





YOGA

FOR ACHIEVING UNITED NATIONS (UN)
SUSTAINABLE DEVELOPMENT GOALS (SDGs):
RECOMMENDATIONS



Compiled by:

Department of Psychiatric Social Work and Department of Integrative Medicine,

National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru in collaboration with Swami Vivekananda Yoga Anusandhana Samsthana, (SVYASA Yoga University) Bengaluru

Supported By:

Central Council for Research in Yoga and Naturopathy (CCRYN), Ministry of AYUSH, Govt of India









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Honourable Prime Minister of India

Shri. Narendra Modiji

on

Yoga

"Yoga is a symbol of universal aspiration for health and well-being. It is health assurance in zero budget"

"Yoga guarantees wellness as fitness. Yoga is not merely an exercise but a way to attain peace through physical, mental and spiritual wellbeing"

"Yoga is a code to connect people with life, and to reconnect mankind with nature. It expands our limited sense of self, to see our families, societies and mankind, as extensions of our own self".

"Yoga is not only about asanas; it is much more. It is a blend of Gyan (Knowledge), Karma (work) and Bhakti (devotion)."

"Yoga has the potential to herald in a new Yuga (a new era) - of peace, compassion, brotherhood and all-round progress of the human race".

Foreword

The United Nations Sustainable Development Goals (SDGs) highlight the connections between the environmental, social and economic aspects of sustainable development. Yoga has an important role in achieving UN SDGs. Yoga builds a harmony between human and nature and can be used as a powerful method to develop one's physical and mental resilience to deal with environmental calamities. It also promotes positive feelings of resilience towards environment to help and protect it from destruction.

I am indeed delighted to know that there was a systematic effort by NIMHANS and SVYASA, Bengaluru in collaboration with CCRYN, AYUSH Ministry, Government of India to understand how Yoga can be used to achieve community and environment sustainability through brainstorming sessions with Yoga and environment experts from across India and the world, to suggest recommendations and draft a policy statement to implement Yoga to achieve UN SGDs.

I do hope that recommendations, if implemented, throughout the country can help in achieving all the UN SDG's in India through the Yogic way of life. I wish to urge the United Nations to study these recommendations and consider implementing these recommendations in a phased manner through their already existing projects to achieve the UN SDG goals.



Prataprao Jadhav

Union Minister of State (Independent Charge)

Ministry of Ayush and Minister of State Health and Family Welfare,

Govt. of India



Message from the Ministry of AYUSH, GoI

Namaste,

I am glad that NIMHANS in collaboration with SVYASA *Yoga* University, Bengaluru is engaged in such a noble work of promoting "*Yoga* for achieving United Nations Sustainable Development Goals" (UN SDGs). *Yoga* is our ancient science which needs to be promoted all over the world in terms of achieving the UN SDGs. The white paper drafted from this work lays a foundation for future needs, studies and lifestyle modification so that diseases are prevented and health is maintained. I hope *yoga* becomes a part of our life both in thinking and action. This would lead to transformation of the individual and then the society.

I congratulate the entire team of NIMHANS and SVYASA for taking up such an important work in collaboration with CCRYN, Ministry of AYUSH, Government of India. The Department and Ministry will keenly look at the final recommendations as guiding points for future implementation in policies and programmes of the Government.

Best wishes



Vaidya Rajesh Kotecha Secretary Ministry of AYUSH Govt. of India, New Delhi.

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Message from Director, CCRYN

Namaste,

It gives me immense pleasure to consider "Yoga" for achieving United Nations Sustainable Development Goals (SDGs). Today, the focus is on sustainable living and development, for which people are going towards their roots in order to combat modern lifestyle and Non communicable disorders such as Obesity, Diabetes, Cardiovascular diseases and mood disorders such as Anxiety and Depression. Urbanization, modernization, and pursuit of consumerism, the erratic lifestyle and habits have taken a toll over human and nature ethics. Individuals have lost complete awareness of self and nature. As it is mentioned in yoga texts 'The universe is manifested in a tiny version within us; Any imbalance internally (microcosm) reflects imbalance externally (macrocosm). Yoga literally means 'Union' or 'to join' the inner self (Individual's true nature) with the outer self (Manifestations of the Universe/ Brahman). Yoga being a mind-body intervention acts as a strong tool to create self-reflection and self-awareness among the masses. Yoga advocates one to adopt a minimalistic living in harmony with nature and surroundings. Yoga advocates compassion, humility, love, unity and brotherhood through expanding one's awareness. Yoga helps one to find happiness within thereby making one content with self and weans away one from materialistic pursuits. This can lead to less load on the ecology and yoga can therefore serve as a tool for conserving the environment and ecology. There are several other SDG goals that can be met by adopting *yoga* in one's lifestyle.

I am happy to be a part of this project and extend my heartfelt congratulations to Dr. Aarti Jagannathan, Additional Professor of Psychiatric Social Work at NIMHANS, Bengaluru and her entire team for working on such an important issue of the society. The stakeholders' workshop which included experts from various fields had also witnessed brainstorming discussions on various SDGs and I am sure the recommendations which will be drafted will help improve the wellbeing of the society to a great extent.

Thank You



Dr. Raghavendra Rao MDirector, Central Council for Research in Yoga and Naturopathy (CCRYN)
Ministry of AYUSH, Govt. of India, New Delhi.



Message from the Director, NIMHANS

Yoga is an age-old tradition and is even more relevant in contemporary times for mental and physical fitness. This philosophy and practice provide ways for many outcomes, from being healthy to achieve the heights of spirituality. Yoga as a whole offers a solution for personal and societal upliftment, as well as conservation and sustenance of the natural resources. It teaches us to live with the natural habitat in peace and harmony, thus providing a complete holistic intervention for achieving many of the United Nation Sustainable Development Goals (UN SDGs).

I am glad to see *yoga* being promoted as a tool to achieve UN SDGs. *Yoga* is and was a part of National Institute of Mental Health and Neurosciences (NIMHANS) since its conception. The logo of NIMHANS already has the inscription "*Samatvam Yoga Uchyate*', meaning 'state of equilibrium of the mind is *Yoga*'.

I appreciate the initiative taken by the team working on this project. The stakeholders' workshop conducted both in-person and through online discussion had given a lot of ways to achieve this cause. I am sure the white paper drafted with these valuable recommendations from various experts in the field will provide a way forward to the students, doctors, researchers, teachers, social workers, family members etc. I hope everyone will be benefited from this major change happening once the recommendations are formulated and applied in every discipline of life.

I congratulate the entire team working for this project and wish them all the success in their future endeavours.

Best Wishes



Dr. Pratima MurthyProfessor of Psychiatry and Director
NIMHANS
Hosur Road, Bengaluru.



Message from the Chancellor, SVYASA

My dear brothers and sisters,

I heartily congratulate Dr. Aarti Jagannathan, Additional Professor of Psychiatric Social Work and her entire team for taking this work in the right direction.

The main aim of this study is to build an Ideal Individual and then to build an Ideal social order. Swami Vivekananda has rightly mentioned about this in his quote "Be and Make". An Ideal individual builds an Ideal society. *Yoga* uplifts us from lower human beings having lower qualities such as anger, greed, lust etc, to attain the higher or ideal human being qualities such as love, compassion, kindness etc. When the Ideal social norm is built, then economic growth happens, health and peace prevails in every house. Thus, an Ideal social order is developed. *Yoga* should be considered to uplift the individual from *Tamas* to *Rajas* and then further move towards *Sattva*, and these qualities should be sustained.

Yoga helps us to develop universal brotherhood through the concept of "*Vasudaiva Kutumbakam*". It has the potential to build an ideal social order. Thus, each and every SDG goal should be visualized from this point of view through which sustainability can be achieved.

The recommendations from various experts across India and the world helped us to write a white paper to be submitted to the CCRYN, Ministry of AYUSH, GoI. It will be good if these recommendations are forwarded to the UN so that the aim of "Vasudaiva Kutumbakam". It has the potential to build an Ideal social order. Thus, each and every SDG goal should be visualized from this point of view through which sustainability can be achieved.

The recommendations from various experts across India and the world helped us to write a white paper to be submitted to the CCRYN, Ministry of AYUSH, GoI. It will be good if these recommendations are forwarded to the UN so that the aim of "Vasudaiva Kutumbakam" can be achieved universally.

With love



Dr. H. R. NagendraChancellor, Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA), Bengaluru



Message from Distinguished Chair, AYUSH

Dear Colleagues,

'Yoga' is a promising intervention in psychosomatic ailments along with modern medication. At NIMHANS we are doing research using yoga intervention in psychiatric and neurological disorders and the results are encouraging. Studies done at the Department of Integrative Medicine, NIMHANS yielded the following results; negative symptoms were improved in patients with schizophrenia after doing yoga perhaps due to the activation of mirror neurons; the severity of depression was reduced and increase in serum Brain derived neurotrophic factor (BDNF) was observed. NIMHANS has developed and validated yoga modules for conditions such as Generalized Anxiety Disorder, Depression, Mild cognitive impairment, Somatoform pain disorder, Schizophrenia to name a few.

Backed up with this robust scientific data and my personal experience of using *yoga* in affected individuals, I am happy that *yoga* is now considered as an eco-therapy intervention for achieving United Nations Sustainable Development Goals (UN SDGs). I congratulate Dr. Aarti Jagannathan, Additional Professor of Psychiatric Social Work, NIMHANS and her team for initiating such thoughtful work. I am sure this is the beginning towards sustainability and the world will witness major changes once these recommendations are practically applied. If this ancient science from our ancestors is being taught and applied everywhere, in every sector, every school and college, office etc., our country can move to achieve the development goals that are sustainable.

Best Wishes



Dr. B. N. GangadharDistinguished Scientist Chair
Ministry of AYUSH, Govt. of India, New Delhi.
Professor Emeritus, Department of Integrative Medicine & Former Director NIMHANS, Bengaluru.

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Preface

"The 2030 Agenda for Sustainable Development, adopted by all United Nations members in 2015, created 17 world Sustainable Development Goals (SDGs). They were created with the aim of peace and prosperity for people and the planet – while tackling climate change and working to preserve oceans and forests. The SDGs highlight the connections between the environmental, social and economic aspects of sustainable development". This work is an attempt in the direction of recommending 'Yoga' as a way of life for Sustainable living in harmony with nature and the surrounding.

From the perspective of eco-therapy and sustainability, improving and developing resilience in one's own mental and physical health through practice of outdoor activities in nature such as *Yoga* (connecting with nature) even in unfavourable environmental conditions is beneficial. *Yoga* (an ancient Indian practice) as a form of eco-therapy, through successive stimulation - relaxation helps break the loop of uncontrolled speed of thoughts (stress), helps gain control over the mind, and harmonizes the disturbances at each of the five levels (physical, mental, emotional, intellectual, spiritual) to tackle psychosomatic problems. *Yoga* practiced in nature also helps the individual connect with his/her ecology and develops a sense of compassion towards one's ecosystem – towards issues related to climate action and change. A parasitic relationship needs to be transformed to a symbiotic one with our environment. *Yoga* can be used as a powerful method to not only help develop one's physical and mental resilience to deal with environmental calamities, but also to develop positive feelings towards one's environment to help protect it from destruction. Thus, if *yoga* is advocated as a method of eco-therapy to all individuals through inclusive approaches of community participation, it could possibly be a solution in the promotion of environmental and community sustainability (SDG Goal 11), which would help achieve many SDGs. *Yoga* would help transform the community into ambassadors of change enthused to the cause of ecology through a simple minimalistic living.

These recommendations have been prepared as a part of the project titled 'Yoga as an eco-therapy for achieving United Nations Sustainable Development Goals: An explorative study' funded by Central Council for Research in Yoga and Naturopathy (CCRYN) under the Ministry of AYUSH, Govt. of India, New Delhi. Various schools of yoga, yoga associations, renowned yoga researchers and practitioners across India and the world have participated in deliberating on this issue and bringing out these recommendations over the last one year. The Core team members from National Institute of Mental Health and Neurosciences (NIMHANS), Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA) along with support from Central Council for Research in Yoga and Naturopathy (CCRYN), Ministry of AYUSH, Govt. of India have done extensive review of literature and have had multiple stakeholder's group meetings and brainstorming sessions to arrive at the current recommendations. It is the team's sincere appeal that the Ministry and the government forward these recommendations to the United Nations for developing policies and programmes to implement these recommendations.

