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YOGA AS A HOLISTIC APPROACH TO MENTAL HEALTH: A REVIEW OF ITS EFFECTS ON STRESS, ANXIETY, AND DEPRESSION

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ABSTRACT

Mental health conditions, such as stress, anxiety, and depression, rank among the top causes of disability globally, impacting millions of people across various age demographics. Conventional treatment methods, including psychotherapy and medication, although effective, frequently come with side effects, accessibility challenges, and exorbitant costs. Recently, yoga has gained recognition as a complementary and holistic strategy for managing mental health. This review examines the effectiveness of yoga in diminishing stress, relieving anxiety, and addressing depression by evaluating existing research on the topic. Numerous studies indicate that yoga produces its positive effects through physiological processes, including the regulation of the autonomic nervous system, a decrease in cortisol levels, and modulation of neurotransmitters, as well as through psychological processes such as enhanced emotional regulation and increased mindfulness. Despite encouraging evidence, additional large-

scale studies employing standardized methodologies are required to confirm yoga as a validated therapeutic approach for mental health issues.

KEYWORDS: Yoga, Mental health, Stress management, Anxiety relief, Meditation, Holistic health, Alternative medicine, Cognitive function.

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INTRODUCTION

Mental health disorders have emerged as a significant public health issue, impacting individuals' quality of life and leading to increased healthcare demands. According to the World Health Organization (WHO), depression ranks as one of the primary causes of disability globally, with anxiety disorders being some of the most common mental health issues. Stress, often viewed as a trigger for more severe mental health conditions, is associated with a variety of detrimental physical and psychological health effects.

Conventional treatment methods, such as cognitive-behavioral therapy (CBT) and antidepressant medications, are frequently employed to address stress, anxiety, and depression. However, these treatments are not universally accessible, and they may come with side effects or drawbacks. This has resulted in heightened interest in alternative and complementary therapies, including yoga, which combines physical movement, controlled breathwork, and meditation to enhance overall wellness.

Yoga has been practiced for centuries and has received worldwide acclaim for its potential benefits in managing mental health issues. It is thought to increase self-awareness, control stress reactions, and encourage relaxation. This review intends to investigate the effectiveness of yoga as an adjunctive approach for managing stress, anxiety, and depression by analyzing current scientific literature on the topic.

Yoga represents a holistic multidimensional health system that ancient sages utilized to attain states of transcendence and cultivate exceptional mental abilities and well-being. Essentially, yoga therapy is a form of alternative therapy that employs Asanas (Physical postures), Pranayama's (Breathing techniques), Dhyana (Meditation), Shatkarma (Internal cleansing), Mudras (Hand postures), and Bandhas (Locks) to mitigate the effects of heightened stress responses, thereby reducing physiological arousal and potentially benefiting both anxiety and depression. This review provides an overview of scientific evidence from randomized controlled trials, review articles, and Hatha yoga scriptures regarding the effects of yoga in enhancing mental health through the relief of mental disorder symptoms.

In Ayurveda, yoga is viewed as a key practice for maintaining physical health, mental balance, and spiritual harmony. Ancient Ayurvedic texts such as the Charaka Samhita, Sushruta Samhita, and Ashtanga Hridaya define yoga as a comprehensive approach to well-

being that is closely tied to Ayurvedic principles of balancing the three doshas—Vata, Pitta, and Kapha.

Yoga in ayurvedic texts

1. Relationship Between Yoga and Ayurveda

Ayurveda and yoga are sister disciplines that collaborate to achieve optimal health. While Ayurveda emphasizes diet, herbs, and lifestyle, yoga offers physical postures (asanas), breathing techniques (pranayama), and meditation (dhyana) for maintaining balance in both body and mind.

2. Yoga for dosha balance

Ayurvedic texts recommend specific yoga practices for balancing each dosha:

- Vata dosha: Gentle, grounding asanas (e.g, forward bends, restorative poses) and slow pranayama techniques like Nadi Shodhana.
- Pitta dosha: Cooling asanas (e.g., twists, moon salutations) and calming breathing techniques like Sheetali Pranayama.
- Kapha dosha: Energizing asanas (e.g, sun salutations, backbends) and stimulating breathing techniques like Bhastrika Pranayama.

