritual well-being. According to the European Agency for Safety and Health at Work (EU-OSHA), work related stress is experienced 'when the demands of the work environment exceed the workers' ability to cope with (or control) them'. Zimabardo (1988) defined stress as "the pattern of specific and non specific responses an organism makes to stimulus events that disturb its equilibrium and tax or exceed its ability to cope." Cannon (1932) proposed the concept of fight or flight response to stress. When an organism perceives a threat, the body is rapidly activated, aroused and motivated via sympathetic nervous system and it disrupts emotional, physical and mental state causes various medical problems over time especially when person is unable to either fight or flee and is to face prolonged stress without break in its potency and continuity

## 2.1 Body's Response to Stress

The Automatic Nervous System (ANS) has two branches: sympathetic and parasympathetic. The sympathetic nervous system energizes the body for fight or flight by signaling the release of several stress hormones. The parasympathetic nervous system slows all the systems stimulated by the stress response; in effect, it counteracts the actions of the sympathetic branch. The responses of the sympathetic nervous system to stress involve a series of biochemical exchanges between different parts of the body. The hypothalamus, a structure in the brain, functions as the control center of the sympathetic nervous system and determines the overall reaction to stressors. When the hypothalamus perceives that extra energy is needed to fight a stressor, it stimulates the adrenal

glands, which are located near the top of the kidneys, to release the hormone epinephrine, also called *adrenaline*. Epinephrine causes more blood to be pumped with each beat of the heart, dilates the airways in the lungs to increase oxygen intake, increases the breathing rate, stimulates the liver to release more glucose (which fuels muscular exertion), and dilates the pupils to improve visual sensitivity. The body is then poised to act immediately. In addition to the fight-or-flight response, the alarm phase can also trigger a longer-term reaction to stress. The hypothalamus uses chemical messages to trigger the pituitary gland within the brain to release a powerful hormone, *adrenocorticotropic hormone (ACTH)*. ACTH signals the adrenal glands to release cortisol, a hormone that makes stored nutrients more readily available to meet energy demands. Finally, other parts of the brain and body release endorphins, which relieve pain that a stressor may cause. Normally the cerebral cortex receives a wide variety of messages from the environment leading to an emotional and mental response. These messages are passed on to the limbic areas leading to an emotional and mental response.

The Yogic practice leads to heightened cortical arousability and reduced limbic arousability at the same time, which heightened perceptual awareness and simultaneously reduced emotional reaction. Thus the regulatory mechanism in the hypothalamus is set at normal state which results in decreases sympathetic system and stimulates parasympathetic system. There is a powerful technique to cope with the problem of stress without medication in which a person can use their mind to change physiology for the better and improve their health by using the natural restorative process called the Relaxation Response. *Yoga Nidra* is one of the best Yogic interventional mechanisms to cope with problem of stress which stimulates the parasympathetic system and decreases the sympathetic system which bring the body into homeostatic state.

## 2.2 Yoga Nidra- Underlying Concept

*Yoga Nidra* (Sanskrit for Yogic Sleep) is a powerful *Yogic* technique from the *Tantra Yoga* tradition. *Yoga Nidra* is probably best-known technique to induce complete physical, mental and emotional relaxation. *Yoga Nidra* is a state of consciousness, which is, neither sleep nor awoken, neither is it concentration nor hypnotism. It can be defined, as an altered state of consciousness. It is both a name of a state and of a practice which creates an altered state of consciousness allowing the practitioner to relax and heal their being, expand their faculty of imagination, enter the realm of subconscious & super-conscious, effectively manifest seemingly magical changes in their life. Swami Satyananda Saraswati (2002) explains *Yoga Nidra* as a state of mind between wakefulness and dream. When someone practices *Yoga Nidra* he opens the deeper phases of the mind. During the practice of *Yoga Nidra* the consciousness is at different levels and the consciousness is suspended for a few moments periodically, which means that it alternates between the subconscious and unconscious states. Few studies have been conducted to examine the effectiveness of *Yoga Nidra* on stress related to psychological and psychosomatic disorders.