I express my gratitude to Guruji Dr. H. R. Nagendra, Dr. Manjunath N. K and their team from SVYASA, and Dr. B. N. Gangadhar, Emeritus Professor, Department of Integrative Medicine and former Director, NIMHANS for the encouragement and guidance and valued suggestions right from the inception of this project. I express my gratitude to Dr. Raghavendra Rao M, Director, CCRYN, New Delhi for his unwavering support for carrying out this project. I would also thank each one of the experts who were a part of this project for their valuable inputs, cooperation and availability whenever we needed them. I am thankful to The Director, NIMHANS for allowing me to conduct this study at NIMHANS and to the Head, Department of Psychiatric Social Work and Department of Integrative Medicine, NIMHANS for their support and cooperation.

Dr. Aarti Jagannathan, Project Coordinator

INTRODUCTION

United Nations Sustainable Development Goals (UNSDGs)

The United Nations (UN) 17 Sustainable Development Goals (SDGs) aims to promote community and environment sustainability (United Nations, 2015). The 17 SDGs are as below (https://sdgs.un.org/goals):





SDG 1: No Poverty

To end poverty in all its forms everywhere by 2030.

SDG 2: Zero Hunger

To end hunger, achieve food security and improved nutrition and promote sustainable agriculture.

SDG 3: Good Health and Well-being

To ensure healthy lives and promote well-being for all at all ages.

SDG 4: Quality Education

To ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

SDG 5: Gender Equality

To achieve gender equality and empower all women and girls.

SDG 6: Clean water and Sanitation

To ensure availability and sustainable management of water and sanitation for all.

SDG 7: Affordable and Clean energy

To ensure access to affordable, reliable, sustainable and modern energy for all.

SDG 8: Decent work and Economic growth

To promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all.

SDG 9: Industry, Innovation and Infrastructure

To build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

SDG 10: Reduced Inequalities

To reduce inequalities within and among countries.

SDG 11: Sustainable Cities and Communities

To make cities and human settlements inclusive, safe, resilient and sustainable.

SDG 12: Responsible Consumption and Production

To ensure sustainable consumption and production patterns.

SDG 13: Climate Action

To take urgent action to combat climate change and its impacts.

SDG 14: Life below Water

To conserve and sustainably use the oceans, seas, marine resources for sustainable development.

SDG 15: Life on Land

To focus on protection, restoration and promoting sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.

SDG 16: Peace, Justice and Strong Institutions

To promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

SDG 17: Partnerships for the Goals

To strengthen the means of implementation and revitalize the global partnership for sustainable development.

Yoga for achieving United Nations Sustainable Development Goals (UN SDGs):

Yoga teaches one to lead a simple minimalistic life with contentment that helps reduce dependency on materialistic pleasures, comforts, reduces carbon footprint and pollution and has a direct bearing on one's health. Yoga has the potential to improve both physical and mental health, has a strong connection with nature and requires no artificial facilities for practice. It is widely practiced and has a dedicated following worldwide especially after the United Nations declaration of the International Day of Yoga on 21st June (United Nations, 2014). Yoga, if followed as a lifestyle, encompassing the yogic concepts for living and the eight limbs of Ashtanga yoga such as Yama (abstinences), Niyama (observances), Asana (postures), Pranayama (breathing), Pratyahara (withdrawal), Dharana (concentration), Dhyana (meditation), and Samadhi (absorption) (Hari Dass, 1978), can be an effective intervention in achieving multiple SDGs.

CORE TEAM

The Core Team

Project Coordinator:

Dr. Aarti Jagannathan,

Additional Professor, Department of Psychiatric Social Work,

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Co-Coordinator(s):

1. Dr. Lakshmi Nishitha J,

Scientist B (Yoga)

Department of Integrative Medicine, NIMHANS, Bengaluru

2. Dr. H. R. Nagendra,

Chancellor,

Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA) Yoga University Bengaluru

Consultants:

1. Dr. B. N. Gangadhar,

Distinguished Scientist Chair, AYUSH, Govt. of India,

Professor Emeritus, Department of Integrative Medicine &

Former Director, NIMHANS, Bengaluru, Karnataka, India

2. Dr. Raghavendra Rao M,

Director, Central Council for Research in Yoga and Naturopathy (CCRYN),

Ministry of AYUSH, Govt. of India, New Delhi.

Project Staff:

Dr. Pooja More

Project Associate, CCRYN Funded Project

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Other Stakeholder's involved in bringing out recommendations (in alphabetical order):

1. Dr. Akshay Anand

Professor, Neurology, Post Graduate Institute of Medical Education & Research (PGIMER), Chandigarh, India.

2. Mr. Alexander Peters

CEO of Health Centre Sun & Moon Berlin, Germany.

Recognised alternative practitioner (Yoga Teacher & Yoga Therapist)

Member of the board of German Yoga Therapists.

Member of ADAVED (Ayurveda Umbrella Association Germany)

3. Ms. Alyssa Wostrel

Executive Director,

International Association of Yoga Therapists (IAYT), United States.

4. Yogacharya Dr. Anand Balayogi Bhavanani

Professor Yoga Therapy and Director

Institute of Salutogenesis and Complementary Medicine (ISCM)

Shri. Balaji Vidyapeeth, Pillayarkuppam, Pondicherry, India.

5. Pujya Swami Amruta Suryananda ji

Portuguese Yoga Confederation Portugal.

6. Dr. Antonietta Rozzi

President and Founder, SarvaYoga International- Leading Yoga Institution, Ministry of AYUSH.

Teacher of Yoga in Education at Bolzano University-Italy

President Assoyoga Italia

Honorary President of Federazione Italiana Yoga, Italy.

7. Dr. Chhaya Kurhade

Senior Research Fellow, Department of Psychiatric Social Work,

National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru-29, Karnataka, India.

8. Mr. Dặng Hùng

Chairman, Vietnam Yoga Academy, Vietnam

9. Mr. Danilo Santaella

Global Consortium on Yoga Therapy (GCYT), Brazil

10. Mr. Kimura

Japan Yoganiketan, Japan

11. Dr. Lakshmi Nishitha J

Scientist-B (Yoga),

Department of Integrative Medicine,

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12. Dr. N. K. Manjunath

Vice-Chancellor and Director.

Anvesana Research Laboratories,

Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA Yoga University), Bengaluru-19, Karnataka, India.

13. Mr. Manoj Thakur

Yoga Trainer and Managing Director, VYASA Yoga Singapore affiliated to Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA) Bengaluru, Singapore.

14. Dr. Naveen Vishweshwaraiah

Co-Founder and National President

Indian Naturopathy and Yoga Graduate Medical Association (R), Bangalore Member, National Board for the Development of Yoga and Naturopathy, Ministry of AYUSH, GoI.

Faculty Member, Academic Council, Rajiv Gandhi University of Health Sciences, Bengaluru, Karnataka, India

15. Dr. Nidheesh Kumar Yadav

Head, Department of Yoga Science, University of Patanjali, Haridwar, India.

16. Dr. Pooja More

Project Associate,

Department of Psychiatric Social Work & Department of Integrative Medicine, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru-29, Karnataka, India.

17. Dr. Praseeda Menon

Research Officer (Psychology), Scientific Research Department, Assistant Professor, G. S. College of Yoga& Cultural Synthesis, Kaivalyadhama Yoga Institute, Lonavala, Pune, Maharashtra, India.

18. Dr. Rajvi Mehta

Senior Iyengar Yoga Teacher, Mumbai, Maharashtra, India.

19. Dr. Reinhard Bögle

Senior Yoga Practitioner, Munich, Germany

20. Mr. Rudresh Kumar Singh

Bahrain Indian Cultural Art Society (BICAS), Bahrain

21. Dr. Shanivaram Reddy

Additional Professor,

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National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru-29, Karnataka. India.

22. Dr. Shivarama Varambally

Professor of Psychiatry and Former Head of Department of Integrative Medicine, National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru-29, Karnataka, India.

23. Dr. S. Sridharan

Senior Yoga Therapy Consultant and Mentor, Krishnamacarya Yoga Mandir (KYM), Chennai Vice-President, Indian Yoga Association (IYA), India.

24. Mr. Subodh Tiwari

Hon Secretary/CEO

Kaivalyadhama, Lonavala, Pune, Maharashtra, India.

25. Dr. Sumathi Jayaraman,

Executive Director, Sri Sri Institute for Advanced Research (SSIAR), Bengaluru, Karnataka, India

26. Dr. Sunil Santha

Professor and Chairperson, Centre of livelihoods and Social Innovation, School of Social work, Tata Institute of Social Sciences (TISS), Mumbai, Maharashtra, India.

27. Dr. Vartika Saxena

Professor and Head, Department of Community and Family Medicine, Former Dean Research, All India Institute of Medical Sciences Rishikesh, Uttarakhand, India

28. Dr. Vikram Pai

Medical Officer (AYUSH) – Yoga & Naturopathy,

Co-ordinator, Central Council for Research in Yoga and Naturopathy Collaborative Centre for Mind Body Intervention through Yoga (CCRYN CCMBIY) All India Institute of Medical Sciences (AIIMS), Raipur, Chhattisgarh, India.

29. Dr. Vinod Kumar

Founder, Yogayur Chikitsa (www.yogayurchikitsa.com).

Yoga Practitioner and Researcher Bengaluru, Karnataka, India.

30. Ms. Viveka Kim

Miryang Yoga Cultural Centre, South Korea

31. Indian Yoga Association (IYA)

PREAMBLE TO THE RECOMMENDATIONS

Aim: To understand how yoga can be used to help achieve UN SDGs

Objectives:

- 1. To brainstorm with *yoga* practitioners/ researchers/ experts, community and environment experts on how *yoga* can be used to achieve Community and Environment Sustainability
- 2. To develop recommendations on how yoga can help achieve UN SDGs

The work was conducted in 3 phases:

Phase 1: Review of Literature

The process of review of literature in Phase 1, included a search of 'yoga' related studies in each SDG (The keywords were prepared for each sub-target of all the seventeen SDGs using yoga as an intervention) using search engines such as PubMed, Scopus, Cochrane Library and Google Scholar between July 2023 to September 2023. Articles were screened after going through Title, Abstract and the complete paper. The details of the papers were saved in the excel sheet. Further the articles were screened by two separate experts and the final decision about the Inclusion/ exclusion of the articles was made in the study. Reasons for excluding the articles included: does not directly talk about the related topic of UN SDGs, inability to get full text of articles, outcome of the study not matching with yoga for SDGs, not related to yoga, etc.

Table 1: Number of articles in their respective SDGs

SDGs	Articles Screened	Articles Included	Articles Excluded
SDG 1	70	40	30
SDG2	23	3	20
SDG 3	107	97	10
SDG 4	8	4	4
SDG 5	10	5	5
SDG 6	12	9	3
SDG 7	0	0	0
SDG 8	15	10	5
SDG 9	8	2	6
SDG 10	0	0	0
SDG 11	2	2	0
SDG 12	7	5	2
SDG 13	16	7	9
SDG 14	3	2	1
SDG 15	11	8	3
SDG 16	21	18	3
SDG 17	7	5	2
Total	320	217	103

Phase 2: Brainstorming with the experts

Three brainstorming sessions were conducted with the experts

- a. In-Person stakeholder's workshop on 22nd November, 2023 at NIMHANS.
- b. Presentation and discussion with the members of Indian Yoga Association (IYA) on 25th
 February, 2024.
- c. Online stakeholder's discussion from across countries on 29th February, 2024.

2a. In-person Stakeholder's Workshop

The aim of the workshop was to understand how *yoga* can be used to achieve UN SDGs. This was done through brainstorming discussion with *yoga*, community, and environment sustainability experts. The outcome of this discussion was to prepare a white paper to be submitted to the CCRYN, Ministry of AYUSH, Govt. of India for implementation throughout the country.

The workshop was conducted on 22nd November 2023 at National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru. A total of 16 experts including *yoga* experts from different schools of *yoga* and others professionals from different fields such as Medicine, Social work, Environment, Naturopathy, Ayurveda within India participated in this workshop.

