# **Yoga Effectiveness on Physical & Mental Health**

# **Davender Singh, Dr. Kewal Krishan** Lecturer, GSSS, KISHAN GARH (5902) ROHTAK

**Abstract:** Using information from review papers, this study evaluates earlier studies on the impact of yoga therapy on a variety of areas of mental and physical health. Collectively, these articles highlight a range of situations where yoga may be beneficial, but almost all of them still need more research to pinpoint these advantages. It has been challenging to use meta-analysis as a suitable tool for assembling the body of information due to the diversity of the examined treatments and surroundings. However, certain meta-analyses and even fairly high-quality randomized controlled trials (RCTs) demonstrate the benefits of yoga therapy, particularly with regard to pain-related ailments and mental health. While yoga may be helpful as a supportive adjunct in treating a number of medical problems, it is not yet recognized as a stand-alone, curative therapy. Yoga provides coping mechanisms for life, boosts self-efficacy, and encourages independence. It can also be used in part as a self-care practice for therapeutic purposes. Yoga is a supporting / auxiliary therapy that is reasonably priced. It is therefore strongly advised that a more extensive investigation be carried out utilizing stronger scientific standards and appropriate management procedures.

Key words: Yoga and the Health, Mind

#### Introduction

By 2020, ischemic heart disease will be the leading source of illness burden globally, according to the World Health Organization. Anxiety is now being addressed more promptly than in the past. Care regimens typically contain prescription drugs that are ineffective for enhancing emotional stability or infection control as a result of these test modifications. For behavioral wellbeing and physical fitness issues to be successfully addressed, a thorough strategy that looks into the cause of the problem is required.

This essay offers proof that yoga can be utilized to enhance physical health, prevent disease, reduce stress, and address other imbalances in mental and physical health. Yoga is still not a cure-all for issues with behavioral well-being and physical fitness, much like other therapies. When combined with other strategies to assist people to achieve increased mental well-being, yoga has enormous potential.

Yoga is a collection of physical and intellectual rituals that first appeared in India about a thousand years ago. In the second century BC, it was formally formalized in the Yoga Sutras, a work attributed to the philosopher Patanjali. Yoga's initial purpose was to let ordinary, frail humans connect with the transcendent concept, or Deity. The union of the mind, body, and spirit is effective; the word "yoga" is a Sanskrit word that means "assembly," "yoke," or "joining." Through deep relaxation and maintaining mental focus, yoga may train the mind to become serene. The mental training activity is beneficial. Yoga can help with mental health in several ways, one of which is by letting you completely participate in its emotional component. Yoga practitioners, or yogis, claim that over time, the buildup of repressed emotions in the psyche will disappear. The effects will last long after yoga is over, even if the cycle is slow. Yoga is a fantastic way to relax and reduce stress.

#### THE IMPACT OF YOGA ON MENTAL HEALTH

# Regulates adrenal glands

Cortical volume is reduced by yoga. Consider this if it doesn't seem to be anything. The cortical is often secreted by the adrenal glands in response to an acute event, temporarily boosting immune activity. The immune system can be weakened if cortical rates remain high even after the crisis. Temporary increases in long-term memory cortical assistance are beneficial, but persistently high rates impair performance and can lead to permanent brain alterations. Toxic cortical chemicals have really been linked to conditions such as severe depression, osteoporosis (because it steals calcium and other nutrients from bones and prevents the formation of new bone), high blood pressure, and insulin resistance. Researchers refer to "food seeking activity" (the kind that makes you eat when you're agitated, annoyed, or stressed) as being influenced by high cortical rates in rats. The body absorbs extra calories and stores them as belly fat, which increases weight gain and the risk of diabetes and heart attacks.

# Increases your self-esteem

You'll be able to tell if you're deserving or, as yogic theory holds, whether you're a reflection of the All-Powerful, when you take a good attitude and practice meditation, initially in brief glimpses and later in longer experiences.

