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THE IMPACT OF YOGA ON MENTAL HEALTH: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Relationships and productivity are impacted by mental health, which is essential for both individual and society well-being. Yoga has grown in popularity due to its ability to reduce stress and provide a comprehensive approach to health. Yoga's ability to alleviate various health conditions, from stress to chronic diseases, is being investigated by research. This investigation seeks to understand the science underlying yoga's benefits for mental health, providing hope to those seeking emotional balance and recovery. This study evaluates and compiles all available information on yoga's efficaciousness as a mental health treatment method. Materials and Method: The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were followed in the conduct of this systematic review. We looked at the electronic databases Google Scholar, Scopus, and Medline (PubMed). **Result:** The combined data from this research provides compelling evidence for yoga's therapeutic advantages in several areas related to mental health and well-being. Yoga's adaptability as a comprehensive intervention is highlighted by the favourable outcomes seen in self-care, mindfulness, emotional exhaustion, depersonalisation, perceived stress, sleep quality, and overall resilience. Furthermore, the statistically significant benefits of yoga for improving mental health, lowering work-related stress, and reducing depressive symptoms show that it can be used to address both clinical and occupational aspects of mental health. It is becoming increasingly obvious that yoga provides a valuable tool for improving the mental health and general well-being of various groups as we continue to investigate its multiple aspects. Conclusion: Yoga's holistic concept, which emphasises the relationship between the mind and body, provides the foundation for the association between yoga and mental wellness. Numerous studies, including systematic reviews and neuroimaging research, have repeatedly demonstrated the therapeutic benefits of yoga for mental health. This highlights the need for more research and integration into mental healthcare, underscoring its importance as a comprehensive and approachable strategy to address mental health issues. In today's busy environment, yoga is a valuable tool for fostering mental health and general well-being as our scientific understanding grows.

Keywords: yoga & mental health dipression, anxiety

INTRODUCTION

A key element of both individual and social health, mental health impacts relationships, productivity, and quality of life. It is the foundation of overall well-being. Making mental health a priority is crucial for building resilience and improving individual and group wellbeing. Adult stress, especially work-related stress, has increased, resulting in burnout, absenteeism, issues with job performance, and weak-ened mental and physical health. [1,2]

Yoga has gained popularity as an accessible and stress-reducing practice, with a significant increase in the number of people practising yoga over the years^[3,4] There are well-documented consequences of stress on physiological health, and yoga is as effective or better than dynamic aerobic exercise in improving health-related outcomes.^[3,5] It has been practised for thousands of years and emerged as a health maintenance practice and therapeutic intervention in the early 20th century.^[6]

Numerous health issues, such as mental stress, obesity, diabetes, hypertension, coronary heart disease, and chronic obstructive pulmonary disease, have been studied about yoga's potential benefits.^[7-9] Yoga's therapeutic effects for various conditions have been shown in numerous individual research, indicating that it may be used as a non-pharmaceutical strategy or as a supplement to medication therapy.^[9-11]

This introduction provides a starting point for investigating the mutually beneficial relationship between yoga and mental health. We will explore the scientific foundations and real-world uses of yoga as a potent treatment for depression, anxiety, stress, and a variety of other mental health issues. As we continue, we will learn how the age-old knowledge of yoga can enable people to develop a condition of emotional

stability and mental balance in their contemporary lives.

Yoga is a transformative healing and restoration tool for a variety of conditions, including anxiety, depression, stress management, and post-traumatic stress disorder (PTSD).^[12] The World Health Organization acknowledges the relationship between spirituality, mental health, and social well-being but does not define spiritual health as a distinct component.^[13]

The benefits of yoga on different neurological problems are not well reviewed, even though it is widely used as a mind-body medicine for illness prevention and health promotion and as a potential treatment modality for neurological disorders.^[14–16]

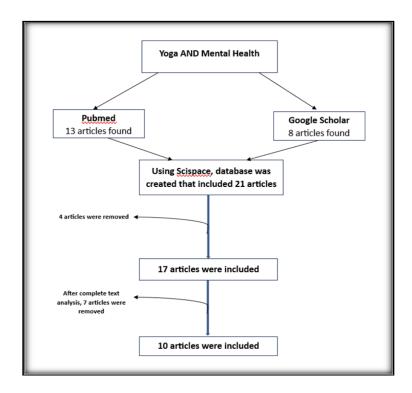
Objective: This study aims to evaluate and compile the body of knowledge regarding yoga's efficacy as a mental health method.