The experts were divided into four groups based on their expertise and were asked to discuss among themselves to come up with final recommendations for each group of SDGs. Each group representative presented their recommendations. Dr. H. R. Nagendra, Chancellor, SVYASA *Yoga* University, Bengaluru, Dr. Raghavendra Rao M, Director, CCRYN, Under Ministry of AYUSH, Govt. of India and Dr. B. N. Gangadhar, Professor Emeritus; Department of Integrative Medicine and former Director, NIMHANS moderated the session. Dr. H. R. Nagendra, the chairperson, suggested developing a *yogic* society with concepts such as *Vasudaiva Kutumbakam*. He focused on the *trigunas* of the individual, where he suggested that efforts should be made to bring a *Tamasik* individual to the *Rajasik* level (with the help of *yoga* practices such as *Yama*, *Niyama*, *Asana*, *Pranayama*, *Pratyahara*, *Raja yoga*) and then taking him towards the *Satvik* plane (following the concepts of *Karma yoga*, *Bhakti yoga* and *Jnana yoga*). He also suggested that shifting the qualities of the person from *Asuri sampat* (inhumane qualities such as anger, aggression, lust etc) to *Daivi sampat* (divine qualities such as love, compassion, friendship etc.) would help achieve the majority of the UN SDGs. Dr. B. N. Gangadhar suggested focusing on society embracing *yoga* as a lifestyle (with *yama*, *niyama*) rather than 1-hour session per day to achieve the UN SDGs.

2b. Presentation of "Yoga for achieving UN SDGs" at National Conclave organized by Indian Yoga Association in collaboration with Art of Living Headquarters, Bengaluru.

Indian Yoga Association (IYA) in collaboration with Art of Living (AOL), Bengaluru organized a National Conclave from 24 – 26 February, 2024 at AOL Ashram, Bengaluru, which aimed to bring together experts from the field of yoga to discuss and exchange insights on the importance of yoga research and policy. Dr. Aarti Jagannathan, Additional Professor of Psychiatric Social Work, NIMHANS was invited as a panellist to present her work on "Yoga for achieving United Nations Sustainable Development Goals (UN SDGs)". She presented the draft recommendations on how yoga can be used to manage UN SDGs and explained how IYA can participate actively in achieving them; i.e. to promote local food habits and plant based foods as in SDG no. 2; to have modules scientifically developed, approved and propagated by IYA as in SDG no.3; to educate and train yoga therapists, to develop a yogic way of value education through IYA, advocating yoga in schools as in SDG no. 4; to have IYA certification and entrepreneurship training by IYA as in SDG no. 8; conduct mass programs through IYA to fulfil SDG no. 14; to advocate for yoga as a way of life (concepts) as in SDG no. 15. Dr. H. R. Nagendra, Chancellor, SVYASA University who chaired the session, talked about the importance of holistic approach of yoga which helps to create a holistic and better individual, leading him towards a better society (Vasudaiva Kutumbakam). The IYA members appreciated the work and approved of the draft recommendations in principle. They also suggested that a Google form be circulated among all the members of IYA to get further specific comments and recommendations, if any, on how yoga can help in managing the UN SDGs. A Google form was circulated to all National members of IYA for the specific inputs on the topic at the end of the Conclave. Responses received from the members were incorporated in the final recommendations.

2c. Online Stakeholders discussion on yoga for achieving UN SDGs

An online stakeholders meeting to discuss *yoga* as an eco-therapy for achieving UN SDGs was conducted on 29th February 2024. Experts from *yoga* schools and associations from different countries participated in the online discussion. The experts were presented with the draft recommendations of *yoga* for achieving UN SDGs and asked the following questions:

- 1. How do you think *yoga* can be useful for achieving UN SDGs?
- 2. Is there anything that needs to be modified/ deleted/ added in the suggested recommendations? e.g. any specific *yogic* concepts/ activities for particular SDG that need to be added?

Everyone in the meeting agreed in principle with the recommendations suggested. It was decided to share the Google form detailing each of the UNSDGs and the video of the presentations for the experts

to give in their detailed inputs, if any. Responses received from the experts were incorporated in the final set of recommendations.

Suggestions for way forward:

The following Recommendations on how *yoga* can help achieve the United Nations Sustainable Development Goals has been arrived at by triangulating the discussions that have been conducted in the above three events (in-person workshop at NIMHANS, online stakeholders meeting of International Schools and National Conclave of Indian *Yoga* Association).

- 1. Yoga to be adopted as a way of life: All through the discussion one point that has been prominent is that yoga adopted as a way of life (following yoga philosophy and yogic practices) can help in achieving the UN SDGs. Hence beyond yoga practices, it is important to look at yoga philosophy and concepts to help achieve the UN SDGs. Several concepts from yoga philosophy can be indirectly applicable to all the SDGs e.g: Swadhyaya (Self-reflection); Mindfulness (Awareness of present moment); Trigunas (three qualities in every individual), Tapas (self-discipline). However, in this document we have only mentioned the yoga philosophy concepts which can directly help achieve the specific SDG. The recommendations need to be read and interpreted in the above context.
- 2. **Incorporating Recommendations in existing projects:** The recommendations out of this document can be incorporated in the existing campaigns and programmes of the UN. For e.g. several UN agencies have projects on reducing food wastage with circular economy principles, projects for women, resilience of vulnerable individuals etc., where these recommendations on yoga and yoga practices to achieve the specific SDGs can be incorporated. These recommendations can be linked to tangible outcomes that can help countries achieve the SDGs through yoga. The current team would be happy to volunteer to review all UN projects related to each of the SDGs and provide specific guidance on how these recommendations can be woven into the existing projects.
- 3. Collaborative research for implementation of Recommendations: Efficacy of *yoga* has already been validated in several thrust areas of the UN such as prevention of violence, public health systems etc. Over a period, some of these SDG specific recommendations can be developed into new projects/ programmes for testing and implementation across countries.
- 4. **Convene discussions on** *yoga* **for SDGs:** The UN can convene discussions and round tables on *yoga* for achieving SDGs as a lead up to a Joint UN conference on *Yoga* for achieving SDGs for International *Yoga* Day 2025. These discussions would help finalize the way forward in research and implementation of the Recommendations across countries.

RECOMMENDATIONS

SDG 1: NO POVERTY

"End poverty in all its forms everywhere"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Dana	Charity - attitude of giving needful items to the under-privileged section of the society.
2	Aparigraha	Cultivating non-possessiveness.
3	Santosha	The habit of just being happy with what one has.

Recommendations on how Yoga can help achieve UN SDG 1:

- 1. <u>Vocational opportunities for income generation to reduce poverty:</u>
 - Partnerships can be encouraged with NGOs and educational institutions to integrate *yoga* training (covering the philosophy and world view of *yoga*) into vocational programmes.
 - Many ancillary professions associated with *yoga* practice, i.e. clothes, mats, posters etc. can be encouraged to tie up with local *yoga* centres for income generation.
 - Collaboration with the government health care system and programmes can be considered to create job opportunities for *yoga* practitioners. Schemes that mandate the appointment of *yoga* instructors in different settings should be considered.
 - Individuals can be encouraged to set up their own *yoga* businesses such as *yoga* studios, wellness centers, and teaching practices. The government can provide subsidized loans with low interest rates or scholarships for opening such centers. Corporates can be encouraged to set aside a portion of their CSR funds towards supporting entrepreneurs in the field of *yoga* from the lower socio-economic strata.
 - Conducting quality *yoga* teacher's training programmes to help get job opportunities and income, particularly for women.

2. Inculcating Yogic concepts in lifestyle towards charity:

 Conducting mass community programs with yoga experts to promote concepts of Aparigraha, Dana (charity), and minimalistic living amongst the richer section of society to help the poor. • Teaching *yogic* lifestyle and concepts (*Dana*, *Aparigraha*, *Santosha*) to persons from low socio-economic strata to help them become more resilient and empowered and move from hopelessness and despair towards improving their circumstances. This can be done by offering free/ low-cost *yoga* training in community centers, schools, and shelters to this group.

3. <u>Yoga villages for developing self-sustenance:</u>

• To develop *yoga* villages to improve quality of life, health, socio-economic status, beliefs and attitudes of the whole village through *yogic* lifestyle.

SDG 2: ZERO HUNGER

"End hunger, achieve food security and improved nutrition and promote sustainable agriculture"

2 ZERO HUNGER

Concepts in *yoga* that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Mitahara	Balanced and moderate consumption.
2	Dana	Charity - attitude of giving excess food to the needy.
3	Asteya/ Aparigraha	Non-stealing and non-attachment to food.

Recommendations on how Yoga can help achieve UN SDG 2:

1. Developing cultural and eco-friendly food habits to reduce hunger:

- *Yogic* lifestyle can be promoted in rural and urban areas through local, cultural, ecofriendly, and seasonal food habits. This can be done by encouraging local farmers to grow local and seasonal food and by motivating communities to follow the ethical rules of *yogic* lifestyle (*Yama* and *niyama*).
- Governments can promote urban farming and community gardens to promote access to fresh, locally grown produce in urban areas.
- Vegetarianism and organic farming can be promoted to achieve self-sufficiency in food.

2. Mitahara and Donation:

- Mass campaigns amongst the public can be conducted to develop the attitude of *Mitahara* (balanced moderate diet) and/ or organize *Satvik* food donation drives. This can help in reduced eating of junk food.
- Emphasis can be placed on reducing the wastage of food by adopting community kitchens and by donating (*Dana*) food to the needy during special occasions such as marriage, festivals, birthdays etc.
- Importance of mindful eating to develop an attitude of *Mitahara* and nutrition education to all through lectures/ community programs can be conducted.
- Foster a helping attitude through *yoga*, by supporting small start-ups, and sponsoring food to NGOs regularly.
- Corporates can be encouraged to delineate a part of their CSR to fundraising events to alleviate hunger, and distribute *Satvik* diet in local communities.

SDG 3: GOOD HEALTH AND WELL-BEING





Concepts in *yoga* that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Ashtanga/ Hatha Yoga	Use of specific <i>ashtanga/ hatha yoga</i> modules for the patients with various disorders.
2	Jnana Yoga	Path of Knowledge – <i>yogic</i> counselling through self-help literature.
3	Karma Yoga	Path of Practice – taking responsibility of one's health and doing the <i>yoga</i> practices regularly.
4	Raja Yoga	Mastery over the mind through yoga.
5	Bhakti Yoga	Path of Surrender -for patients with terminal ailments.
6	Panchakosha Viveka	Yoga practices at different layers of existence for preventive, promotive and curative health and well-being.

Recommendations on how Yoga can help achieve UN SDG Goal 3:

- 1. Specialized yoga programme for different health disorders:
 - *Yoga* can be used as an intervention for preventive, promotive, curative health in non-communicable diseases in health centres. For this *yoga* therapy schools can be encouraged to train *yoga* therapists in clinical and hospital-based settings.
 - To encourage research to scientifically develop and validate specialized *yoga* programmes for persons with disabilities and persons with communicable as well as non-communicable diseases. Details of the *yoga* programme including whether it should be conducted as a monotherapy or as an add-on therapy; the intensity and difficulty level of the practices based on the type of disorder should be designed based on the needs of the patients. e.g: The *yoga* practices that are aimed to be taught to patients with multiple sclerosis or disorders associated with fatigue should be easy to learn and less strenuous to perform.
 - Specific *yoga* modules for communicable diseases need to be developed and implemented as used in COVID-19.

2. Yoga for well-being of vulnerable groups (women and youth):

- *Yoga* programmes can be planned from the time of conception as a lifestyle by obstetricians to avoid high-risk pregnancies, or pregnancy-associated anxiety.
- Yoga can be added to school and college curricula to avoid academic stress, exam fear/ anxiety, and to enhance physical and mental well-being in terms of fostering resilience, better coping skills, reducing aggression and improving attention. Mass yoga programmes on specific events in schools and colleges can also be encouraged.
- Specific *yoga* modules for youth with mental health and substance use disorders can be developed and implemented.

3. Yogic counselling:

- To encourage the employment of *yoga* counsellor in every working space of the society (hospitals, schools, colleges, industries, government and non-government sectors).
- As a part of pre-natal health counselling using *yogic* concepts/ stories from *Veda* and *Upanishads*.
- *Yogic* counselling using the concepts of *Triguna* for emotional regulation [lifting the individual from *rajasik* (passion/ activity), and *tamasik* (inertia/ ignorance) qualities (lower human qualities) to *satvik* qualities (purity/ goodness/ lightness) in thoughts and actions].

4. Accessibility and inclusiveness of yoga:

- *Yoga* can be adapted to suit individuals of all age groups, fitness levels, and abilities, making it an inclusive and accessible wellness practice.
- Regular *yoga* programmes can be conducted in local hospitals, educational institutions, community centres, companies, and organizations for improving health and well-being.
- *Yoga* sessions for promoting health as well as for treatment of disorders should be covered under the health insurance policy as in some countries like Germany.
- A *Yogic* diet can be promoted to manage health conditions.

