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# Stress Management Through Yoga

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#### **Abstract**

Stress is often defined as a bodily response to the demands of life. But there are also emotional and mental aspects of stress. It is experienced as thoughts and feelings as well as in the body. Another way to define stress could be as an internal and conditioned response to external pressures. The main aim of this study is to quide people about the factors of stress and minimizes or takes control over stress through regular practice of some selected yoga. Many studies have been stated very clearly that regular practicing of yoga could be controlled and improved physical health as well as mental health; few studies have shown some experimental evidence and results particularly on varies mental factors like anxiety, stress, schizophrenia, depression and so on and, from these we can easily accept the impact or contribution of yoga on mental aspect. It was necessary to identify the exact reasons and time of stress arousal, find out the mental stage of needs, the process of mental satisfaction according to needs, the point of transfer of mental state from demands or needs to stress lastly the point where the stress become mental disorder or unbalance. Many ways are there to take control over stress, here one of the best methods by which we can easily minimize and direct mental stress is yoga. Undoubtedly yoga take control over mind as mind is the overall boss of every mental process.

**KEYWORDS:** yoga, anxiety, stress, schizophrenia, depression

#### INTRODUCTION

In this high demand lifestyle, people have to learn the technique to fulfill the daily demand and manage the stressful situations and live accordingly. Stress is a normal state of mental factors for every living being, in each moment of a day people live with variety of stress and response accordingly, balancing the situation lead their life normally. Stress is a common mental factor of every human being, without stress life becomes pale, that mean stress is an automatic feature of person's life. Suppose if we want to put an example of stress from daily life of a person then it would be very difficult to find out a moment without any stress, that mean we are living with stress but the situation, education, knowledge, experience, condition, social system and so on taught us to balance the stressful situation, so it is absolutely normal to life.

Problem is that when we unable to do appropriate response according to the demand, then it create pressure on the mental state and this situation leads to break the normal state of mind. Here a conflict is seen between demand and mental state,

if the person has the capability to response according to the demand or need then problem wouldn't be up headed, satisfaction would be taken place, mental adjustment also there and the states of mind become stable<sup>1</sup>. In another way, if the response is not appropriate according to the demand or need then the state of mental balance becomes unstable and conflict would be taken place until the problem solved. Everything is on mental level and control by the mind, so if we keep control over mind fully then problems related to stress will be minimum and every stressful situation will be handle easily. Many methods are there but one of the best methods is regular practicing of yoga. The main aim of yoga is to connect the person's inner world, purify own self, gathering knowledge, control over body, mind, life and soul, and again connect to the outer world and lastly sacrifice own self to God. Suppose if we concentrate on gathering knowledge about own self then we can manage lots of life problems including mental stress. Therefore it is necessary to account all the procedure of minimize mental stress through yoga.

# **OBJECTIVES OF THE STUDY**

- 1. Guide people about the factors of stress and minimizes or takes control over stress through regular practice of some selected yoga.
- 2. Concern about the stress and stressful situations.
- 3. Guide people to know how a demand becomes stress.

# **RATIONALITY OF THIS STUDY**

In this modern age people live with high demand leads those towards excess mental stress, after a certain period when people unable to overcome or handling this excess mental stress create mental as well as physical problems. Few mental problems are as much as severe that affected on person's life massively. The problems related to excess stress are anxiety, aggression, depression, schizophrenia is also called psychosomatic disorder and sometime people behave abnormally. It is necessary to aware people about the reason and solution of this mental stress related problems<sup>2</sup>.

#### **STRESS**

Stress is often defined as a bodily response to the demands of life. But there are also emotional and mental aspects of stress. It is experienced as thoughts and feelings as well as in the body. Another way to define stress could be as an internal and conditioned response to external pressures. One definition of stress is that it represents both a psychological and a physiological reaction to a real or perceived threat that requires some action or resolution. It is a response that operates on

cognitive, behavioral, and biological levels that, when sustained and chronic, results in significant negative health effects (Linden, 2005) <sup>3,4,5</sup>.

Stress is, therefore, what happens when life exerts pressure on us, but also the way it makes us feel. According to landmark brain researcher Bruce McEwen (McEwen, 2002; McEwen & Wingfield, 2010), it is both a stimulus and a response<sup>6</sup>.