# Create peace of mind

In Patanjali's Yoga Sutra, he claims that meditation calms emotional disturbances, or, to put it another way, that it speeds up the inner cycles of disappointment, guilt, fury, anxiety, and attraction that can lead to tension. Learning to calm your mind is probably going to make you live longer and safer because depression causes so many health issues, such as headaches, anxiety, lupus, MS, eczema, increased blood pressure, and heart attacks.

# Build up your immune system

The immune system generally responds favorably to meditation, improving when necessary (for instance, raising antibody levels in response to a vaccination) and weakening when necessary (for instance, minimizing an excessively aggressive immune response in an autoimmune disorder like psoriasis).

#### Releases tension in limbs

As you practice yoga, you may start to recognize that you are holding onto tension in many ways, such as your mouth, your hair, or the muscles in your face and neck. Do you ever see yourself squinting your nose as you peek at a computer screen or grasping the phone or steering wheel with a death grip? Such unintentional movements of the hands, arms, legs, back, and face can cause ongoing discomfort, weakening of the muscles, and soreness, which can increase stress and worsen mood.

# Maintains your nervous system

Scientists have observed yogis who used a meditation technique to produce strange brain-wave patterns, cause erratic heart rhythms, and raise the warmth of their hands by 15 degrees Fahrenheit. Yoga may teach you how to enhance blood flow to the pelvis if you wish to become pregnant or how to unwind when you are feeling lightheaded.

#### THE EFFECT OF YOGA ON PHYSICAL HEALTH

# Improvement in flexibility

During the first lesson, you most likely won't be able to complete a backbend, but if you persevere, you'll gradually loosen up and perhaps even be able to perform challenging poses. You'll even notice that your symptoms and aches are beginning to subside. Nothing is possible. Tight hips will put tension on the back because of incorrect thigh and shinbone placement.

#### Makes your posture perfect

Your head is a large, sturdy, and spherical bowling ball; as such, it requires less effort from the neck and back muscles to maintain it when it is directly above an upright spine. However, if you move forward only a few inches, your muscles begin to ache. Pick on the forward-leaning bowling ball for eight to twelve hours a day, and it's no wonder you're worn out. Popularity apathy isn't the only problem, though. Problems with the back, spine, and other body parts may result from poor posture.

#### **Increase heart rate**

Although not all yoga is aerobic, if you frequently practice it or take flow or Ashtanga instruction, your heart rate will increase into the aerobic range. There are, however, some yoga exercises that can improve cardiovascular fitness without raising heart rate. Additionally, studies have found that practicing yoga lowers resting heart rate, increases endurance, and lowers stress.

# Control blood pressure

According to two studies that compared the benefits of Savasana (Corpse Pose) to merely sitting on a sofa, yoga can help those with high blood pressure. Savasana was connected to a 26-point decrease in systolic blood pressure (the highest figure) and a 15-point decrease in diastolic blood pressure (the lowest number; the greater the starting blood pressure, the larger the decrement) within three months.

# THE EFFECT OF YOGA ON ANXIETY

Yoga poses strengthen and extend the body's muscles, support and enhance respiratory and cardiovascular health, help with addiction recovery and treatment, reduce stress, anxiety, and depression, improve chronic pain, change sleep patterns, and generally enhance wellbeing and quality of life.

The relaxation response requires a profound state of relaxation, which can be obtained through activities like breathing exercises, prayer, or meditation.

Yoga functions in a similar way to other self-relieving techniques including contemplation, rest, exercise, or even socializing. Yoga techniques appear to have the potential to lessen the negative effects of overreacting to stress, which may be beneficial for both anxiety and depression.

The prevalence of stress, fear, and anxiety makes it impossible to keep track of them all. Both persons should have gone through test result anxiety, parental reactions to report cards, first dates, and job interviews because these things happen frequently. Although feeling a small amount of fear is acceptable, it's important to maintain your composure, attention, and creativity. When does this anxiety reach an unhealthy level?