SDG 4: QUALITY EDUCATION

"Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Yoga Anushasana	To include <i>yoga</i> practice and philosophy in the academic curriculum.
2	Yama-Niyama	To inculcate codes of individual and social conduct.
3	Bramhacharya	To inculcate discipline in student life.
4	Sravana/ Manana/ Nidhidhyasana	To help students observe (listen with attention), contemplate and absorb knowledge.

Recommendations on how *Yoga* can help achieve UN SDG4:

1. Yoga as part of the education curriculum:

- *Yogic* concepts and philosophy (e.g. *Patanjali Yoga Sutras*, concept of *Pancha Koshas*) can be introduced as a subject in schools and colleges.
- To consider having compulsory credits for students in online/ offline *yoga* training. For this standardized *yoga* practices can be developed and implemented universally in all schools and colleges.
- There should be equitable access to *yoga* education for all students.

2. <u>Yoga for Value Education:</u>

- To include simplified *yoga* philosophy/ concepts including 'spirituality' (being one with nature) as part of value education.
- To conduct *yoga* personality development camps in schools and colleges.
- *Yoga* training can include an explanation of the *yama-niyama* (rules) to help develop *tapas* (self-discipline) and *swadhyaya* (self-development) in students and can be weaved into the school curriculum as moral/value based education.
- Students can be encouraged to read the biography of eminent *yoga* teachers, whom they can relate to and get inspired.

• Teaching students the concept of *ahimsa* (not hurting others: bullying) and *asteya* (developing the habit of being respectful towards others' possessions and limitations in the class with friends).

3. Yoga as extra-curricular activities:

- To conduct *yoga* competitions like *yoga* Olympiads/ Quiz/ Painting, chanting from *yoga* texts/ scriptures in schools and colleges for students.
- To conduct mass *yoga* programs on International *Yoga* Day for staff and students.
- To have guest lectures from eminent *yoga* personalities addressing the students in schools and colleges.
- To promote *yogic* concepts through workshops in schools and colleges for teachers as part of professional development for their stress management and health promotion.

4. Yoga Research:

• To encourage studies which help understand the impact of *yoga* practice and philosophy on quality of education.

SDG 5: GENDER EQUALITY

"Achieve gender equality and empower all women and girls"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Triguna	Improve the inner human qualities, leading to society's upliftment.
2	Vasudaiva Kutumbakam	Co-existence in harmony (between genders).

Recommendations on how Yoga can help achieve UN SDG Goal 5:

1. Yoga for All:

- To promote *yoga* for all, irrespective of age, gender, caste, or creed, fostering harmony and social care.
- To develop yoga modules with specialised practices for women to improve their quality of life.
- The establishment of *yoga* Self-Help Groups (SHGs) in rural areas to empower vulnerable communities like women, transgender, etc can be encouraged.
- Introducing *yoga* in workplaces, and educational institutions to enhance relationships, mutual support, and for gender-inclusive practices.
- Creating Inclusive and Accessible spaces in the local community to practice *yoga* that welcomes individuals of all genders. These local communities can also engage in promoting gender equality, rights, and inclusive societies.
- *Yoga* practitioners can promote body positivity within these *yoga* communities by creating an environment where women feel empowered and embrace their bodies.
- Yoga-based leadership and empowerment programmes for women in organizations/ community groups can be conducted to develop self-awareness, self-acceptance and selfconfidence; empowering women to recognize their inherent worth and potential.

2. <u>Inculcating yogic qualities for gender equality:</u>

- Public programmes to spread awareness and practice the *yogic* concept of *Vasudaiva Kutumbakam* (oneness of existence) and emotional culturing to develop mutual respect towards the other gender can be conducted.
- The concept of *yama* and *niyama* (*yogic* way of life, rules) as well as *trigunas* (improve the inner human qualities) can be taught to all genders leading to societal upliftment.

SDG 6: CLEAN WATER AND SANITATION



"Ensure availability and sustainable management of water and

sanitation for all"

Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Saucha	Maintaining cleanliness: Clean water, sanitation, reduction of pollution.
2	Tapas	Self-discipline to protect/restore water-related ecosystems.
3	Aparigraha/ Asteya	Non-possessiveness: Integrated water resource management.
4	Swadhyaya/ Mindfullness	Self-reflection and awareness to protect/restore water-related ecosystems.

Recommendations on how Yoga can help achieve UN SDG Goal 6:

1. Awareness programmes:

- Governments can conduct campaigns/ programmes on yogic concepts in relation with cleanliness, water conservation, and sanitation. This can be done in the community and via social media.
- *Yogic* concepts and their connection to nature-water conservation (how one needs to respect nature) can be introduced in schools and colleges as part of the academic curriculum.

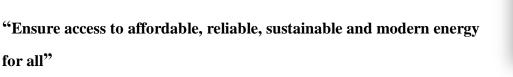
2. Community-based water projects:

- Yoga organizations and community groups can collaborate with local communities to support
 water-related projects such as well construction, water purification systems, sanitation
 facilities.
- Yoga communities can partner with local NGO's, water yoga theme workshops and events.

3. Research initiatives:

Studies can be conducted to understand the impact of the *yogic* way of life on cleanliness & sanitation.

SDG 7: AFFORDABLE AND CLEAN ENERGY





Concepts in *yoga* that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Vasudaiva Kutumbakam	Efficiency in the use of energy sources & use of clean energy for all in the world.
2	Tapas	Self-discipline to efficiently use energy resources.
3	Aparigraha/ Asteya	Non-possessiveness to share energy resources with all in the world.
4	Mindfulness	Awareness of the present moment to efficiently use energy resources.
5	Swadhyaya	Self-reflection to efficiently use energy resources.

Recommendations on how Yoga can help achieve UN SDG Goal 7:

1. Yoga-related activities:

- Practicing *yoga* in nature (eco-friendly practices) can be propagated to reduce energy consumption and promote sustainability.
- A *yogic* lifestyle (minimalistic living) can be promoted for sustainability.

2. Mindful consumption and energy awareness:

 Mass public and government campaigns and on social media can be conducted on yogic concepts and their connection to nature.

3. Research initiatives:

• Studies to understand the impact of the *yogic* way of life on efficiency in the use of energy can be conducted.

SDG 8: DECENT WORK AND ECONOMIC

GROWTH

"Promote sustained, inclusive and sustainable economic growth, full and Productive employment and decent work for all"

8 DECENT WORK AND ECONOMIC GROWTH

Concepts in yoga that can be applied to achieve this goal:

S. No	Yoga Concept	Application
1	Karma Yoga	Doing action/ work with full involvement without being preoccupied with the results of the action.
2	Swadhyaya	Self-awareness and awareness about promoting sustained, inclusive, economic growth.
3	Tapas	Disciplined effort, perseverance, and commitment towards work.
4	Asteya/ Aparigraha	Efficiency to use available resources, decent work for all and increase in productivity.

Recommendations on how Yoga can help achieve UN SDG Goal 8:

1. Yoga as a Profession/ Work:

- Rigorous training and certification courses for *yoga* professionals to boost standards and employment options in the wellness industry; i.e. to produce specialized *yoga* instructors.
- Conducting quality *yoga* teachers training programmes to help get job opportunities and income, particularly for youth and women.
- Entrepreneurial training for *yoga* teachers to manage their profession can be imparted. Local municipalities and corporates through CSR funds can help and support *yoga* entrepreneurs through economic investment into local *yoga* businesses.
- Decent working conditions for *yoga* teachers employed in private institutions- decent pay and career growth opportunities to be built into a system.

2. Yoga for employers:

- To plan and execute a 360-degree *yoga* training for people in leadership positions to enable them to make humane decisions for employee welfare, and to inculcate the importance of the *yama* and *niyama* for employers and employees.
- Corporate *yoga* wellness programmes can be incorporated as part of the work culture to improve productivity.

SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

"Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation"



Concepts in *yoga* that can be applied to achieve this goal:

S. No	Yoga Concept	Application
1	Triguna	To move from <i>tamasic</i> quality (inertia) and/ or <i>rajasic</i> quality (increased mental activity) to <i>satvik</i> quality (balanced state of mind) to foster innovation.
2	Aparigraha	Non-possessiveness to promote inclusive and sustainable industrialization.
3	Tapas	Self-discipline, readiness to get involved in hard work to achieve a particular target.
4	Karma Yoga	Doing action/ work with full involvement without being preoccupied with the results of the action.

Recommendations on how Yoga can help achieve UN SDG Goal 9:

- 1. Innovation in wellness technology: Integration of *yoga* with technology in the form of *yoga* apps, online classes, and wearable devices making it more accessible to a wider audience and promoting a healthy lifestyle.
- 2. Investment in sustainable infrastructure (energy efficient lighting, eco-friendly materials, and renewable energy systems) for *yoga* studios and retreat centres.
- 3. Increase the access of small-scale industrial and other enterprises such as *yoga* wellness centres, especially in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.

SDG 10: REDUCED INEQUALITIES

"Reduce inequality within and among countries"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Vasudaiva Kutumbakam	Co-existence in harmony to reduce inequalities.

Recommendations on how Yoga can help achieve UN SDG Goal 10:

1. Promote Yoga for All:

- Yoga can be promoted for all; i.e. all socio-economic sections, all genders, all cultures in society, marginalized communities, working class as well as the managerial sections, organized as well as unorganized sectors etc.
- Standardized *yoga* programs for all age groups can be followed universally.
- Promoting Vasudaiva Kutumbakam International inter-ethnic equality and blurring of social and intercontinental inequalities through yoga programmes across the globe can be achieved.
- Mass *yoga* programmes in the community can be used as an intervention for social inclusion and community building.

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

"Make cities and human settlements inclusive, safe, resilient, and sustainable"



Concepts in *yoga* that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Vasudaiva Kutumbakam	The world is one family interconnected with each other; we are responsible for our sustainable cities and communities.
2	Santosha	Cities of happiness.
3	Tapas and Swadhyaya	Self-discipline and self-reflection to contribute to smart sustainable cities.

Recommendations on how Yoga can help achieve UN SDG Goal 11:

1. Community Involvement:

- Engage local communities, including gram panchayats, to promote an eco-friendly and sustainable *yogic* lifestyle.
- *Yoga* Community engagement spaces (green spaces and urban parks) can be developed to foster social cohesion.
- Collaboration between *yoga* institutes and universities can be initiated for the development of smart city missions.

2. Awareness Programs:

• Awareness programmes on the *yogic* concept of *Vasudaiva Kutumbakam* (sustainable cities and communities) through village level meetings and local initiatives.

SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

"Ensure sustainable consumption and production patterns"

Concepts in *yoga* that can be applied to achieve this goal:

S. No	Yoga Concept	Application
1	Ahimsa	Non-violence leading to responsible consumption and production in society.
2	Saucha	Cleanliness of surrounding and working environment: waste management.
3	Swadhyaya	Self-awareness about the surroundings and acting according to the situation: waste management, responsible consumption, and production.
4	Pratyahara	Consuming only for the need of body.
5	Brahmacharya	Life of Moderation.
6	Aparigraha/ Asteya	Non-hoarding/ non-stealing of resources.
7	Santosha	Being content with the available resources.

Recommendations on how Yoga can help achieve UN SDG Goal 12:

1. Mass Public Awareness:

 To consciously use the concepts of yama, ahimsa, niyama-swadhyaya, self-regulation, connection with nature and universe, and realization of interdependence leading to responsible consumption and production.

2. <u>Promoting mindful consumption:</u>

 To practice sustainable living practices, waste reduction and recycling, plant-based nutrition and conscious eating, consumer education and awareness, ethical fashion, and consumer choices.

3. Promoting a sustainable lifestyle:

• Collaborate with the *yoga* community around the world to establish and promote global rules for using eco-friendly *yoga* mats, *yoga* clothes, and *yoga* supplies.

RESPONSIBLE CONSUMPTION AND PRODUCTION

SDG 13: CLIMATE ACTION

"Take urgent action to combat climate change and its impacts"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Triguna concept	Enhancing resilience to climate-related hazards and natural disasters.
2	Ahimsa	Vegetarianism versus non-vegetarianism and not exploiting natural resources.
3	Saucha	Reduction of pollution.
4	Swadhyaya and Mindfulness	Awareness and self-reflection to Reduce/ Reuse/ Recycle.
5	Pratyahara	Detachment of the sense organs from pleasures which affect the climate, e.g. using air-conditioning, emission of carbon/ fuel (while driving private vehicles), consumption of electricity etc.
6	Santosha	Satisfaction with simple living and in nature.