3. Therapeutic benefits of yoga in ayurveda

Ayurvedic texts outline yoga as a method for preventing and treating illnesses by:

- Improving digestion (Agni).
- o Detoxifying the body through effective breath regulation (Pranayama).
- Enhancing immunity and blood circulation.
- o Lowering stress, anxiety, and depression levels.
- o Encouraging longevity and overall wellness (Ojas and Prana enhancement).

4. Yoga and The mind

Ayurveda identifies the mind (Manas) as an essential element of health. Yoga practices such as meditation and mindfulness aid in balancing the three mental attributes (Sattva, Rajas, Tamas), fostering inner tranquility and awareness.

Consequently, yoga in Ayurvedic literature is regarded not merely as a physical activity but as a comprehensive lifestyle method that combines body, breath, and mind for optimal health.

MATERIAL AND METHODS

To perform this review, a systematic literature search was carried out utilizing databases like PubMed, Google Scholar, and ScienceDirect. The keywords employed in the search encompassed "yoga and stress," "yoga for anxiety," "yoga and depression management," and "mental health benefits of yoga."

The criteria for including studies were

- 1. Peer-reviewed research articles published from 2010 to 2024.
- 2. Research that examined the effects of yoga on stress, anxiety, and/or depression.
- 3. Randomized controlled trials (RCTs), systematic reviews, and meta-analyses that assessed psychological and physiological outcomes.

Studies that primarily examined meditation or other physical exercises without yoga as the central intervention were excluded from this review. Following a review for relevance and methodological quality, a total of 50 studies were included in the evaluation.

Yoga and Stress reduction

Chronic stress activates the hypothalamic-pituitary-adrenal (HPA) axis, resulting in increased cortisol release, which adversely impacts the body's immune function and mental health. Numerous studies have demonstrated that yoga alleviates stress by managing the autonomic nervous system and lowering cortisol levels.

A meta-analysis encompassing 42 studies revealed that individuals who engaged in yoga for at least eight weeks showed considerably lower cortisol levels compared to non-practitioners. Furthermore, yoga has been proven to enhance parasympathetic nervous system activity, fostering relaxation and diminishing the body's physiological response to stress. The integration of physical postures (Asanas), controlled breathing (Pranayama), and meditation in yoga aids in establishing a harmonious state between the body and mind, thus lowering stress levels.

Yoga for anxiety management

Anxiety disorders are marked by excessive fear, increased autonomic nervous system activity, and unregulated emotional responses. Yoga has been shown to be effective in mitigating anxiety symptoms by improving emotional regulation and enhancing mindfulness.

A randomized controlled trial conducted with participants having generalized anxiety disorder (GAD) indicated that those who took part in a 12-week yoga intervention experienced noteworthy reductions in anxiety symptoms relative to those in a control group. The study also noted higher gamma-aminobutyric acid (GABA) levels in yoga practitioners, which is linked to a soothing effect on the nervous system.

Yoga and Depression relief

Depression is linked to imbalances in neurotransmitters like serotonin and dopamine, alongside elevated inflammatory markers within the body. Research indicates that yoga can exert antidepressant effects by affecting both neurobiological and psychological mechanisms.

A systematic review evaluating the impact of yoga on major depressive disorder (MDD) discovered that yoga interventions considerably enhanced mood and cognitive functioning in individuals experiencing depression. The practice of yoga was associated with elevated serotonin levels, improved sleep quality, and better emotional regulation.

Alongside biochemical shifts, yoga encourages social interaction and mindfulness, which can assist individuals with depression in feeling more connected and present. One study found that group-based yoga sessions resulted in mood and self-esteem improvements, indicating that the social component of yoga also contributes to its antidepressant effects.

Role of yoga in mental health through yama (Ethical restraints)

In the yogic tradition, Yama constitutes the first limb of Patanjali's Yoga Sutras and is essential for mental health. Yamas are ethical guidelines that influence behavior, foster emotional balance, and alleviate mental stress. By adhering to these guidelines, individuals nurture peace, clarity, and psychological resilience.