Yoga for depression combines calming, relaxing, and relaxation techniques to provide one of the most efficient ways to improve one's mood. Yoga is a form of exercise that incorporates a variety of physical motions, breathing techniques, and meditation.

Streeter observes that many patients who have not responded to traditional therapy may benefit from yoga when the autonomic nervous system is healthy and the rest of the brain is functioning properly. The major goals of this study are to investigate how yoga affects anxiety and to evaluate how well yoga and yogic relaxation practices work as therapeutic methods.

#### **HOW DOES YOGA WORK?**

According to several academics, yoga has a positive impact on the nervous system, the cardiovascular system, and gene expression. Vagal nerve stimulation improves the autonomic nervous system's parasympathetic function, which in turn improves GABA's (a neurotransmitter) behavior.

Yoga is a sort of meditation, and as such, helps restore emotional balance, relaxation, and tranquility. Slow diaphragmatic breathing is typical in almost all forms of yoga from a yogic standpoint. The secret to calming the mind is to slow down and breathe deeply. Professionals will talk among themselves in this solitude and silence.

Yoga practitioners are brought "home" to their true selves, in part by mimicking nature. Numerous asanas, such as the tree posture, dog pose, cat pose, snake pose, and others, have an animal or plant-like appearance. According to a yogic aphorism, a fixed body leads to a stable mind. It increases our capacity for empathy, comprehension, and grief while lowering our propensity for fury. Yoga also brings "home" practitioners to their true selves.

The corpse pose, or savasana, is the final exercise in a yoga course. Participants lie down in deep relaxation while spreading their arms and legs. Sometimes it makes up the majority of the curriculum, in part because it comes right after the body moves and performs its functions. Almost all of their patients are given savasana by ayurvedic doctors as a remedy for the frantic pace of modern society. Savasana combines vigorous breathing with deep relaxation across the entire body. The goal of savasana is to maintain consciousness while the rest of the body is at rest, despite the fact that some people do fall asleep during the pose. Reduced commitment to content issues is made possible by the softness and extension of the experience. Outside of India, we don't seem to talk about this, but the definition of savasana as a corpse is founded in part on the notion that the corpse is in perfect health. In Indian mythology, the cycle of life and rebirth includes death. You can let go of all obsessions and attachments by urging the body and mind to simulate death.

The yogic heart center, the anahata chakra, is located in the center of the seven chakras, within the chakra network; asanas like ardachakrasana (back bend), kapotasana (pigeon pose), and ustrasana (camel pose) help to widen the middle of the chest; visualizations and pratyahara (meditation) support practitioners in feeling an open-heartedness.

# THE IMPACT OF YOGA ON SOME DISEASES

#### Cancer

The impact size hasn't been measured yet, though. The psychological health of cancer patients may benefit from yoga. Most cancer patients experience psychological side effects that are normal for the illness, such as worry, exhaustion, and mood swings. The consequences on the body, however, require greater attention.

#### **Diabetes mellitus**

This long-term study discovered that a sample of diabetics who consistently practiced yoga had a much lower need for oral hypoglycemic medication to maintain adequate blood sugar management. Yoga has been demonstrated to be a simple and affordable therapeutic method, and it may be used as an adjuvant therapy for people with non-insulin-dependent diabetic mellitus (NIDDM).

#### IMPACT OF YOGA

# **Physiological Impacts:**

Yoga causes a number of beneficial chemical reactions to take place in the body, including those that lower blood lactate levels, cortisol and adrenal levels, lower muscle stress, lower the heart rate, and lower the blood lactate content, which strengthens the immune system while also boosting vitality and improving power.

#### **Mental Benefits:**

Additionally, studies have demonstrated that yoga has advantages for focus, relaxation, and mental clarity. Additionally, it tends to lower stress levels, minimize melancholy and anxiety, improve sleep quality, and advance self-esteem and good health.