Recommendations on how Yoga can help achieve UN SDG Goal 13:

- 1. Introduction of *yogic* concepts and their connection to nature in schools, colleges, public and government campaigns via social media and in physical events can be conducted.
- 2. Promoting outdoor *yoga* practice and nature-connectedness is an important step in considering *yoga* as an Eco-therapy.
- 3. Promoting a *yogic* lifestyle and vegetarianism can be a step towards climate action.
- 4. Research can be conducted to understand the impact of the *yogic* way of life on climate.

SDG 14: LIFE BELOW WATER

"Conserve and sustainably use the oceans, seas, and marine resources for sustainable development"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Vasudaiva Kutumbakam	Coexistence with all forms of life in nature.
2	Saucha	Clean up projects for rivers and oceans.
3	Ahimsa	Vegetarianism versus non-vegetarianism; Ecosystem-specific dietary preferences.
4	Asteya	Sustainable use of rivers, oceans and marine life.
5	Mindfulness	Sustainable use of rivers, and oceans and marine life.

Recommendations on how Yoga can help achieve UN SDG Goal 14:

1. Awareness and Advocacy:

- Introduction of *yogic* concepts and their connection to life below water in colleges, public and government campaigns via social media and in physical events can be conducted.
- To advocate for *Yoga* embedded eco-tourism: Partnerships with *yoga* wellness centres in coastal regions can help promote sustainable eco-tourism practices and education on water conservation.
- Integration of ocean themes/ poses in *yoga* practices to create environment awareness and connectedness to nature.
- Promoting zero plastic utilization and vegetarianism.

2. Research:

 Research can be conducted to understand the impact of the *yogic* way of life for life below water.

SDG 15: LIFE ON LAND

"Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss"



Concepts in *yoga* that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Triguna	Protect/ Restore life (plants, animals) on land; Reduce/ Reuse/ Recycle.
2	Vasudaiva Kutumbakam	Coexistence with all forms of life in nature.
3	Saucha	Clean up projects for local parks, forests etc.
4	Ahimsa	Non-violence towards life on land for their protection and conservation.
5	Mindfulness	Awareness about Reduce/ Reuse/ Recycle.
6	Asteya	To refrain from taking what does not belong to us. Protecting and conserving life forms on land.

Recommendations on how Yoga can help achieve UN SDG Goal 15:

1. Awareness and Advocacy:

- Introduction of *yogic* concepts and their connection to life on land in colleges, public and government campaigns via social media and in physical events can be conducted.
- To advocate for *yoga*-embedded eco-tourism: Partnerships with yoga-based communities, spiritual centers, indigenous communities, and retreat centers to showcase models for sustainable practices that have low or minimal impacts on the environment.
- Promoting campaigns for environmental education, nature-based practices like yoga, rural and indigenous wisdom.

2. Research:

 Research can be conducted to understand the impact of the yogic way of life for life on land.

SDG 16: PEACE, JUSTICE AND STRONG

INSTITUTIONS

"Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institution at all levels"



Concepts in yoga that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Ahimsa	Practicing non-violence.
2	Anasaktibhava	Inculcating non attachment and neutrality to achieve peace and justice.
3	Satya	Being truthful and promoting truthfulness.
4	Santosha	Experiencing happiness and peace.
5	Vasudaiva Kutumbakam	Oneness of existence – peace.

Recommendations on how Yoga can help achieve UN SDG Goal 16:

- 1. Conducting workshops on life skills, including simple *yogic* practices to help the youth with emotional regulation and anger management in schools and colleges.
- 2. Promoting inner peace and well-being through *yoga* workshops in juvenile homes and prisons.
- 3. Education and training in inculcating the spirit of *Ahimsa* (non-violence), *Satya* (truth), *Maitreya* (benevolence), *Karuna* (compassion), *Upeksha* (equanimity) etc in schools, colleges, and prisons.

SDG 17: PARTNERSHIPS FOR THE GOALS

"Strengthen the means of implementation and revitalize the global partnership for sustainable development"



Concepts in *yoga* that can be applied to achieve this goal:

S. No.	Yoga Concept	Application
1	Vasudaiva Kutumbakam	The world is one family where all are interconnected with each other. Co-existing with peace, health, and harmony.

Recommendations on how Yoga can help achieve UN SDG Goal 17:

- 1. Concepts of *Vasudaiva Kutumbakam* (oneness in existence), *tapas* (self-determination) and *swadhyaya* (self-realization) are to be promoted with realisation of interdependence.
- 2. For partnership, developing value-based relationships needs to be cultivated.
- 3. Consciousness in every step on how to achieve UN SDG Goals through *yoga* should be created. For this *yoga* communities and associations can collaborate with various stakeholders, including government, NGOs, businesses, and communities to support the implementation of SDG Goals.
- 4. Promoting cross—sectoral collaborations, global networks and alliances, local and global outreach, advocacy and policy engagement, capacity building and knowledge sharing, inclusive and participatory approaches.

References

- 1. Abolifa, A. B. S., Abulifa, S., & Bindra, S. P. Uncsdrio + 20 focal point on the libyan economy and role of yoga. https://www.westeastinstitute.com/wp-content/uploads/2016/03/Almotasim-bellah-s-abolifa-Salem-Abulifa-Dr-S.P.Bindra.pdf
- 2. Aggarwal, A. K., Guglani, M., & Goel, R. K. (2008). Spiritual & Yoga tourism: A case study on experience of Foreign tourists visiting Rishikesh, India.
- 3. AG, G. S., Subramanya, P., & Mahadevan, B. (2017). Effect of yoga on adolescents' attitude towards violence. Journal of Human Values, 23(2), 81-91.
- 4. Akhter, S., & Ahmed, A. (2021). Importance of yoga in daily life. https://www.theyogicjournal.com/pdf/2021/vol6issue1/PartC/6-1-51-820.pdf
- 5. Anbarasi, M., & Kumar, S. P. (2019). Various online marketing and promotions strategies to improve the validation towards the organic products in the pharmaceutical sectors. Executive editor, 10(1), 263.
- 6. Anderson, R., Mammen, K., Paul, P., Pletch, A., & Pulia, K. (2017). Using Yoga Nidra to Improve Stress in Psychiatric Nurses in a Pilot Study. Journal of alternative and complementary medicine (New York, N.Y.), 23(6), 494–495. https://doi.org/10.1089/acm.2017.0046
- 7. Asthana, A. N. (2023). Reskilling business executives in transition economies: can yoga help?. International Journal of Business and Emerging Markets, 15(3), 267-286.
- 8. Baindur, M., & Baindur, M. (2015). Relating to Nature: Worship, Care, and Ecological Ethics. Nature in Indian Philosophy and Cultural Traditions, 173-198.
- 9. Bali, A., Kachwala, T., & Sivaramakrishnan, S. (2019). An Assessment of the Impact of Karma Yoga on Performance in Teams. South Asian Journal of Management, 26(3).
- 10. Barrett, B., Grabow, M., Middlecamp, C., Mooney, M., Checovich, M. M., Converse, A. K., & Yates, J. (2016). Mindful climate action: Health and environmental co-benefits from mindfulness-based behavioral training. Sustainability, 8(10), 1040.
- 11. Bazzano, A. N., Sun, Y., Chavez-Gray, V., Akintimehin, T., Gustat, J., Barrera, D., & Roi, C. (2022). Effect of Yoga and Mindfulness Intervention on Symptoms of Anxiety and Depression in Young Adolescents Attending Middle School: A Pragmatic Community-Based Cluster Randomized Controlled Trial in a Racially Diverse Urban Setting. International journal of environmental research and public health, 19(19), 12076. https://doi.org/10.3390/ijerph191912076
- 12. Behura, A. K., & Sahoo, P. K. (2022). Ashtanga yoga of patanjali vis-à-vis sustainable development goals. Journal of Dharma, 47(1), 41-56.
- 13. Bennett, L. M., & Starnino, V. R. (2022). The experience of yoga for persons with complex interpersonal trauma: A phenomenological approach. Complementary therapies in clinical practice, 49, 101674. https://doi.org/10.1016/j.ctcp.2022.101674

- 14. Betal, C. (2017). Role of Yoga Practices in the Protection of Human Rights. International Journal of Health Sciences & Research, 7(12).
- 15. Bhagwat, S. A. (2008). Yoga and sustainability. Journal of Yoga, 7(1), 1-14.
- 16. Bhagwat, S. A. (2009). Ecosystem services and sacred natural sites: reconciling material and non-material values in nature conservation. Environmental values, 18(4), 417-427.
- 17. Bhagwat, S. A. (2008). Yoga and sustainability. Journal of Yoga, 7(1), 1-14.
- 18. Bhat, S. G. S., Arasappa, R., Jagannathan, A., & Varambally, S. (2021). Yoga therapy for Obsessive Compulsive Disorder (OCD): A case series from India. Asian journal of psychiatry, 62, 102739. https://doi.org/10.1016/j.ajp.2021.102739
- 19. Bindra, S., & Ezziany, I. M. (2016). Towards Enhancing the National Competitiveness of the Libyan Economy with special Reference to Role of Yoga. International Journal of Health & Economic Development, 2(1).
- 20. Bishnoi, M., & Yadav, P. (2022). Yoga-As a Preventive Technique for Crime. Shodhasamhita, 133-142.
- 21. Bockler, A., Ferrari, N., Deibert, C., Flöck, A., Merz, W. M., Gembruch, U., Ehrhardt, C., Dötsch, J., & Joisten, C. (2021). Relationship between Physical Activity and the Metabolic, Inflammatory Axis in Pregnant Participants. International journal of environmental research and public health, 18(24), 13160. https://doi.org/10.3390/ijerph182413160
- 22. Borden, A., & Cook-Cottone, C. (2020). Yoga and eating disorder prevention and treatment: A comprehensive review and meta-analysis. Eating disorders, 28(4), 400–437. https://doi.org/10.1080/10640266.2020.1798172
- 23. Bodhananda, S. (2010). Yoga and management. https://sambodh.us/SS/abtSB/Articles-SB/SB-2012 Yoga of Management.pdf
- 24. Bodhananda, S. (2022). Management and Leadership: Insights from Yoga Philosophy and Practice. NHRD Network Journal, 15(4), 422-430.
- 25. Bose, B. K., King, M. W., & Schware, R. Yoga, Personal Transformation, and Global Sustainability. http://matthewkingphd.com/wp-content/uploads/2016/06/Yoga-and-Global-Sustainability-03.17.14.pdf
- 26. Bowers, H., & Cheer, J. M. (2017). Yoga tourism: Commodification and western embracement of eastern spiritual practice. Tourism Management Perspectives, 24, 208-216.
- 27. Capela Santos, D., Jaconiano, S., Macedo, S., Ribeiro, F., Ponte, S., Soares, P., & Boaventura, P. (2023). Yoga for COVID-19: An ancient practice for a new condition A literature review. Complementary therapies in clinical practice, 50, 101717. https://doi.org/10.1016/j.ctcp.2022.101717
- 28. Cartwright, T., Cahill, M., & Sadana, V. (2020). A mixed methods evaluation of an individualised yoga therapy intervention for rheumatoid arthritis: Pilot study. Complementary therapies in medicine, 50, 102339. https://doi.org/10.1016/j.ctim.2020.102339