MATERIALS AND METHODS

Identification: This systematic review followed PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) criteria. Electronic databases Medline (PubMed), Scopus, and Google Scholar were examined. The following search algorithm was applied: YOGA AND MENTAL HEALTH. Eligible studies were selected through a multi-step approach (title reading, abstract, and full-text assessment).

Study Selection and Eligibility Criteria: Database search results were filtered out. A preliminary selection was accomplished by filtering duplicates, and a title and abstract screening was completed. All the texts of all possibly pertinent papers were then independently reviewed, and their eligibility was evaluated. Research that examined the use of yoga to improve mental health was considered for inclusion.

Flow chart



RESULTS

Table 1:

Authors	Year	Results
Rachel et al, ^[3]	2017	Gym yoga was effective in reducing stress and improving psychological health among workers experiencing stress over 16 weeks. The Yoga group showed significant reductions in stress, anxiety, and general psychological health, as well as significant increases in well-being compared to the control group.
Granath et al, ^[17]	2013	The cognitive behaviour therapy program showed medium-to-high effect sizes for variables such as perceived stress, stress behaviour, exhaustion, anger, and quality of life. The yoga program also showed improvements in stress and other symptoms, with effect sizes ranging from medium too high for variables such as quality of life and exhaustion. Overall, the results suggest that cognitive behaviour therapy and yoga are promising techniques for stress management.
Alexander et al, ^[18]	2015	The yoga group showed a significant improvement in self-care, mindfulness, emotional exhaustion, and depersonalisation compared to the control group. Preliminary analyses revealed a pattern of significant relationships among the outcomes of interest at baseline, suggesting the use of repeated measures MANOVA. The results showed a significant multivariate main effect of time and a significant multivariate interaction effect of time by group.
Yuchen et al, ^[11]	2022	The study included 80 MS patients, 30 in the Baduanjin exercise group, 30 in the yoga group, and 20 in the control group. The Baduanjin exercise group and the yoga group showed significant improvements in balance, posture control, and trunk movement compared to the control group. The Baduanjin exercise group had more substantial balance and trunk movement increases than the yoga group. The Baduanjin exercise group and the yoga group showed significant reductions in fatigue, with no significant difference between the two groups. The Baduanjin exercise group had a more substantial decrease in depressive symptoms than the yoga group. The control group showed

		no significant changes in balance, posture control, fatigue, or depressive symptoms. Repeated measures MANOVA. The results showed a significant multivariate main effect of time and a significant multivariate interaction effect of time by group.
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Ganesh et al, ^[19]	2021	The study included 96 participants, 48 in the yoga group and 48 in the control group. 81 participants completed the study. The yoga group showed statistically significant improvements in sleep quality and constipation-related quality of life compared to the control group. The yoga group significantly decreased constipation-related physical discomfort, psychological discomfort, worries and concerns, and total scores. The yoga group showed significant changes in subjective sleep quality, sleep duration, sleep disturbance scores, and daytime functioning.
Hagen et al, ^[20]	2023	The joint survey of all participants in the 8-week yoga course showed reduced perceived stress, fewer sleep issues, and improved overall well-being. These findings were statistically significant, with moderate effect sizes for the changes.
Kwok et al, ^[21]	2019	The study compared the effects of a mindfulness yoga program and stretching and resistance training exercise (SRTE) on psychological distress, physical health, spiritual well-being, and health-related quality of life (HRQOL) in patients with mild-to-moderate Parkinson's disease (PD). The yoga group showed significantly better improvement in outcomes compared to the SRTE group, particularly for anxiety.
Manicor et al, ^[13]	2016	The study found statistically significant differences in favour of yoga for reducing symptoms of depression compared to regular care alone. Differences in reduced anxiety scores were not statistically significant. Overall, statistically significant differences in favour of yoga were found. DASS, K10, SF12 mental health, SPANE, FS, and resilience scores.
Fang et al, ^[6]	2015	Nurses in the yoga group had better sleep quality and lower work stress than nurses in the non-yoga group. The linear regression model indicated that nursing experience, age, and yoga intervention were significantly related to sleep quality. The number of nurses with high work stress significantly differed between the yoga and non-yoga groups after six months of follow-up.
Method et al, ^[22]	2017	The study recruited 100 nursing students, with 50 participants in each group (yoga intervention and waitlist control). After dropouts, there were 80 students left for analysis. The yoga group improved resilience, perceived stress, self-compassion, and mindfulness compared to the wait list control group. Post-hoc analysis with Bonferroni adjustment showed significant improvement within the yoga group regarding self-compassion and mindfulness.