The 8 stages of the *Yoga Nidra* practice include:

- A) Internalization / Relaxation – Preliminary preparation of the body.
- B) Affirmation (Sankalpa) – A personal goal previously decided upon is declared silently.
- C) Rotation of Consciousness – The consciousness is taken on a tour of the whole body in a structured fashion.
- D) Respiration awareness – A period of awareness of the breath at special positions in the body.
- E) Manifestations of Opposites – Pairs of feelings and emotions are experienced.
- F) Creative Visualization – Various Archetypal images are visualized mentally.
- G) Affirmation- Sankalpa is repeated and, now in a highly suggestible state of consciousness, is programmed into the subconscious mind.
- H) Return to Full Awareness – A careful and

gradual return to a normal state.

### 2.2.1 Benefits

- Everyone can practice. Even beginners who have no experience with meditation.
- Physical stresses and tensions are removed.
- Mental stresses and unwanted impressions are removed.
- Emotional balance is restored.
- The faculties of imagination and visualization are practised and enhanced.
- The subconscious is focussed on and able to manifest any personal goal be it physical.

### 2.2.2 Effect of Yoga Nidra on Emotional and Mental Health

It can assist in the achievement of a state of so called self-realization (complete self-awareness) *Yoga Nidra* helps in restoring mental, emotional and physical health by way of relaxation, and makes the mind more conducive to *Pratyahara* - withdrawing senses from their objects, *Dharana* - concentration, and meditation. The practice helps harmonize the two hemispheres of the brain and the two aspects of the autonomous nervous system (sympathetic and parasympathetic).

### 2.2.3 Typical Effects

The most easily observable effect of the *Yoga Nidra* practice is the extremely deep relaxation of the nervous system and healing of the body by allowing it the rest and recharge it usually lacks in our all too busy lifestyles. *Yoga Nidra* has been clinically shown to be one of the most powerful methods available to achieve this state of deep relaxation and sedation without the use of chemical agents as demonstrated in various clinical trials both in the US Menninger Foundation research in the 1970's, and in various academic experiments in Copenhagen, Denmark. Brain scans were used to observe and study the changes occurring during and post-practice with startling results.

In *Yoga Nidra* exactly opposite process is used to make the brain centres active by focussing awareness on the parts of the body in a definite sequence. Thus, the person tries to stimulate various parts of the brain by focusing the awareness on the corresponding parts of the body. By awareness is implied 'attitude of witnessing' towards physical or mental actions of the body.

#### 2.2.4 Mechanism of Yoga Nidra

*Yogic* philosophy as well as modern psychology, enumerates three basic types of tension which are responsible for all the agonies of modern life. These three types of tension are classified as Physical, Mental and Emotional. Through the consistent practice of *Yoga Nidra*, these threefold tensions can be progressively released. 1. Physical Tension- This is termed as muscular tensions related to the body itself, the nervous system and endocrinal imbalance. These are easily released by the deep physical relaxation attained in the state of *Yoga Nidra*. 2. Emotional Tension- It controls the emotional state of the mind, tranquilize the entire emotional structure of the mind. 3. Mental tension- Everyone involved in some kind of mental activity in day to day life. The mind is whirlpool of fantasies, confusions and oscillations. The tensions related to family, workplace, and interpersonal relationships are accumulated in the consciousness state of the mental body. This may bring

psychological and behavioural changes in the body responsible for abnormal behaviour of an individual. *Yoga Nidra* is the science of relaxation which enables to enter into the realms of the subconscious mind, thereby releasing and relaxing mental tensions and establishing harmony in all facts of life.

### 3. REVIEW OF LITERATURE

Rani et al. (2011) investigated the impact of *Yoga Nidra* on psychological well being in patients with menstrual irregularities in Chattrapati Shahuji Maharaj Medical University, Lucknow. The authors studied the association of menstrual symptoms with anxiety and depression in female students. The frequent occurrence of one menstrual symptoms cause discomfort affecting the Performance. The practice of *Yoga Nidra* has been reported to relieve pain associated with dysmenorrhoea and excessive level of premenstrual tension. The participants in the *Yoga Nidra* program had found to be decreased level of anxiety, depression and increased positive well-being, general health and vitality compared with the control group.