- 29. Çelik, A. S., & SüheylaYaralı, R. N. (2023). The Effect of Laughter Yoga on the Psychological Resilience and Sleep Quality of Nurses During the Pandemic: A Randomized Controlled Trial. Alternative Therapies in Health and Medicine, 29(5), 146-152.
- 30. Chakrabarty, P., & Das, S. (2023). Yoga Tourism as an Emerging Branch of Eco-tourism for the Restoration of Sustainable Human Environment. In Environmental Management and Sustainability in India: Case Studies from West Bengal (pp. 567-578). Cham: Springer International Publishing.
- 31. Chalquist, Craig. (2009). A looks at thee co therapy research evidence. Ecopsychology, 1(2), 64-74.42.
- 32. Chandel, S. S., Chandel, R. (2021). Sustainable Cities and Townships: A Strategy for Effective Implementation of Sustainable Development Goal-11 by Higher Education institutions. Universities handbook–34th edition (2018), 59, 49.
- 33. Chang, T. F., Ley, B. L., Ramburn, T. T., Srinivasan, S., Hariri, S., Purandare, P., & Subramaniam, B. (2022). Online is haupa yoga for student mental health and well-being during COVID-19: a randomized control trial. Applied Psychology: Health and Well-Being, 14(4), 1408-1428.
- 34. Chaudhary, A. L. K. A. (2017). Swachh Bharat mission-need, objective and impact. International Journal for research in Management and Pharmacy, 6(2), 24-28.
- 35. Childs-Fegredo, J., Fontana, E., Moran, M., & Faulkner, P. (2023). Yoga-integrated psychotherapy for emotion dysregulation: A pilot study. Counselling and Psychotherapy Research, 23(3), 638-652.
- 36. Ciezar-Andersen, S. D., Hayden, K. A., & King-Shier, K. M. (2021). A systematic review of yoga interventions for helping health professionals and students. Complementary therapies in medicine, 58, 102704. https://doi.org/10.1016/j.ctim.2021.102704
- 37. Cohen, C., Pignata, S., Bezak, E., Tie, M., & Childs, J. (2023). Workplace interventions to improve well-being and reduce burnout for nurses, physicians and allied healthcare professionals: a systematic review. BMJ open, 13(6), e071203.
- 38. Cramer, H., Anheyer, D., Saha, F. J., & Dobos, G. (2018). Yoga for post traumatic stress disorder a systematic review and meta-analysis. BMC psychiatry, 18(1), 72. https://doi.org/10.1186/s12888-018-1650-x
- 39. Cramer, H., Peng, W., & Lauche, R. (2018). Yoga for menopausal symptoms-A systematic review and meta-analysis. Maturitas, 109, 13–25. https://doi.org/10.1016/j.maturitas.2017.12.005
- 40. Cramer, H., Lauche, R., Azizi, H., Dobos, G., & Langhorst, J. (2014). Yoga for multiple sclerosis: a systematic review and meta-analysis. PloS one, 9(11), e112414. https://doi.org/10.1371/journal.pone.0112414
- 41. Dard, D. (2019). Unlocking the gate to inner peace with yoga. In Handbook of research on promoting peace through practice, academia, and the arts (pp. 147-164). IGI Global.
- 42. David, T., Buchan, J., & Nalau, J. (2022). Coping and Adapting to Climate Change in Australia: Yoga Perspectives. International journal of yoga therapy, 32(2022), Article-15.

- 43. Derlic, D. (2020). A systematic review of literature: Alternative offender rehabilitation—Prison yoga, mindfulness, and meditation. Journal of Correctional Health Care, 26(4), 361-375.
- 44. Desai B. P. (1990). Place of nutrition in yoga. Ancient science of life, 9(3), 147–153.
- 45. Dhiraj, A., & Kumar, S. (2021). Opportunities and challenges of yoga tourism in India. Hospitality and tourism emerging practices in human resource management, 202-209.
- 46. Dol K. S. (2019). Effects of a yoga nidra on the life stress and self-esteem in university students. Complementary therapies in clinical practice, 35, 232–236. https://doi.org/10.1016/j.ctcp.2019.03.004
- 47. Douglass, L. (2010). Yoga in the public schools: Diversity, democracy and the use of critical thinking in educational debates. Religion & Education, 37(2), 162-174.
- 48. Durrani, S., Contreras, J., Mallaiah, S., Cohen, L., & Milbury, K. (2019). The effects of yoga in helping cancer patients and caregivers manage the stress of a natural disaster: A brief report on hurricane Harvey. Integrative cancer therapies, 18, 1534735419866923.
- 49. Elahi, A. (2018). Women Empowerment Through Yoga. Deliberative Research, 38(1), 70-72.
- 50. Evans, S., Ling, M., Hill, B., Rinehart, N., Austin, D., & Sciberras, E. (2018). Systematic review of meditation-based interventions for children with ADHD. European child & adolescent psychiatry, 27(1), 9–27. https://doi.org/10.1007/s00787-017-1008-9
- 51. Evans, K., Spiby, H., & Morrell, J. C. (2020). Non-pharmacological interventions to reduce the symptoms of mild to moderate anxiety in pregnant women. A systematic review and narrative synthesis of women's views on the acceptability of and satisfaction with interventions. Archives of women's mental health, 23(1), 11–28. https://doi.org/10.1007/s00737-018-0936-9
- 52. Fazia, T., Bubbico, F., Nova, A., Buizza, C., Cela, H., Iozzi, D., ... & Bernardinelli, L. (2023). Improving stress management, anxiety, and mental well-being in medical students through an online Mindfulness-Based Intervention: a randomized study. Scientific Reports, 13(1), 8214.
- 53. Finkelstein-Fox, L., Park, C. L., & Riley, K. E. (2018). Mindfulness and emotion regulation: promoting well-being during the transition to college. Anxiety, stress, and coping, 31(6), 639–653. https://doi.org/10.1080/10615806.2018.1518635
- 54. Folgado-Fernández, J. A., Di-Clemente, E., Hernández-Mogollón, J. M., & Campón-Cerro, A. M. (2018). Water tourism: A new strategy for the sustainable management of water-based ecosystems and landscapes in Extremadura (Spain). Land, 8(1), 2.
- 55. Gard, T., Noggle, J. J., Park, C. L., Vago, D. R., & Wilson, A. (2014). Potential self-regulatory mechanisms of yoga for psychological health. Frontiers in human neuroscience, 770.
- 56. Ge, F., Wan, M., Zheng, A., & Zhang, J. (2020). How to deal with the negative psychological impact of COVID-19 for people who pay attention to anxiety and depression. Precision clinical medicine, 3(3), 161–168. https://doi.org/10.1093/pcmedi/pbaa023

- 57. Halpern, J., Cohen, M., Kennedy, G., Reece, J., Cahan, C., & Baharav, A. (2014). Yoga for improving sleep quality and quality of life for older adults. Alternative therapies in health and medicine, 20(3), 37–46.
- 58. Hari Dass, Baba (1978). Ashtanga Yoga Primer. Santa Cruz: Sri Ram Publishing. pp. bk. cover. ISBN 978-0-918100-04-7.
- 59. Haseena, V. A. The Need for Gender Uprising-Measures of Highlighting through Yoga. https://core.ac.uk/download/pdf/234674424.pdf
- 60. Hendriks, T., de Jong, J., & Cramer, H. (2017). The Effects of Yoga on Positive Mental Health Among Healthy Adults: A Systematic Review and Meta-Analysis. Journal of alternative and complementary medicine (New York, N.Y.), 23(7), 505–517. https://doi.org/10.1089/acm.2016.0334
- 61. Henninger, S. H., Fibieger, A. Y., Magkos, F., & Ritz, C. (2023). Effects of Mindful Eating and Yoga Dance among Overweight and Obese Women: An Exploratory Randomized Controlled Trial. Nutrients, 15(7), 1646. https://doi.org/10.3390/nu15071646
- 62. Hyde, A. (2012). The yoga in schools movement: Using standards for educating the whole child and making space for teacher self-care. Counterpoints, 425, 109-126.
- 63. Jacob, m. J. K. Yogic/ yogevic environmentalism. Everyman's science, 347. https://www.sciencecongress.nic.in/hindi/pdf/e-book/Dec_January_2013-14.pdf#page=31
- 64. Jagannathan A, Janardhana N, Hamza A, & Ragesh G. The Juxtaposition between Environmental Sustainability and Social Sustainability: An Indian Perspective on Climate Change Mental Health. In: Rinkel M and powers M (eds). Social Work Promote in Community and Environmental Sustainability: A Workbook for Global Social Workers and Educators. The International Federation of Social Workers, Mar 2017, p202-213.
- 65. Jahanbin, E. (2019). Yoga Therapy and Eating Disorders. Caspian Journal of Health Research, 4(1), 21-27.
- 66. Jain, V., Jain, K., Sharma, S., Chaitanya, S., & Prajna, S. (2017). Yoga-Preksha-Dhyan practice as a cost-effective preventive strategy against aggressiveness in primary school children. International Journal of Yoga and Allied Sciences, 6(2), 106-113.
- 67. Joyce, C., Roseen, E. J., Keysor, J. J., Gross, K. D., Culpepper, L., & Saper, R. B. (2021). Can Yoga or Physical Therapy for Chronic Low Back Pain Improve Depression and Anxiety Among Adults From a Racially Diverse, Low-Income Community? A Secondary Analysis of a Randomized Controlled Trial. Archives of physical medicine and rehabilitation, 102(6), 1049–1058. https://doi.org/10.1016/j.apmr.2021.01.072
- 68. Joyce, C., Kelly, K. C., Gurnani, S., Sherman, K. J., Roseen, E. J., & Saper, R. B. (2022). "In Class We Were All One." A Qualitative Exploration of Yoga and Educational Interventions for Predominantly Low-Income and Minority Adults with Chronic Low Back Pain. Journal of integrative and complementary medicine, 28(11), 870–877. https://doi.org/10.1089/jicm.2022.0557
- 69. Kanchibhotla, D., Kulkarni, S., & Singh, S. (2020). Effectiveness of a comprehensive yoga program on convicted extremist offenders. International journal of yoga, 13(1), 50.

- 70. Kahya, H. H., & Raspin, C. G. (2017). Yoga Therapy for the Mind Eight-Week Course: Participants 'Experiences. Explore (New York, N.Y.), 13(2), 116–123. https://doi.org/10.1016/j.explore.2016.12.006
- 71. Kaplan, R. and Kaplan, S. (1989). The experience of nature: A psychological perspective. Cambridge University Press, Cambridge, New York.
- 72. Katuwal, C. B. (2020). Spirituality Yoga and Women Empowerment Process. Research Nepal Journal of Development Studies (RNJDS), 3(2), 73-83.Kelley, H. H., Dollahite, D. C., James, S., & Marks, L. D. (2023). Changes in spiritual practices and relational well-being during the COVID-19 pandemic. Marriage & Family Review, 59(2), 41-64.
- 73. Khoshnaw, D. M., & Ghadge, A. A. (2021). Yoga as a complementary therapy for metabolic syndrome: A narrative review. Journal of integrative medicine, 19(1), 6–12. https://doi.org/10.1016/j.joim.2020.09.002
- 74. Koch, S., Esch, T., & Werdecker, L. (2022). Effects of a yoga-based stress intervention program on the blood pressure of young police officers: a randomized controlled trial. Journal of Integrative and Complementary Medicine, 28(3), 234-240.
- 75. Koncz, A., Nagy, E., Csala, B., Körmendi, J., Gál, V., Suhaj, C., Selmeci, C., Bogdán, Á. S., Boros, S., & Köteles, F. (2023). The effects of a complex yoga-based intervention on healthy psychological functioning. Frontiers in psychology, 14, 1120992. https://doi.org/10.3389/fpsyg.2023.1120992
- 76. Kovalsky, S., Hasisi B., Haviv N, Elisha E. (2021) Can Yoga Overcome criminality? The impact of Yoga on recidivism in Israeli prisons. International journal of Offender Therapy and Comparative Criminology, 65, 6-7.
- 77. Krishnan, S. (2003, December). Yoga: A remedy to respiratory illness. In Proceedings of the Third International Conference on Environment and Health, Chennai, India (pp. 15-17).
- 78. Kulkarni, A. C. S. The sudarshankriya yoga (sky) breathing technique—its inclusion as a good practice to combat climate change. https://d1wqtxts1xzle7.cloudfront.net/89999595/divya_kanchibhotla-libre.pdf?1661040512=&response-content disposition=inline%3B+filename%3DThe Sudarshan Kriya Yoga Sky Breathing T.pdf&Expires=1 718257196&Signature=CsE6WNm6Qgf8pcdc3XvR6FPSVxnfBIhkca4SLvkQQBzavTQZ0mD2dK-zDNK8jyj2cNQivCJ7COHLLAIv1ZkyDOgzn3QKkzHl1qUQ223XIp3j-dtlGZBHbIVYHfDorUDytl-SHH5~xQSdYc8F3H1d5GrR9NeVI0q0S017oDHJjNDFigTb3Wfq9pCa~Ee4xTHDsAtpT-efJ0ZRrZSHMsYgo~goVg9SICJKIIDIwLHb5RFnW7D74AzlOuTd6p1iu7jrVm3u8xzv-kkBB5wnAZ1D3jc~K73I85TDl485TYoOZxbwh3U3DlH5mfFUIVEhKSbKTWxU9WXS2MBBwVRmvgBm1g_&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
- 79. Kumar, A. (2018). Significance of Yoga in Human daily Life. International Journal of Yogic, Human Movement and Sports Sciences, 3(1), 191-194.
- 80. Kumar, V., Jagannathan, A., Bhargav, H., Varambally, S., & Gangadhar, B. N. (2021). Generic Yoga Modules for Clinical and Research Settings-Need of the Hour. International journal of yoga therapy, 31(1), Article_25. https://doi.org/10.17761/2021-D-18-00016