#### Can Stress Cause a Chemical Imbalance?

In addition to affecting the balance of neurotransmitters, stress can affect chemical balances in multiple systems of the body including: nervous system, digestive system, endocrine (hormones) system, cardiovascular system, reproductive system<sup>7</sup>.

#### What Are Neurotransmitters?

Neurotransmitters are chemical messengers in the body. They are used by the nervous system to help neurons, or nerve cells, communicate with one another. They also help neurons transmit signals to other target cells throughout the body<sup>8</sup>. Some of the main neurotransmitters include: Serotonin, Dopamine, Norepinephrine, Acetylcholine, GABA (gamma-aminobutyric acid), Glutamate.

These neurotransmitters help with many functions including: Sleep, Appetite, Mood, Arousal, Behavior, Cognition, Pleasure, Early brain development, Memory, Learning, Stress response ("fight or flight"). Dysfunction of these neurotransmitters has been linked to conditions such as: Schizophrenia, Anxiety disorders, Depression, Bipolar disorder (mood swing), Parkinson's disease<sup>9</sup>.

While it is common to hear that depression and some other mental health conditions such as anxiety disorders are caused by a chemical imbalance, most mental health experts believe the causes of mental health conditions are more complex than the term implies<sup>10</sup>. The balance of chemicals in the brain is thought to be one influence on depression and anxiety disorders, along with a combination of factors such as: Faulty mood regulation by the brain, Genetics, Environmental factors like stressful life events, Medications, Medical problems.

How a Demand or Need Become Mental Stress is Shown Below:

Needs or demands:

Stimulus and Response... satisfaction/dissatisfaction ...... mental balance/imbalance.......if imbalance....... Try to fulfill demands.......stress.......demand not fulfill....... Over mental stress and dissatisfaction starts.......mental disorder through some chemical reaction lead by nerves.... Affect this stress directly on the particular organs like intestine, glands, brain, heart, respiratory system etc.

#### **Dimensions of Stress:**

- 1. Physical: Physical symptoms of stress include: Headaches, sleeplessness, Fatigue, Stomach aches, Body pain, Acne or breakouts Digestive issues.
- 2. Mental: Mental symptoms of stress include: Anxiety, Depression, Suicidal tendency, Food and eating issues, Addictions and/or compulsions, Substance abuse.
- 3. Social: Poor Interpersonal relationship, maladjustment, loneliness etc.
- 4. Emotional symptoms of stress include: Irritability, Sadness, Anger, Apathy, and Overwhelm.

When these complaints occur as a result of stress, they may clear up when the stressful situation is resolved. But they can also become serious if present long-term. Treatment from a doctor or mental health professional may be necessary, especially if stress persists.

# **PSYCHOSOMATIC DISORDER**

Psychosomatic disorder is a condition in which psychological stresses adversely affect physiological (somatic) functioning to the point of distress. It is a condition of dysfunction or structural damage in bodily organs through inappropriate activation of the involuntary nervous system and the glands of internal secretion<sup>11</sup>. People with this condition may have excessive thoughts, feelings or concerns about the symptoms — which affects their ability to function well<sup>12,13,14</sup>.

#### CHEMICAL IMBALANCE

A chemical imbalance happens when there is too much or too little of any substance in the body that helps it function normally. While it can apply to an imbalance of any of these substances in any area of the body, the term is usually used to refer to imbalances in the brain<sup>15</sup>.

A chemical imbalance occurs when the substances that help the body function the way it should become out of balance. Either too much or too little of these substances can cause a chemical imbalance that affects the body's ability to function normally.

These chemical imbalances are often linked to health conditions. For example, a hormonal imbalance occurs with polycystic ovary syndrome (PCOS), which in turn puts a person at risk for other conditions such as type-II diabetes and infertility.

Too much or too little of these substances anywhere in the body is considered a chemical imbalance. However, the term "chemical imbalance" is usually associated with chemical imbalances in the brain and their potential effect on mental health and related conditions.

#### **Chemical Imbalances in the Brain**

The chemicals in the brain that help facilitate communication between nerve cells are called neurotransmitters. Any disruption in the complicated process of nerve cell

communication has the potential to affect the production and/or function of neurotransmitters and, by extension, a person's mental health<sup>15</sup>.