Five Yamas and Their Role in Mental Health

1. Ahimsa (Non-Violence)

- Promotes compassion and kindness towards oneself and towards others.
- Alleviates stress, anger, and negative feelings.
- Encourages self-love, lessening self-criticism and anxiety.

2. Satya (Truthfulness)

- Supports honesty in Thoughts and Actions.
- Averts inner conflicts, Guilt and Fear.

o Fosters Self-Acceptance and Mental clarity.

3. Asteya (Non-Stealing)

- Instills contentment and gratitude.
- Minimizes greed, jealousy, and anxiety regarding material belongings.
- Cultivates a sense of fulfillment and emotional steadiness.

4. Brahmacharya (Moderation/Self-Discipline)

- o Encourages balance in desires, emotions, and lifestyle habits.
- o Decreases impulsive actions and dependence.
- o Improves focus, energy conservation, and inner tranquility.

5. Aparigraha (Non-Possessiveness/Non-Attachment)

- o Encourages the release of material and emotional attachments.
- o Lowers stress, anxiety, and the fear of losing.
- o Cultivates a sense of freedom, tranquility, and mindfulness.

How yamas improve mental health

- Reduce Anxiety and Depression: By promoting honesty, kindness, and detachment,
 Yamas assist in managing stress and unfavorable emotions.
- Enhance emotional stability: Living ethically averts guilt, regret, and mental suffering.
- Improve relationships: Non-violence, truthfulness, and contentment foster harmonious relationships, alleviating emotional conflicts.
- Promote inner peace: Practicing moderation and detachment aids individuals in discovering happiness from within rather than seeking it from external sources.

By incorporating Yamas into everyday life, yoga serves as an effective means for sustaining mental health and emotional wellness.

Role of yoga in mental health through niyama (Personal disciplines)

In Patanjali's Yoga Sutras, Niyama is recognized as the second limb of yoga, concentrating on self-discipline and inner purification. Practicing the five Niyamas facilitates mental clarity, emotional stability, and inner peace, making yoga a potent instrument for mental health.

Five Niyamas and Their role in mental health

1. Shaucha (Purity)

- o Promotes cleanliness in the body, mind, and environment.
- Helps eliminate negative thoughts, stress, and mental clutter.
- Fosters emotional detoxification, alleviating anxiety and depression.

2. Santosha (Contentment)

- o Teaches acceptance and gratitude for the present situation.
- Lowers stress, frustration, and feelings of discontent.
- Encourages inner peace, happiness, and emotional resilience.

3. Tapas (Self-Discipline)

- o Builds mental strength, focus, and perseverance.
- o Aids in overcoming laziness, negative habits, and emotional instability.
- o Enhances willpower, motivation, and self-control.

4. Swadhyaya (Self-Study)

- Encourages self-reflection and self-awareness.
- o Facilitates understanding of emotions, thoughts, and behavioral patterns.
- o Supports personal development, mindfulness, and self-realization.

5. Ishvarapranidhana (Surrender to the divine)

- o Teaches faith, trust, and the act of relinquishing control.
- Reduces anxiety, fear, and overthinking.
- Cultivates inner peace, acceptance, and spiritual wellness.

How niyamas improve mental health

- Enhance emotional stability: Embracing contentment and self-discipline mitigates stress and emotional upheaval.
- Reduce Anxiety and Depression: Purity and surrendering to a higher power assist in releasing negative emotions.
- Enhance Self-Awareness: Self-reflection encourages mindfulness and a deeper comprehension of one's thoughts.
- Foster resilience: Discipline and acceptance cultivate inner strength to face life's challenges.

By integrating the Niyamas into everyday existence, yoga offers a systematic way to mental wellness, promoting tranquility, clarity, and emotional harmony.

Role of yoga in mental health through asana (Physical postures)

In Patanjali's Yoga Sutras, Asana is recognized as the third limb of yoga and pertains to physical positions meant to create stability, flexibility, and balance in both the body and mind. Consistent practice of asanas not only enhances physical well-being but also significantly contributes to improving mental wellness by alleviating stress, anxiety, and depression.