- 81. Kwok, J. Y. Y., Choi, E. P. H., Wong, J. Y. H., Lok, K. Y. W., Ho, M. H., Fong, D. Y. T., ... & Auyeung, M. (2023). A randomized clinical trial of mindfulness meditation versus exercise in Parkinson's disease during social unrest. npj Parkinson's Disease, 9(1), 7.
- 82. Lalonde, A. M. G. (2012). Embodying asana in all new places: transformational ethics, yoga tourism and sensual awakenings (Doctoral dissertation).
- 83. Lewis, C. A. (1990). Gardening as a healing process. In Francis, M. and Hester, R. T., Jr (eds) The meaning of gardens: Idea, place and action. The MIT Press: Cambridge, pp.244–251. 9.
- 84. Lin, S. L., Huang, C. Y., Shiu, S. P., &Yeh, S. H. (2015). Effects of Yoga on Stress, Stress Adaption, and Heart Rate Variability Among Mental Health Professionals-A Randomized Controlled Trial. Worldviews on evidence-based nursing, 12(4), 236–245. https://doi.org/10.1111/wvn.12097
- 85. Lundt, A., & Jentschke, E. (2019). Long-Term Changes of Symptoms of Anxiety, Depression, and Fatigue in Cancer Patients 6 Months After the End of Yoga Therapy. Integrative cancer therapies, 18, 1534735418822096. https://doi.org/10.1177/1534735418822096
- 86. Mahadevan, B., Setty, A. G., & Subramanya, P. (2016). Effect of Yoga on Human Aggression and Violent Behaviour—A Review of the Indian Yoga Scriptures and Scientific Studies. Social and Education History, 5(1), 83-104.
- 87. Mahala, D. C. (2019). Yoga-A Royal Path for Stress Free Climate in Higher Education. https://www.journalofsports.com/pdf/2019/vol4issue1/PartAV/6-2-121-207.pdf
- 88. Malini, K. R., & Yasa, W. B. (2023). YOGA AS A CONTEMPORARY WAY OF LIFE. Journal of Applied Science and Social Science, 13(01), 10-18.
- 89. Malini, K. H., Yasa, I. W. S., & Utama, I. W. B. (2018). Yoga as lifestyle of postmodern society in Bintaro Jaya. International Journal of Social Sciences and Humanities, 2(2), 1-14.
- 90. Martin, B., Peck, B., & Terry, D. (2022). Young Children's Experiences with Yoga after School. Journal of Occupational Therapy, Schools, & Early Intervention, 1-18.
- 91. Marques, C. S., Ferreira, J., Rodrigues, R. G., & Ferreira, M. (2011). The contribution of yoga to the entrepreneurial potential of university students: a SEM approach. International Entrepreneurship and Management Journal, 7, 255-278.
- 92. Mathai, B. S. Yoga as a Tool in Peace Education. Adapted from Gandhi Marg, Volume 33, Number 1, April-June 2011.
- 93. Mazumdar, A. (2018). India's soft power diplomacy under the Modi administration: Buddhism, diaspora and yoga. Asian Affairs, 49(3), 468-491.
- 94. McCartney, P. (2021). The not So United States of Yoga land. Post-Nationalism, Environmentalism, and Applied+ Yoga's Sustainable Development. Nationalism. Past, Present, and Future. New York: Nova, 1-122.
- 95. Meister, K., & Becker, S. (2018). Yoga bei psychischen Störungen [Yoga for mental disorders]. Der Nervenarzt, 89(9), 994–998. https://doi.org/10.1007/s00115-018-0537-x

- 96. Mendelson, T., Greenberg, M. T., Dariotis, J. K., Gould, L. F., Rhoades, B. L., & Leaf, P. J. (2010). Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. Journal of abnormal child psychology, 38(7), 985–994. https://doi.org/10.1007/s10802-010-9418-x.
- 97. Miller, C. P. (2020). Soft power and biopower: Narendra Modi's "double discourse" concerning yoga for climate change and self-care. Journal of Dharma Studies, 3, 93-106.
- 98. Mishra, A. Relevance and Utility of Yoga Education in Present Scenario with special reference to NEP 2020. https://theresearchdialogue.com/wp-content/uploads/2023/02/12-Dr.-Avantika-Mishra-.pdf
- 99. Mooventhan, A., & Nivethitha, L. (2017). Evidence based effects of yoga in neurological disorders. Journal of clinical neuroscience: official journal of the Neurosurgical Society of Australasia, 43, 61–67. https://doi.org/10.1016/j.jocn.2017.05.012
- 100. Mulla, Z. R., & Krishnan, V. R. (2006). Karma Yoga: A conceptualization and validation of the Indian philosophy of work. Journal of Indian Psychology, 24(1/2), 26-43.
- 101. H. R. Nagendra, & Nagarathana, R. (2010). New perspectives in stress management: Swami Vivekananda Yoga Prakashana. Bengaluru, Karnataka, India.
- 102. Nantha Kumar C. (2018). The benefits of yoga in children. Journal of integrative medicine, 16(1), 14–19. https://doi.org/10.1016/j.joim.2017.12.008
- 103. Nguyen-Feng, V. N., Clark, C. J., & Butler, M. E. (2019). Yoga as an intervention for psychological symptoms following trauma: A systematic review and quantitative synthesis. Psychological services, 16(3), 513–523. https://doi.org/10.1037/ser0000191
- 104. Norman, M. (2015). Prison yoga as a correctional alternative?: Physical culture, rehabilitation, and social control in Canadian prisons. Alternative offender rehabilitation and social justice: Arts and physical engagement in criminal justice and community settings, 78-98.
- 105. O'Shea, M., Capon, H., Evans, S., Agrawal, J., Melvin, G., O'Brien, J., & McIver, S. (2022). Integration of hatha yoga and evidence-based psychological treatments for common mental disorders: An evidence map. Journal of clinical psychology, 78(9), 1671–1711. https://doi.org/10.1002/jclp.23338
- 106. Padhy, S. (2013). Ethno-ecological Introspection into Bhagawatgeeta: 4. Ecological Responsibility of Humanbeings. Journal of Biodiversity, 4(2), 79-82.
- 107. Patel, G., Brosnan, C., & Taylor, A. (2023). Understanding the role of context in health policy implementation: a qualitative study of factors influencing traditional medicine integration in the Indian public healthcare system. Health sociology review: the journal of the Health Section of the Australian Sociological Association, 1–17. Advance online publication. https://doi.org/10.1080/14461242.2023.2210550

- 108. Parajuli, N., Pradhan, B., & Bapat, S. (2022). Effect of yoga on cognitive functions and anxiety among female school children with low academic performance: A randomized control trial. Complementary therapies in clinical practice, 48, 101614. https://doi.org/10.1016/j.ctcp.2022.101614
- 109. Parashar, A., & Bhardwaj, A. (2014). The Role of Yoga to Promoting Health Tourism in Rishikesh. International Journal of Interdisciplinary Research, 1(3), 1-5.
- 110. Parvathi, K. (2019). The role of Educational Technology in teaching. Journal of Education and Development, 9(18), 140-146.
- 111. Pandey, S. T., Verma, O., Pandey, D. S., Gill, S., Patel, J. C., Patel, G. N., & Thakur, D. M. (2015). Yogic Farming through Brahma Kumaris Raja Yoga Meditation: An Ancient Technique for Enhancing Crop Performance. Asian Agri-History, 19(2).
- 112. Pastan C. D. (2021). Mind-Body Wellness: A Complement to Dental Education and Professional Development. International journal of yoga, 14(3), 239–243. https://doi.org/10.4103/ijoy.ijoy_7_21
- 113. Perey, I., & Cook-Cottone, C. (2020). Eating disorders, embodiment, and yoga: a conceptual overview. Eating disorders, 28(4), 315–329. https://doi.org/10.1080/10640266.2020.1771167
- 114. Perez, G. K., Haime, V., Jackson, V., Chittenden, E., Mehta, D. H., & Park, E. R. (2015). Promoting resiliency among palliative care clinicians: stressors, coping strategies, and training needs. Journal of palliative medicine, 18(4), 332–337. https://doi.org/10.1089/jpm.2014.0221
- 115. Petering, R., Barr, N., Srivastava, A., Onasch-Vera, L., Thompson, N., & Rice, E. (2021). Examining impacts of a peer-based mindfulness and yoga intervention to reduce interpersonal violence among young adults experiencing homelessness. Journal of the Society for Social Work and Research, 12(1), 41-57.
- 116. Platt, L. M., Whitburn, A. I., Platt-Koch, A. G., & Koch, R. L. (2016). Non pharmacological Alternatives to Benzodiazepine Drugs for the Treatment of Anxiety in Outpatient Populations: A Literature Review. Journal of psychosocial nursing and mental health services, 54(8), 35–42. https://doi.org/10.3928/02793695-20160725-07
- 117. Prabhakaran, D., Ajay, V. S., & Tandon, N. (2019). Strategic Opportunities for Leveraging Low-cost, High-impact Technological Innovations to Promote Cardiovascular Health in India. Ethnicity & disease, 29(Suppl 1), 145–152. https://doi.org/10.18865/ed.29.S1.145.
- 118. Pratiwi, D. (2021). Creating Shared Value (CSV) based on the system in yoga related to corporate awareness in the practice of Corporate Social Responsibility (CSR). The Indonesian Accounting Review, 11(1), 1-8.
- 119. Purohit, S. P., & Pradhan, B. (2016). Effect of yoga program on executive functions of adolescents dwelling in an orphan home: A randomized controlled study. Journal of traditional and complementary medicine, 7(1), 99–105. https://doi.org/10.1016/j.jtcme.2016.03.001.

- 120. Rohde, C. L. E. and Kendle, A. D. (1994). Report to English nature—Human well-being, Natural landscapes and wildlife in urban areas: A review. Department of Horticulture and Landscape and the Research Institute for the Care of the Elderly, University of Reading, Bath. Ulrich, R. S. and Parsons, R. (1992). Influences of passive experiences with plants on individual well-being and health. In Relf, D. (ed.) Role of horticulture in human well- being and social development: A national symposium. Timber Press, Arlington, Virginia, pp. 93–103
- 121. Roseen, E. J., Gerlovin, H., Femia, A., Cho, J., Bertisch, S., Redline, S., Sherman, K. J., & Saper, R. (2020). Yoga, Physical Therapy, and Back Pain Education for Sleep Quality in Low-Income Racially Diverse Adults with Chronic Low Back Pain: a Secondary Analysis of a Randomized Controlled Trial. Journal of general internal medicine, 35(1), 167–176. https://doi.org/10.1007/s11606-019-05329-4
- Runkle, J. D., Risley, K., Roy, M., & Sugg, M. M. (2023). Association Between Perinatal Mental Health and Pregnancy and Neonatal Complications: A Retrospective Birth Cohort Study. Women's health issues: official publication of the Jacobs Institute of Women's Health, 33(3), 289–299. https://doi.org/10.1016/j.whi.2022.12.001
- 123. Sachithanantha, P., & Thavapraba, S. (2017). Environmental Conservation Through Yoga Practice and Its Relevance to Contemporary Society—A Study. http://repository.kln.ac.lk/handle/123456789/16974
- 124. Samanta, A., Vikramaditya, D., & Singh, N. (2017). Unlocking the Impact of Sustainable Development Goals (SDGs): Kalinga Institute of Social Sciences (KISS) Realizing the Opportunity. Indian Journal of Sustainable Development, 3(1), 1-12.
- 125. San Lazaro Campillo, I., Meaney, S., McNamara, K., & O'Donoghue, K. (2017). Psychological and support interventions to reduce levels of stress, anxiety or depression on women's subsequent pregnancy with a history of miscarriage: an empty systematic review. BMJ open, 7(9), e017802. https://doi.org/10.1136/bmjopen-2017-017802
- 126. Saper, R. B., Sherman, K. J., Delitto, A., Herman, P. M., Stevans, J., Paris, R., Keosaian, J. E., Cerrada, C. J., Lemaster, C. M., Faulkner, C., Breuer, M., & Weinberg, J. (2014). Yoga vs. physical therapy vs. education for chronic low back pain in predominantly minority populations: study protocol for a randomized controlled trial. Trials, 15, 67. https://doi.org/10.1186/1745-6215-15-67
- 127. Saxena, K., Verrico, C. D., Saxena, J., Kurian, S., Alexander, S., Kahlon, R. S., Arvind, R. P., Goldberg, A., DeVito, N., Baig, M., Grieb, A., Bakhshaie, J., Simonetti, A., Storch, E. A., Williams, L., & Gillan, L. (2020). An Evaluation of Yoga and Meditation to Improve Attention, Hyperactivity, and Stress in High-School Students. Journal of alternative and complementary medicine (New York, N.Y.), 26(8), 701–707. https://doi.org/10.1089/acm.2020.0126
- 128. Sharma, A. K., & Talwar, B. (2005). Corporate social responsibility: modern vis-à-vis Vedic approach. Measuring Business Excellence, 9(1), 35-45.
- 129. Sharma, K., Anand, A., & Kumar, R. (2020). The role of Yoga in working from home during the COVID-19 global lockdown. Work, 66(4), 731-737.