# **Immunity:**

If the brain is regularly stimulated in a soothing environment, it will create more of the beneficial neurotransmitter "serotonin" and less of the destructive neurotransmitter "cortisol." Cortisol has a deleterious impact on the immune system, inhibits cognitive function, and increases blood pressure and blood sugar abnormalities.

#### The Less Demonstrable:

Although some people adore the intellectual aspects of their work, the truth is that they have the power to change a person's personality and thus, their entire being. One of yoga's most important advantages is that it helps one develop a deeper understanding of themselves as well as a certain amount of calmness and consciousness.

#### THE EFFECT OF MEDITATION (ON MINDFULNESS):

Focus, memory, and emotional maturity can all be enhanced by meditation, or "consciousness," as Westerners like to refer to it.

#### **Building resilience:**

Studies have demonstrated that meditation lowers fear levels and increases stress tolerance and effectiveness.

# **Enhances emotional intelligence:**

According to studies of brain scans, meditation will dramatically improve your ability to track and manage your emotions. However, more importantly, meditation leads the subconscious to take control of the body rather than the other way around.

# Mind sharpens:

The human imagination is the most imaginative since, in a peaceful state of mind, it produces the best ideas because breakthroughs, as has been clinically demonstrated via countless trials. The mind is in a balanced condition during meditation, which encourages divergent thought at its best and searches for the most possible answers to a given question—one of the most crucial elements of creativity.

#### **Reduce stress:**

The attitude of an individual is strongly correlated with their level of productivity and cooperation in a team. People continue to hold back their opinions when under stress, which reduces their empathy and has an adverse effect on friendship and success.

#### **Increase concentration:**

Meditation helps people improve their thinking and decision-making abilities in addition to helping them think more clearly and stay grounded.

# Increase energy levels and decrease sleep:

Reduced rates of soreness and fatigue are indicators of good sleep. Meditating results in fewer interruptions to sleep and can improve sleep quality. Your circadian cycles tend to be governed by a regular sleep pattern, suggesting that energy levels are constant throughout the day.

# **Build up feelings of wellbeing:**

One's resourcefulness and achievement can be significantly increased by having better emotional control. Making meditation a regular practice might encourage the mind to become more conscious. Tension caused by contemporary lifestyles can be treated with meditation. The immune system is balanced by it. A deeper knowledge of wellbeing must include the importance of emotional health.

#### YOGA AND MINOR MENTAL HEALTH PROBLEMS

Our lives occasionally revolve around anxiety, tension, and despair. They occasionally think of them as little problems, but if they are left untreated and unmanaged, they could develop into significant psychological illnesses. According to research, yoga is exceptional in its beneficial capacity to reduce anxiety, tension, and sadness. Yoga may be extremely helpful for reducing anxiety, distress, depression, feelings of shame, suicidal ideation, and a sense of peace and balance due to its positive effects on feel-good neurotransmitters, alpha-wave function, vagal sound, serum prolactin, and declining levels of oxidative stress, lipid level, serum cortisol, and decreased control of the hypothalamic pituitary-adrenal axis. Training in postures may also increase the degree No leisure activity, including smiling, interacting with others, engaging in enjoyable activities, or going shopping, will ease our emotional state more than meditation because both of these activities include some degree of nervous system relaxation. Additionally, there is no evidence that walking has more of an impact on our mental health or level of anxiety than yoga.

In addition to lowering emotional unhappiness, yoga can be an excellent stress management approach for lowering the burden of diseases brought on by stress. By practicing yoga, you may be able to reduce irritations that are a part of everyday living. In patients with life-threatening illnesses, this can lessen their tiredness and worry. There is enough proof to conclude that stress causes a number of chronic illnesses, including heart disease, cancer, stroke, and diabetes.

Regular teenagers, individuals with gastrointestinal conditions, people who are lonely, and those who have a negative body image can all experience less anxiety and despair if lifestyle modifications are paired with yoga practice. Yoga increases sensitivity and proactivity in difficult situations that cause annoyance or anxiety, which reduces instinctive reactive behavior.