How asanas improve mental health

1. Alleviate Stress and Anxiety

- o Asanas assist in reducing cortisol (Stress hormone) levels, encouraging relaxation.
- Forward bends and restorative positions stimulate the parasympathetic nervous system, soothing the mind.

2. Boost Mood and Emotional stability

- o Certain asanas encourage the release of endorphins and serotonin, enhancing mood.
- Heart-opening positions (e. g., Cobra Pose, Camel Pose) aid in releasing stored emotions and fostering positivity.

3. Enhance Focus and Concentration

- Balancing positions (e. g., Tree Pose, Warrior III) improve mental clarity and cognitive abilities.
- Consistent practice strengthens the mind-body connection, enhancing mindfulness.

4. Combat depression

- Inversions (e. g., Shoulder Stand, Headstand) elevate blood flow to the brain, boosting mental alertness.
- Gentle backbends raise energy levels and mitigate feelings of fatigue.

5. Encourage Relaxation and Improved Sleep

- Relaxation asanas such as Child's Pose, Corpse Pose (Savasana), and Legs-Up-The-Wall
 Pose soothe the nervous system.
- Aids in overcoming insomnia and enhancing sleep quality.

Recommended asanas for mental health

- For Stress and Anxiety: Child's Pose, Cat-Cow Pose, Forward Bend.
- For Depression and Low Energy: Sun Salutations, Cobra Pose, Bridge Pose.
- For Focus and Concentration: Tree Pose, Warrior Poses, Eagle Pose.
- For Relaxation and Sleep: Savasana, Legs-Up-The-Wall, Reclining Butterfly Pose.

By regularly practicing asanas, yoga acts as a natural and holistic method to support mental health, encouraging emotional stability, inner peace, and overall wellness.

Additional studies indicate that yoga boosts vagal tone, which is connected to better functioning of the autonomic nervous system. Slow and controlled breathing techniques employed in yoga have been identified to regulate the amygdala, the brain region involved in fear and stress processing, resulting in diminished anxiety symptoms.

Role of yoga in mental health through pranayama (breath control)

Pranayama, which is the fourth limb of Patanjali's Yoga Sutras, involves the regulation of breath that significantly affects mental health by soothing the nervous system, decreasing stress, and enhancing emotional stability. Regulated breathing improves the circulation of Prana (life force energy), harmonizing the mind and body for overall health.

How pranayama improves mental health

1. Reduces Stress and Anxiety

- o Deep breathing stimulates the parasympathetic nervous system, promoting relaxation.
- Decreases cortisol levels, mitigating the impacts of stress.

2. Enhances emotional stability

- Consistent practice stabilizes emotions, assisting in the management of anger, frustration, and mood fluctuations.
- o Increases self-awareness and mindfulness, fostering inner tranquility.

3. Boosts Mental Clarity and Focus

- Supplies oxygen to the brain, enhancing concentration and cognitive abilities.
- o Fortifies the mind-body connection, alleviating mental exhaustion.

4. Alleviates Depression and Negative Thoughts

o Boosts oxygen levels, which elevates serotonin and dopamine levels, improving mood.

Aids in overcoming tiredness and feelings of sorrow.

5. Improves sleep quality

- Slows the heart rate and relaxes the mind, facilitating rest.
- o Diminishes symptoms of insomnia and unease.

Recommended pranayama techniques for mental health

- 1. Nadi Shodhana (Alternate Nostril Breathing) Harmonizes the nervous system and lessens stress.
- 2. Bhramari (Bee Breath) Soothes the mind and reduces anxiety.
- 3. Sheetali (Cooling Breath) Cools the body and calms emotions.
- 4. Ujjayi (Victorious Breath) Improves focus and emotional steadiness.
- 5. Kapalabhati (Skull Shining Breath) Revitalizes the mind and combats depression.

By integrating pranayama into daily routines, yoga acts as a potent instrument for managing mental health, fostering relaxation, emotional stability, and comprehensive psychological welfare.