Mandlik et al. (2002) investigated the effect of *Yog Nidra* on the activity of brain with the help of Electro-Encephalograph (EEG). Initially EEG showed Beta activity prominently with intermittent

**Table 1: Types of waves in EEG**

Type of Waves in EEG		
Brainwaves	Cycles /Second	Level of Consciousness
<b>Beta</b>	13 – 30	Externally directed attention, mental activity, anxiety. Rational mind use, also some schizophrenias and manias
<b>Alpha</b>	8 – 12	Internally directed attention with closed eyes, relaxed state of body and mind, psychosis
<b>Theta</b>	4 – 7	States of creativity, access to unconscious material meditation. REM sleep, in children
<b>Delta</b>	0.5 – 3	Deep and dreamless sleep, new born babies, some neurological disorders

Alpha activity. With the advancement of *Yoga Nidra*, Beta activity was slowly replaced by Alpha activity and still further by smooth well formed *Alpha* activity. After 30 sessions of *Yoga Nidra* gain of alpha activity was better and with further advancement of *Yoga Nidra* intermittent Theta activity was noted intermixed with alpha activity suggestive of deep state of relaxation. EEG measures minute electrical activity in the brain in the form of waves. The frequency of brain activity waves has been shown to alter according to the state of consciousness and state of mind the subject is in. Beta activity is normally noted in the awake working state. With physical relaxation beta activity is taken up by alpha activity, and as the person goes into different stages of sleep the activity changes to theta and also may exhibit delta activity in deep sleep.

Sharma et al. (2005) observed that practice of *Yoga* brings a harmony in psycho-physiology of the practitioners. Deuskar et. al. (2006) found a significant change in the Performance of archers due to the practice of *Yoga Nidra*. The result shows that *Yoga Nidra* positively decreases the stress level of the male and female subjects both.

Kumar(2008) reported the effectiveness of *Yoga Nidra* in curing the psychological disorders like anxiety, hostility, insomnia etc. and psychosomatic diseases like Asthma, coronary heart diseases, cancer, hypertension etc. In the study it has been found that the practice of *Yoga Nidra* decrease the stress and anxiety level of the students of higher class in Dev Sanskriti Vishwavidyalaya, Haridwar.

Rani et al. (2013) examined the effects of *Yoga Nidra* on stress levels among B.Sc Nursing first year students at academic level Performance interface student's preparation, concentration attention, memory etc. As a result it has been found that the level of stress after the administration of *Yoga Nidra* was decreased in moderate and low level of stress but no effect of *Yoga Nidra* has been found on students having high stress level.

#### 4. STATEMENT OF PROBLEM

The individual, organization and the society face challenge in coping up with the problem of stress at the workplace and in family also. They also bear the latent cost of the stress knowingly and unknowingly which ultimately affect the economy of the country. The survey conducted by European Agency for Safety and Work Health at Work by a team led by Hassard et al. (2014) analysed the cost related to the stress at three levels- Individual, Organizational and Societal level. At the individual level, the stress related cost was reflected in terms of increased medical and insurance costs and reduced income. At the organization level, the financial implications of work related stress was associated with deterioration of productivity, higher level of absenteeism and employee turnover. At a societal level, chronic work- related stress and prolonged exposure to psychosocial risks at work could strain health services and reduce economic productivity negatively affects the gross domestic product (GDP) of the country. Organizations have been putting their effort in reducing the stress related cost which ultimately hampers the productivity of the individual, organization and the country a whole. Therefore organizations adopted various stress management intervention strategies like leisure counselling, participative decision making, job redesign, changing organizational structure, recreational activity etc. These strategies might not be proved to be very effective in bringing the fruitful results in the long run to mitigate the effect of stress level among the employees at the workplace. Therefore proposed research would be addressing the dearth of focus on these aspects and it will be helpful for the society to understand the linkages between the practice of *Yoga Nidra* and outcome of it on the stress level. Few studies have been conducted in this area. There is no significant research work has been done so far on the topic in the organizational context.

#### 5.OBJECTIVE

The objective of the study is to explore the role and

effectiveness of *Yoga Nidra* in mitigating the stress level of the employees at the workplace.

## 6. RESEARCH METHODOLOGY

### 6.1 Research Design

The paper is conceptual and qualitative in nature in which *Yogic* technique- *Yoga Nidra* has been used as stress management intervention strategy. The secondary data has been collected from the various Journals and books. The primary data has been collected from the 30 employees who have been practising *Yoga Nidra* for sometime with the help of structured questionnaire based interview.