DISCUSSION

Yoga is a valuable tool for controlling and lowering anxiety, despair, and stress. Its effectiveness in treating mood-related diseases has been shown in numer-

ous research. Yoga is good for the emotional, intellectual, and personality aspects of the human being in addition to physical ailments. It encourages inner serenity and well-being and offers a comprehensive healing approach.^[10] The yoga group showed notable

increases in self-care, mindfulness, emotional exhaustion, and depersonalisation outcomes compared to the control group, according to assessments done at baseline and the conclusion of the 8-week intervention period. [18] Yoga's multi-system benefits make it advantageous for physiologically impaired groups, such as the senior population, and it has demonstrated significant increases in subjective sleep quality, sleep length, sleep disturbance scores, and daily functioning.[19] Numerous interventions, such as modifying work shift schedules or the timing and duration of breaks, can improve the mental and physical wellbeing of healthcare professionals in occupational medicine.^[23] According to the research that is now accessible, yoga and other mind-body meditation programs provide creative solutions validated by science as successful strategies for boosting empathy, reducing stress, and taking care of physical issues related to the workplace. [22,24] Psychological and physiological measures, such as self-rated stress, stress behaviour, anger, weariness, quality of life, blood pressure, heart rate, urine catecholamines, and salivary cortisol, were significantly improved after a yoga program. [17]

CONCLUSION

Yoga's holistic concept, which emphasises the relationship between the mind and body, provides the foundation for the association between yoga and mental wellness. Numerous studies, including systematic reviews and neuroimaging research, have repeatedly demonstrated the therapeutic benefits of yoga for mental health. This highlights the need for more research and integration into mental healthcare, underscoring its importance as a comprehensive and approachable strategy to address mental health issues. In today's busy environment, yoga is becoming a valuable tool for fostering mental health and general well-being as our scientific understanding grows.

From thorough randomised controlled trials and systematic reviews to neuroimaging studies, the evidence continuously emphasises the beneficial effects of yoga on mental health. These results not only demonstrate the value of yoga as a comprehensive

and approachable strategy for dealing with mental health issues, but they also emphasise the necessity of further research, development, and application of yoga-based therapies in mental health treatment. It is becoming increasingly apparent that yoga, an age-old practice, may contribute to mental health and general well-being in our contemporary environment as scientific knowledge of its advantages grows.

REFERENCES

- 1. P. Reviewed, "a Study on Examination Anxiety Among Secondary School Students of," vol. 816, no. 9, pp. 5–9, 2021, doi: 10.17051/ilkonline.2021.02.223.
- E. I. de Bruin, A. R. Formsma, G. Frijstein, and S. M. Bögels, "Mindful2Work: Effects of Combined Physical Exercise, Yoga, and Mindfulness Meditations for Stress Relieve in Employees. A Proof of Concept Study," Mindfulness (N. Y)., vol. 8, no. 1, pp. 204–217, 2017, doi: 10.1007/s12671-016- 0593-x.
- 3. R. E. Maddux, D. Daukantaité, and U. Tellhed, "The effects of yoga on stress and psychological health among employees: an 8- and 16-week intervention study," Anxiety, Stress Coping, vol. 31, no. 2, pp. 121–134, 2018, doi: 10.1080/10615806.2017.1405261.
- M. Demiralp, F. Oflaz, and S. Komurcu, "Effects of relaxation training on sleep quality and fatigue in patients with breast cancer undergoing adjuvant chemotherapy," J. Clin. Nurs., vol. 19, no. 7–8, pp. 1073–1083, 2010, doi: 10.1111/j.1365-2702.2009.03037.x.
- 5. R. Pal, D. Adhikari, M. B. Bin Heyat, I. Ullah, and Z. You, "Yoga Meets Intelligent Internet of Things: Recent Challenges and Future Directions," Bioengineering, vol. 10, no. 4, pp. 1–25, 2023, doi: 10.3390/bioengineering10040459.
- R. Fang and X. Li, "A regular yoga intervention for staff nurse sleep quality and work stress: a randomised controlled trial,"
- J. Clin. Nurs., vol. 24, no. 23–24, pp. 3374–3379, 2015, doi: 10.1111/jocn.12983.
- 7. D. K. Taneja, "Yoga and health," Indian J. Community Med., vol. 39, no. 2, pp. 68–72, 2014, doi: 10.4103/0970-

0218.132716.