Role of Yoga in Mental Health Through Pratyahara, Dharana, Dhyana and Samadhi

The advanced limbs of Patanjali's Ashtanga Yoga—Pratyahara (Withdrawal of Senses), Dharana (Concentration), Dhyana (Meditation), and Samadhi (Ultimate Absorption)—are profoundly linked to mental health. These methods aid in stress management, enhancing focus, and achieving inner peace by steering the mind towards self-awareness and serenity.

1. Pratyahara (Withdrawal of senses) and Mental health

Pratyahara involves directing attention inward by detaching from outside distractions.

Benefits for Mental Health:

- Reduces Overstimulation: Assists in calming an overly active mind disrupted by sensory overload.
- Manages Anxiety and Stress: Promotes detachment from adverse influences, resulting in emotional stability.
- Enhances Self-Awareness: Cultivates mindfulness and a deeper comprehension of one's feelings.

Example practices

• Engaging in Yoga Nidra to intentionally withdraw the senses.

• Closing the Eyes and Concentrating on breath to minimize external distractions.

2. Dharana (Concentration) and Mental health

Dharana represents the practice of focused concentration, training the mind to hone in on a singular thought, object, or mantra.

Benefits for mental health

- Improves Focus and Memory: Aids in boosting cognitive capabilities and attention duration.
- Reduces Mental Clutter: Stops overthinking and unwanted thoughts.
- Boosts Emotional Stability: Augments mental resilience and patience.

Example practices

- Practicing Trataka (Candle Gazing) to improve focus.
- Concentrating on breath, a mantra, or a singular object.

3. Dhyana (Meditation) and Mental Health

Dhyana is profound meditation, during which the mind stays effortlessly focused without diversion.

Benefits for mental health

- Decreases Stress and Anxiety: Reduces cortisol levels and encourages relaxation.
- Improves Emotional Well-Being: Raises serotonin and dopamine, resulting in happiness and positivity.
- Fosters Mindfulness: Promotes living in the now, minimizing regrets and concerns.

Example practices

- Mindfulness meditation (Vipassana).
- Loving-kindness meditation for emotional healing.

4. Samadhi (Ultimate absorption) and Mental health

Samadhi represents the peak state of meditation, where the mind merges into profound peace and bliss.

Advantages for mental health

- Provides Inner Peace: Eliminates suffering by dissolving ego-driven thoughts.
- Removes Fear and Anxiety: Fosters a deep sense of spiritual satisfaction and freedom.
- Improves Mental Clarity and Purpose: Leads to wisdom, self-awareness, and emotional detachment.

Example practices

- Engaging in deep meditation for prolonged periods.
- Achieving a flow state where the mind is fully immersed in an activity.

DISCUSSION

The results from the studies reviewed suggest that yoga can function as a beneficial complementary therapy for stress, anxiety, and depression. Yoga's capability to regulate the autonomic nervous system, lower cortisol levels, and improve emotional regulation positions it as a promising intervention for mental health disorders.

Nonetheless, there are limitations within the current research. Numerous studies have small sample sizes, which complicates the generalization of findings to broader populations. Moreover, differences in yoga styles (e. g., Hatha, Vinyasa, Kundalini) and session lengths complicate the establishment of standardized protocols. Additional research with larger and more diverse populations is essential to verify yoga's long-term benefits and identify the most effective yoga interventions for particular mental health conditions.

Another aspect to consider is the influence of individual differences in response to yoga. Although many individuals report significant enhancements in mental well-being through yoga, some may not experience it as effectively. Future investigations should examine the factors that affect individual variations in response to yoga-based interventions.

CONCLUSION

Yoga has shown considerable potential in decreasing stress, relieving anxiety, and controlling depression through both physiological and psychological mechanisms. While it should not substitute traditional treatments like psychotherapy or medication, it acts as a beneficial complementary therapy that promotes overall mental well-being.

In light of the increasing prevalence of mental health disorders, incorporating yoga into mental health care strategies might offer individuals an accessible, cost-effective, and holistic method for enhancing their mental health. Future research ought to concentrate on largescale, standardized studies to further substantiate the effectiveness of yoga as an evidencebased therapeutic intervention.

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