### 6.2 Method

The following two logical steps were taken to study the role and significance of *Yoga Nidra* in mitigating the stress.

- a) The 5 studies conducted in the past were systematically reviewed and their contents were analysed with an view to understanding the role and significance of *Yoga Nidra*.
- b) The 30 employees working in different capacities (teaching and non teaching both) were interviewed with the help of structured questions and their responses and experiences were analysed by using Content Analysis Method.

**Table 2: Review and Analysis of Researches Defining the Relation between *Yoga Nidra* and Stress**

S.No.	Author	Nature of Study	Finding	Observation
1	Rani et al. (2011)	The author investigates the impact of <i>Yoga Nidra</i> on psychological well being such as anxiety and depression in female students with menstrual irregularities in Chatrapati Shahuji Maharaj Medical University, Lucknow.	The practice of <i>Yoga Nidra</i> has been reported to relieve pain associated with dysmenorrhoea and excessive level of premenstrual tension.	Found decreased level of anxiety, depression and increased positive wellbeing, general health and vitality
2	Mandlik et al. (2002)	The author investigates the effect of <i>Yog Nidra</i> on the activity of brain with the help of Electro-Encephalograph (EEG).	Initially EEG showed Beta activity prominently with intermittent Alpha activity. With the advancement of <i>Yoga Nidra</i> , Beta activity was slowly replaced by Alpha activity and still further by smooth well formed <i>Alpha</i> activity.	During the practice of <i>Yoga Nidra</i> the brain waves changes from Beta to alpha to theta relates to uncouncious mind i.e complete relaxation.
3	Sharma et al. (2005)	The author examined the impact of practice of <i>Yoga Nidra</i> in bringing a harmony in psycho-physiology of the archers practitioners.	Found a significant change in the Performance of archers due to the practice of <i>Yoga Nidra</i> .	The result shows that <i>YogaNidra</i> positively decreases the stress level of the male and female subjects both.

4	Kumar. K. (2008)	The author investigate the effectiveness of <i>Yoga Nidra</i> in curing the psychological disorders like anxiety, hostility, insomnia etc. and psychosomatic diseases like Asthma, coronary heart diseases, cancer, hypertensions etc of the students of higher class in Dev Sanskriti Vishwavidyalaya, Haridwar.	It has been found that the practice of <i>Yog Nidra</i> decrease the stress and anxiety level	Decrease the level of stress and anxiety
5	Rani et al.(2013)	The author examined the effects of <i>Yoga Nidra</i> on stress levels among B.Sc Nursing first year students at academic level Performance student's preparation, concentration attention, memory etc.	It has beenobserved that the level of stress after the administration of <i>Yoga Nidra</i> was decreased in moderate and low level of stress but no effect of <i>Yoga Nidra</i> was found on students having high stress level.	Decrease stress at moderate level and no effect was found on high level of stress.
<p>The systematic analysis of the five studies which were conducted in the past reveals a positive impact of <i>Yoga Nidra</i> on mitigating the Stress level. In the one of the studies, it has been observed that brain waves state changes from beta to alpha to theta and then delta in EEG machine during the practice of <i>Yoga Nidra</i> which activates the parasympathetic system and decrease the parasympathetic system of the body to bring the position of the mind in homeostatic state. Further the Content Analysis of the interview in the form of structured questionnaire held with the employees shows that the <i>Yoga Nidra</i> helps them positively in improving their wellbeing and health which results in reduced stress level.</p>				

## 7. Analysis and Discussion

Table 2 given above depicts the systematic review and analysis of a few of the researches which have been conducted in the past aiming at defining the relation between *Yoga Nidra* and stress.

## 8. Conclusion

*Yoga Nidra* is the powerful technique to induce

complete physical, mental and emotional relaxations. The *Yoga Nidra* state reflects an integrated response by the hypothalamus resulting in decreased sympathetic nervous activity (excitatory) and increased parasympathetic (relaxatory) function. This relaxation response can be thought of as the inverse counterpart of the so-called 'fight or flight' response. The ultimate objective of *Yoga Nidra* is to combat the stressful influences and rectifying the imbalances created by

poor stress management. It is not only a way of coping with stress, it provides a means of transforming and positively utilizing tension as a stepping stone to greater awareness, efficiency and achievement in life.

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