# CARDIOPULMONARY CONDITIONS AND YOGA

# **Blood Pressure and Hypertension**

The majority of studies (RCTs, non-randomized clinical experiments, unregulated research, cross-sectional analysis, and single-yoga session review) looking at the effects of yoga on blood pressure and hypertension showed a decrease in systolic and/or diastolic strain; however, some reported potential biases in the examined studies (i.e., lifestyle factors or other factors), and flaws in some of the studies made it "difficult to discern a ye

Studies showing yoga to be preferable to no therapy show that yoga practices only lead to mild and marginal reductions in systolic blood pressure and diastolic blood pressure when combined with physical education.

# **Pulmonary Function**

Through breathing regulation techniques, unusual postures, and/or calming techniques, there are documented changes to various lung function parameters in stable individuals who practice yoga; however, such changes were "not compatible and depended on the duration of yoga instruction, the form of yoga technique utilized," according to his succinct literature analysis.

# MUSCULOSKELETAL CONDITIONS AND YOGA

# Musculoskeletal Functioning and Pain

The effects of yoga on musculoskeletal activity, chronic pain syndromes, and impairment due to pain have been the subject of three longitudinal investigations and two additional reports. The remaining studies described research on various types of persistent pain, most of which focused on musculoskeletal problems and underlying disability. Six articles discussed low back pain or arthritis explicitly. Current meta-analysis of pain intensity/frequency and pain-related injury involved single-blinding RCTs, non-blinding RCTs, and it was observed that 10 of 11 researchers recorded substantially stronger yoga-related results relative to "normal treatment, self-care, physical therapy, soothing meditation, contact and coercion, or no action." The effects of yoga on additional symptoms, such as those associated with hemodialysis, bowel irritable syndrome, labor pain, and rheumatoid arthritis, were also studied. These studies similarly showed positive outcomes for yoga therapies. There were minor side effects from the pain medication, such as pain-related impairment. There is evidence that yoga may help numerous illnesses related to pain, despite certain limitations in the studies. Therefore, well-designed large-scale experiments with sufficient controls for confounding factors and more rigorous statistical analysis are required to support such favorable outcomes.

The results point to yoga being more effective than control measures (such as routine treatment or typical therapeutic activities) with reference to persistent back pain, even though some research revealed minimal differences across communities. Clinically relevant outcomes for yoga have been recorded over conventional medical treatment from 6 to 12 months after randomization, but not over intensive stretching activity.

#### **CONCLUSION**

Through increased neuron-effector communication, higher bodily energy, improved organ system performance, increased resilience to illness and stress, and tranquility, balance, a positive outlook, and equanimity within himself, yoga has an impact on every single cell. A positive outlook on life is influenced by the benefits of yoga and meditation as a way of life, such as more relaxing emotions, higher self-confidence and body image, improved performance, stronger interpersonal interactions, and increased concentration.

In yoga, mental and emotional health are taken into account. Yoga, which emphasizes the essential, is the ideal complement to some human pursuits that glorify the specific and are a constant source of inspiration and fulfillment. Good ideas can spontaneously emerge and spread slowly but certainly throughout all of life when the "yoga seed" meets receptive ground. We may use meditation to "unwind" and ease the enormous stress and anxiety that are a normal part of daily living by using the many calming techniques identified in meditation research. Meditation makes it possible to become aware of one's own biorhythms, or mental and emotional cycles. Harmony with the rest of the world is the pinnacle of harmonic wellbeing. Due to the fact that psychosomatic

problems cannot be treated without information, this gives us access to a variety of everyday, practical techniques of intervention that may be used to encourage self-awareness. The perception that one's life is joyful, or life satisfaction, is the most crucial aspect. Self-esteem, persistence, confidence, self-reliance, healthy practices, and pro-social behavior are all traits associated with this experience and are all highly valued in the chaotic modern lifestyle. Yoga positions activate a multitude of organs, muscles, and body components that are linked to emotional reactivity or mental wellness in addition to managing or diverting physiological movements. Metaphors like asana, wind, and posture can all be employed to jolt or wake up the nervous system. Teenagers face a range of difficulties as the competition for the cutthroat job intensifies. We don't have time to focus with them because of a hectic schedule that begins in the morning and concludes with bedtime. We can quickly maintain good mental and physical wellbeing with the help of super brain yoga. Super Brain Yoga can be practiced at any time. You'll have a clear mind and a strong body when you sit.