# APPLICATION OF YOGA TECHNIQUES TO OVERCOME FROM MENTAL STRESS RELATED PROBLEMS

Problems are: Depression, Anxiety, Posttraumatic stress (PTSD), Schizophrenia, Children with Autism, treatment for substance abuse issues, back pain, heart conditions, asthma, chronic fatigue, hypertension, multiple sclerosis(hardness of tissues), and side effects of chemotherapy<sup>5,10,16</sup>.

# Why Yoga Therapy?

Yoga as Therapy: this derive from yoga traditions of Patanjali and Ayurvedic system of health care refers to adaption and application of yoga technique to create, stimulus and maintain of optimum state of physical mental emotional and spiritual health.

Yoga therapy is a mind-body practice that focuses on your physical, emotional and mental health. The practice uses movement, mindfulness, meditation, relaxation and breathing exercises to help you relax relieve stress and manage underlying conditions or symptoms in addition to treatment by a healthcare provider<sup>17</sup>.

#### Review

Yoga therapy is a growing field and scientific evidence has begun to emphasize its efficacy. It is used to treat existing mental and physical health issues, but can also be used as a self-care strategy for prevention and maintenance.

Yoga therapy is well established as a treatment for depression and anxiety. A metaanalysis cited in the Primary Care Companion for CNS Disorders found that yoga therapy also shows promise for the treatment of posttraumatic stress (PTSD) and schizophrenia<sup>18,12</sup>.

Additionally, yoga therapists have begun to develop treatment modalities to suit children with autism. The book Yoga Therapy for Children with Autism and Special Needs, written in 2013 by yoga teacher Louise Goldberg, is already considered a critical text for novice and experienced yoga therapists alike.

According to a 2012 article in Social Work Today magazine, yoga therapy is also emerging as an effective treatment for substance abuse issues. Mental health professionals point out the way yoga positively impacts the parts of the mind and body susceptible to addiction. Studies have shown that yoga boosts the neurotransmitter GABA (gamma-aminobutyric acid), which is important because

GABA levels are statistically low in people who experience substance abuse, anxiety, and depression.

# **Yoga Therapy**

When a person decides to initiate yoga therapy, the therapist will first conduct an initial assessment. This assessment is designed to do the following:

Identify health problems

Assess lifestyle and physical capability

Discuss reasons for seeking therapy

Create a course of treatment

Once the treatment plan is established in this first consultation, the frequency of sessions is agreed upon and sessions are scheduled. From this point, therapy sessions will most likely include the following components:

# Method of application

It is very clear that if a person follows the eight elements of yoga (yama, niyama, asana, prayanama, prathyahar, dhayana, dharna and Samadhi) then it bring self realization, self actualization, and self knowledge and give the actual way of life. The problem of a person's life automatically removes and life will be more easy and comfortable. But it is quite difficult to follow all elements properly in this modern lifestyle, but people can modify it with the help of yoga expert and do accordingly, here author put a short discussion below for a common man<sup>12</sup>.

- 1. Yama: bring the purity of mind by practicing ahimsha, satya, asteya, bramacharya, aprigraha.
- 2. Niyama: take oath to following the real and desire path through the practicing tapasha, swadhaya, santosh, saucha, ishwarpranidhan.
- 3. Asana: by maintaining the line of chest, neck and head we keep our body posture in comfort in a particular position.
- 4. Pranayama: pran+ayam.... Pran= the power of living or life of the inner phyque. Ayam= control or discipline. Pranayama: types: adham, madhyam, uttam, and practicing in three way: purak, rechak and khumbhok. 12seconds purak = Adham, 24 seconds purak = Madhyam, 36 seconds purak = Uttam
- 5. Prtayahar: control our sense organs on own will and develop capability to withdrawal connection from the outer objects at any moment in life.
- 6. When we concentrate our mind in a particular point of our body for 12 seconds is called one Dharna.
- 7. Continuously 12 Dharana in 12 different places is called Dhyana.
- 8. Such 12 pure Dhyana is the stage of Samadhi.