- 130. Sharma, S., Jain, K., Sharma, A. K., Kalia, V., & Jain, V. (2020). Potential Application of Yoga-Preksha-Meditation to Prevent Stress-Induced Anger in Healthy Adults-A Pilot Study. International Journal of Medicine and Public Health, 10(4).
- 131. Shidhaye, R., Bangal, V., Bhargav, H., Tilekar, S., Thanage, C., Gore, S., Doifode, A., Thete, U., Game, K., Hake, V., & Kunkulol, R. (2023). Feasibility, acceptability, and preliminary efficacy of yoga to improve maternal mental health and immune function during the COVID-19 crisis (Yoga-M2 trial): a pilot randomized controlled trial. Frontiers in human neuroscience, 17, 1115699. https://doi.org/10.3389/fnhum.2023.1115699
- 132. Shrivastava, S. R., Shrivastava, P. S., & Ramasamy, J. (2015). Mainstreaming of Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy with the health care delivery system in India. Journal of traditional and complementary medicine, 5(2), 116–118. https://doi.org/10.1016/j.jtcme.2014.11.002
- 133. Shroff, F. M., Asgarpour, M., &Fm, S. (2017). Yoga and mental health: A review. PhysiotherRehabil, 2(132), 2573-0312.
- 134. Singh, A. R., & Singh, S. A. (2008). Diseases of poverty and lifestyle, well-being and human development. Menssana monographs, 6(1), 187–225. https://doi.org/10.4103/0973-1229.40567.
- 135. Singh, S. K. Relevance of Patanjali Yoga Sutrás, its Kriyás in combating the corruption in social paradigm. https://www.researchgate.net/profile/Sandeep-Singh-246/publication/363087933 Relevance of Patanjali Yoga Sutras its Kriyas in combating the corruption in social paradigm/links/630d919d1ddd4470211c6242/Relevance-of-Patanjali-Yoga-Sutras-its-Kriyas-in-combating-the-corruption-in-social-paradigm.pdf
- 136. Singh, S., Sethi, P. K., & Singh, V. (2022). Role of yoga and ayurveda in nutrition and ecology for sustainable healthy living. International Journal of Physical Education Sports Management and Yogic Sciences, 12(4), 13-18.
- 137. Sinha, A., & Kumari, S. (2021). Integrating yoga with education in the modern schooling system: A theoretical model based on ancient knowledge and modern research. Yoga Mimamsa, 53(1), 46-58.
- 138. Sreeni, K. R. R. (2020). Sadivayal Village Development Model: A Smart Sustainable Tribal Hamlet for Community. Int. J. Incl. Dev, 6, 23-29.
- 139. Stephens, B. (2023). Yoga Beats Stress Provides Protection Against Poor Mental Health Outcomes. https://digitalcommons.montclair.edu/student-research-symposium/2023/poster01/40/
- 140. Suárez-Iglesias, D., García-Porro, M., Clardy, A., & Ayán Pérez, C. (2022). Feasibility and effects of a chair-based yoga program for adults with neurodisability. Disability and rehabilitation, 44(18), 5220–5230. https://doi.org/10.1080/09638288.2021.1933617
- 141. Swamy, H. D., Nagarajan, K., & Babu, N. (2021). Yogic principles of artha and dāna with reference to individual and corporate social responsibility. International Journal of Yoga, 14(3), 248.
- 142. Swamy, H. D., & Agoramoorthy, G. (2022). Enhancing the sustainable development goals through yoga-based learning. Journal of Applied Consciousness Studies, 10(1), 8.

- 143. Telles, S., Naveen, K. V., & Dash, M. (2007). Yoga reduces symptoms of distress in tsunami survivors in the Andaman Islands. Evidence-based complementary and alternative medicine: eCAM, 4(4), 503–509. https://doi.org/10.1093/ecam/nem069
- 144. Tiwari, I., & Negi, C. S. (2019). The relevance of yoga in developing holistic health and holistic community. Environment Conservation Journal, 20(SE), 83-88.
- 145. Tomás, C. C., Oliveira, E., Sousa, D., Uba-Chupel, M., Furtado, G., Rocha, C., Teixeira, A., Ferreira, P., Alves, C., Gisin, S., Catarino, E., Carvalho, N., Coucelo, T., Bonfim, L., Silva, C., Franco, D., González, J. A., Jardim, H. G., Silva, R., Baixinho, C. L., ... Rama, L. (2016). Proceedings of the 3rd IPLeiria's International Health Congress: Leiria, Portugal. 6-7 May 2016. BMC health services research, 16 Suppl 3(Suppl 3), 200. https://doi.org/10.1186/s12913-016-1423-5
- 146. Tolahunase, M. R., Sagar, R., Faiq, M., & Dada, R. (2018). Yoga- and meditation-based lifestyle intervention increases neuroplasticity and reduces severity of major depressive disorder: A randomized controlled trial. Restorative neurology and neuroscience, 36(3), 423–442. https://doi.org/10.3233/RNN-170810
- 147. Tremont, G., Davis, J., Ott, B. R., Uebelacker, L., Kenney, L., Gillette, T., Britton, K., & Sanborn, V. (2022). Feasibility of a Yoga Intervention for Individuals with Mild Cognitive Impairment: A Randomized Controlled Trial. Journal of integrative and complementary medicine, 28(3), 250–260. https://doi.org/10.1089/jicm.2021.0204
- Tyagi, A., Cohen, M., Reece, J., & Telles, S. (2014). An explorative study of metabolic responses to mental stress and yoga practices in yoga practitioners, non-yoga practitioners and individuals with metabolic syndrome. BMC complementary and alternative medicine, 14, 445. https://doi.org/10.1186/1472-6882-14-445
- 149. UnitedNations. (n.d.).SustainableDevelopmentGoals.AdoptedinUNGeneralAssembly 2015. Retrieved from https://www.un.org/sustainabledevelopment/health/.
- 150. United Nations. (n.d.). International Day of Yoga, 21 June. Adopted in UN General Assembly on 11 December 2014, by resolution 69/131. Retrieved from https://www.un.org/en/observances/yoga-day/.
- 151. Upadhyay, P., Narayanan, S., Khera, T., Kelly, L., Mathur, P. A., Shanker, A., & Subramaniam, B. (2022). Perceived stress, resilience, and wellbeing in seasoned ishayoga practitioners compared to matched controls during the COVID-19 pandemic. Frontiers in public health, 10.
- 152. Verma, A., Shete, S., Kulkarni, D., & Bhogal, R. S. (2017). Effect of yoga practices on micronutrient absorption in urban residential school children. Journal of Physical Therapy Science, 29(7), 1254-1258.

- 153. Verma, S., & Shivom, M. (2019). Philosophy, Practice and Process of Yoga in modern scenario.https://dlwqtxts1xzle7.cloudfront.net/65035127/philosophy practice and process of yoga in modern scenario dr. sudhanshu verma original article-libre.pdf?1606380210=&response-content-
 - <u>disposition=inline%3B+filename%3DPhilosophy_Practice_and_Process_of_Yoga.pdf&Expires=1718</u> 257742&Signature=aj1Sz25naqjqccUplz5ITsT02iw8oSD7rO9tTg0N-
 - EtFlktCQvpzaJFF3sweI4sk6wa3jJYl97RCXUzz1BS~RL6kz~M92KMdDLkdH7UCXc2O5KEIGhtTpBDG1tfF~h7LJBHb9MEUvKBqpt4otmRV7hcXQB83tOFbUIG8qXhfmbQzKyspe8ftHtYbFZXJ6IikzA0W~dTDBaWXyY4yytFqNa4cZmIVplzSG9WhfkkMtCZ7cy7NW9Gt7fz1db81AlclAP8tCgUg94DAy3DSIH~VZCWZ7b4Em4h6BEPPzbT~VAq8wiLKCjvE6sOb7J8LXIVqqV5ZPXSy-
 - YS7IynuUxDvog__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
- 154. Vijay, G., & Sreekanth, K. Yoga and Mental Health. (Page no 260) International Conference on Enhancing Skills in Physical Education and Sport Science 2020
- 155. Viswanathan, V., Sivakumar, S., Sai Prathiba, A., Devarajan, A., George, L., & Kumpatla, S. (2021). Effect of yoga intervention on biochemical, oxidative stress markers, inflammatory markers and sleep quality among subjects with type 2 diabetes in South India: Results from the SATYAM project. Diabetes research and clinical practice, 172, 108644. https://doi.org/10.1016/j.diabres.2020.108644
- 156. Vyas-Doorgapersad, S., & Surujlal, J. (2016). Gender-based yoga for conflict resolution. International Journal of Business and Management Studies, 8(1), 169-185.
- 157. Vyas-Doorgapersad, S., & Surujlal, J. (2014). Yoga for gender-based empowerment: a new approach in employee wellness. Mediterranean Journal of Social Sciences, 5(13), 268.
- 158. Wagh, M. G. J. (2023). Yoga for sustainable development. Dr. Eknath mundhe Professor, Rayat Shikshan Sanstha's, SM Joshi College Hadapsar, Pune-411028, 21.
- 159. Walsh, R. (2002). Terrorism and other global terrors: An integral analysis. Journal of Transpersonal Psychology, 34(1), 13-22.
- 160. Wang, G., Liang, C., & Sun, G. (2022). Yoga's Therapeutic Effect on Perinatal Depression: A Systematic Review and Meta-Analysis. Psychiatria Danubina, 34(2), 195–204. https://doi.org/10.24869/psyd.2022.195
- 161. Weisner, M. L., & Cameron, M. M. (2020). Does Yoga Increase Sustainability?: Enhanced Sensory Awareness and Environmental Behaviour in South Florida. Worldviews: Global Religions, Culture, and Ecology, 24(1), 58-80.
- 162. Wolfenden, J. V. (2022). Bhakti as Environmental Ethic: Assessing the Religious Vedic Tradition of Bhakti-Yoga as a Potential Environmental Ethic. https://scholar.sun.ac.za/server/api/core/bitstreams/7d4b681b-8fb9-4db0-873e-8cb28dc601ac/content
- 163. Wurz, A., McLaughlin, E., Hughes, K., Ellis, K., Chen, A., Cowley, L., & Culos-Reed, S. N. (2023). Exploring feasibility, perceptions of acceptability, and potential benefits of an 8-week yoga intervention delivered by videoconference for young adults affected by cancer: a single-arm hybrid effectiveness-implementation pilot study. Pilot and Feasibility Studies, 9(1), 1-20.

- 164. Wu, Y. C., Shen, S. F., Lee, S. Y., Chen, L. K., & Tung, H. H. (2023). The effectiveness of mind-body approaches for enhancing resilience in older adults: A systematic review and network meta-analysis. Archives of Gerontology and Geriatrics, 104949.
- 165. Yu, X., Liu, Y., Huang, Y., & Zeng, T. (2022). The effect of non pharmacological interventions on the mental health of high-risk pregnant women: A systematic review. Complementary therapies in medicine, 64, 102799. https://doi.org/10.1016/j.ctim.2022.102799
- 166. Yüce, A., & Güneş, Z. (2021). Do Yoga Be Sustainable: Examination of sustainable consumer behaviour of yoga practitioner. International Journal of Marketing, Communication and New Media, (9).
- 167. Zafeiroudi, A., Pipinia, M., Yfantidou, G., & Georgomanos, S. (2021). The Effects of Yoga Practice on Practitioners' Environmental Behaviours & Sustainability. Environmental Management and Sustainable Development, 10(3), 76-88.
- 168. Zelazo, P. D., Forston, J. L., Masten, A. S., & Carlson, S. M. (2018). Mindfulness Plus Reflection Training: Effects on Executive Function in Early Childhood. Frontiers in psychology, 9, 208. https://doi.org/10.3389/fpsyg.2018.00208.
- 169. Zeltzer, C. (2002). The role of the third chakra in the psychology of terrorism. Psychological Perspectives, 44(1), 34-45.