# **REFERENCES**

- 1. "Yoga Teacher's Manual," Ishwar V. Basavaraddi (2010), published by Morarji Desai National Institute of Yoga.
- 2. The degree of self-esteem in preadolescent school pupils is raised by yoga practice, according to The Bhardwaj, A. K., and G. Agrawal (2013).
- 3. Dr. Pandya's 2011 book, Yoga ke vegyanika Prayog: Improving Memory Through Yoga
- 4. Pushpendra Kumar (2016), "Yoga and Adolescent Mental Health,"
- 5. Derebail Gururaja, Kaori Harano, Ikenaga Toyotake, and Haruo Kobayashi compare the effects of yoga on young and old people in Japan.
- 6. Yoga's Beneficial Effects on Physical and Mental Health: A Synopsis of Reviews by Arndt Büssing, Andreas Michalsen, Sat Bir S. Khalsa, Shirley Telles, and Karen J. Sherman (2012)
- 7. "Yoga and Mental Health: A Review," by Farah Shroff and Mani Asgarpour, published in 2017.
- 8. "Yoga's Effects on Mental and Physical Health" by Dr. Arun Kumar Nayak, 2016.
- 9. Rinirose Simon and Udhayakumar C. Son did a study on the impact of yoga and meditation on health and its advantages.
- 10. Arun Pratap Singh's 2017 article, Yoga for Mental Health: Opportunities and Challenges
- 11. Deborah Khoshaba, Ph.D., Take a Stand for Yoga Today (2013)
- 12. Farha Khan, Dr. Jaishree Jain, Dr. Rashmi Gupta, and Dr. Kusum Gaur (2018), "Effect of Yoga on Anxiety: An Interventional Study,"
- 13. The advantages of yoga for both physical and mental health, according to a national survey carried out in 2013 by Alyson Ross, Erika Friedmann, Margaret Bevans, and Sue Thomas.
- 14. Goldberg, S. B., Vousoura, E., Diamond, M. C., and Miller, L. Zoogman, S. In 2019, a metaanalysis of randomized controlled trials examining the effectiveness of yoga-based treatments for anxiety symptoms was released.
- 15. Neeraj Mahajan, Pawan Goyal, and Jinal Pandya (2019) Yoga's effects on the physical and cardiorespiratory performance of healthy people.

- 16. Chandra Sankar Hazari, Bhim Chandra Mondal, and Saroj Maroik's Effect of Yoga on Health (2017)
- 17. How Yoga Affects People's Mental States by K. Rajan Malayil, Madhava Chandran, P. Unniraman, and N. Devadasan4 (2017).
- 18. The current situation of yoga in mental health care, Gangadhar (2016), B. N. Shivarama Varambally & Co.
- 19. A systematic review and meta-analysis of randomised controlled trials comparing the effects of yoga to active and inactive controls on physical function and health-related quality of life in older adults, by Divya Sivaramakrishnan, Claire Fitzsimons, Paul Kelly, Kim Ludwig, Nanette Mutrie, David H. Saunders, and Graham Baker, 2019.
- 20. Alyson Ross and Sue Thomas, The Health Benefits of Yoga and Exercise: A Review of Comparison Studies (2010)
- 21. Dr. S.A.'s meta-analysis of the effects of yoga on mental health in chronic physical diseases.
- 22. Farah M. Shroff and Mani Asgarpour's review of Yoga for Mental Health was published in 2017.