Breathing Exercises (Pranayam): The therapist will guide the person in therapy through a series of breathing exercises ranging from energizing breaths to balancing breaths.

Physical Postures (Asana): The therapist will teach the person in treatment appropriate yoga poses that address problem areas. For example, the "Legs up the Wall" pose is used to treat things like anxiety and insomnia. In this pose, the person lays on his or her back with legs positioned up against the wall.

Meditation: Relaxation and mindfulness are the focus of meditation when it is combined with yoga poses.

Guided Imagery: The yoga therapist attempts to calm body and mind by providing guide visualization intended to bring inner peace.

Homework: An important element for any yoga practice and it is to find a way to incorporate it into daily life. Yoga therapists provide instructions on how to use what has been learned in treatment at home.

#### CONCLUSION

From the above discussion it is very clear that every individual have to learn the technique of how to take care of physical health as well as mental health. It is our duty to aware our new generation Very specially. Dependence on machine and modern technology affect on their physical health as well as mental health, not only dependency on modern technology but also the regular life's demand creates pressure on them and increase intolerable mental stress.

#### **BIBLIOGRAPHY:**

- 1. Chen., David D. *StressManagement and Prevention.* s.l.: Taylor & Francis Group, 2017
- 2. Sharma, Manoj. 2014, Journal of Evidence-Based Complementary & Alternative Medicine, Vol. 19(1), pp. 59-67.
- 3. Work stress and attentional difficulties: An initial study on burnout and cognitive failures. Linden, Dimitri Van Der. 1, s.l.: Taylor & Francis online, Feb 23, 2007, An International Journal of Work, Health & Organisations, Vol. 19, pp. 23-36.
- 4. Ayala, S. Stress. Health Tips from Army Medicine. http://www.armymedicine.army.mil/hc/healthtips/08/stress.cfm. [Online] 13 June 2008.
- 5. K.N., Udupa. Stress and its Management by Yoga. . Madras : Motilal Banarsidass, (1985).
- 6. Brain on stress: how the social environment gets under the skin. McEwen, Bruce S. s.l.: Pubmed PMID: 23045648.
- 7. William Shaw, Matthew M. Burg. Stress effects on the body. s.l.: Amarican Psychological Association, March 8, 2023.
- 8. Neurotransmitters. https://my.clevelandclinic.org. [Online] 03/14/2022.

- 9. Bottaro, Angelica. Very Well Health. https://www.verywellhealth.com/angelica-bottaro-5076910. [Online]
- 10. Part II, Clinical Sudarshan Kriya Yogic Breathing in the Treatment of Stress, Anxiety, and Depression. Brown RP, et al. s.l.: Journal of Alternative and Complementary Medicine, 2005, Vol. 11.
- 11. Lotha, Gloria. Cleveland Clinic Psychosomatic Disorder. https://www.britannica.com/science/psychosomatic-disorder. [Online] Aug 15, 2021.
- 12. Treatment to Psychosomatic- Disorder through Yoga. Ch.Venkateswarlu, Dr. No. 3, Department of Psychology, Andhra University: International Journal of Social Science Tomorrow, May | 2012, Vol. Vol. 1 . SSN: 2277-6168.
- 13. *Yoga for Anxiety: A Systematic Review of Research.* G., Kirkwood. s.l.: British Journal of Sports Medicine: , 2005, Vol. 39.
- 14. *Yoga for Depression: The Research Evidence*. K., Pilkington. s.l. : Journal of Affective Disorders, 2005, Vol. 89, pp. No. 1-3, pp.13-24.
- 15. Heather Jones. Updated on September 13, 2023. Medically reviewed by Steven Gans, MD. Chemical Imbalance. https://www.verywellhealth.com. [Online] September 13, 2023.
- 16. Role of yoga therapy in anxiety, neurosis and depression. P., De Vicente. s.l.: Yoga Mimamsa, 1987.
- 17. Datey KK, Deshmukh SN, DalviCP, Vinekar SL. "Shavasana": A yogic exercise in the management of hypertension'. Angiology. 1969.
- 18. Fuselier, y Jill. Yoga and Meditation for Enhanced Mood and Well-Being. Santa Cruz: Counseling & Psychological Services at the University of California at Santa Cruz.