- D. Prabhakaran et al., "Yoga-Based Cardiac Rehabilitation After Acute Myocardial Infarction: A Randomized Trial," J. Am. Coll. Cardiol., vol. 75, no. 13, pp. 1551–1561, 2020, doi: 10.1016/j.jacc.2020.01.050.
- A. Lundt and E. Jentschke, "Long-Term Changes of Symptoms of Anxiety, Depression, and Fatigue in Cancer Patients 6 Months After the End of Yoga Therapy," Integr. Cancer Ther., vol. 18, 2019, doi: 10.1177/1534735418822096.
- C. Woodyard, "Exploring the therapeutic effects of yoga and its ability to increase quality of life," Int. J. Yoga, vol. 4, no. 2, p. 49, 2011, doi: 10.4103/0973-6131.85485.
- Y. Pan, Y. Huang, H. Zhang, Y. Tang, and C. Wang, "The effects of Baduanjin and yoga exercise programs on physical and mental health in patients with Multiple Sclerosis: A randomised controlled trial," Complement. Ther. Med., vol. 70, no. March, p. 102862, 2022, doi: 10.1016/j.ctim.2022.102862.
- B. A. Van Der Kolk et al., "Yoga as an adjunctive treatment for posttraumatic stress disorder: A randomised controlled trial," J. Clin. Psychiatry, vol. 75, no. 6, pp. 1–7, 2014, doi: 10.4088/JCP.13m08561.
- M. de Manincor et al., "Individualized Yoga for Reducing Depression and Anxiety, and Improving Well-Being: a Randomized Controlled Trial," Depress. Anxiety, vol. 33, no. 9, pp. 816–828, 2016, doi: 10.1002/da.22502.
- A. Mooventhan and L. Nivethitha, "Evidence-based effects of yoga in neurological disorders," J. Clin. Neurosci., vol. 43, pp. 61–67, 2017, doi: 10.1016/j.jocn.2017.05.012.
- 15. P. Akhtar, S. Yardi, and M. Akhtar, "Effects of yoga on functional capacity and well-being," Int. J. Yoga, vol. 6, no. 1,
- p. 76, 2013, doi: 10.4103/0973-6131.105952.
- 16. C. C. Chou and C. J. Huang, "Effects of an 8-week yoga program on sustained attention and discrimination function in children with attention deficit hyperactivity disorder," PeerJ, vol. 2017, no. 1, 2017, doi: 10.7717/peerj.2883.

- 17. J. Granath, S. Ingvarsson, U. von Thiele, and U. Lundberg, "Stress management: A randomised study of cognitive behavioural therapy and yoga," Cogn. Behav. Ther., vol. 35, no. 1, pp. 3–10, 2006, doi: 10.1080/16506070500401292.
- G. K. Alexander, K. Rollins, D. Walker, L. Wong, and J. Pennings, "Yoga for Self-Care and Burnout Prevention among Nurses," Work. Heal. Saf., vol. 63, no. 10, pp. 462–470, 2015, doi: 10.1177/2165079915596102.
- 19. H. R. Shree Ganesh, P. Subramanya, R. Rao M, and V. Udupa, "Role of yoga therapy in improving digestive health and quality of sleep in an elderly population: A randomised controlled trial," J. Bodyw. Mon. Ther., vol. 27, pp. 692–697, 2021, doi: 10.1016/j.jbmt.2021.04.012.
- I. Hagen, S. Skjelstad, and U. S. Nayar, "Promoting mental health and wellbeing in schools: the impact of yoga on young people's relaxation and stress levels," Front. Psychol., vol. 14, 2023, doi: 10.3389/fpsyg.2023.1083028.
- 21. J. Y. Y. Kwok et al., "Effects of Mindfulness Yoga vs Stretching and Resistance Training Exercises on Anxiety and Depression for People with Parkinson Disease: A Randomized Clinical Trial," JAMA Neurol., vol. 76, no. 7, pp. 755–763, 2019, doi: 10.1001/jamaneurol.2019.0534.
- M. D. Mathad, B. Pradhan, and R. K. Sasidharan, "Effect of yoga on the psychological functioning of nursing students: A randomised wait-list control trial," J. Clin. Diagnostic Res., vol. 11, no. 5, pp. KC01–KC05, 2017, doi: 10.7860/JCDR/2017/26517.9833.
- 23. R. A. Cocchiara et al., "The use of yoga to manage stress and burnout in healthcare workers: A systematic review," J. Clin. Med., vol. 8, no. 3, 2019, doi: 10.3390/jcm8030284.
- 24. I. Axén and G. Follin, "Medical yoga in the work-place setting-perceived stress and work ability-a feasibility study," Complement. Ther. Med., vol. 30, pp. 61–66, 2017, doi: 10.1016/j.ctim.2016.12.001.

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