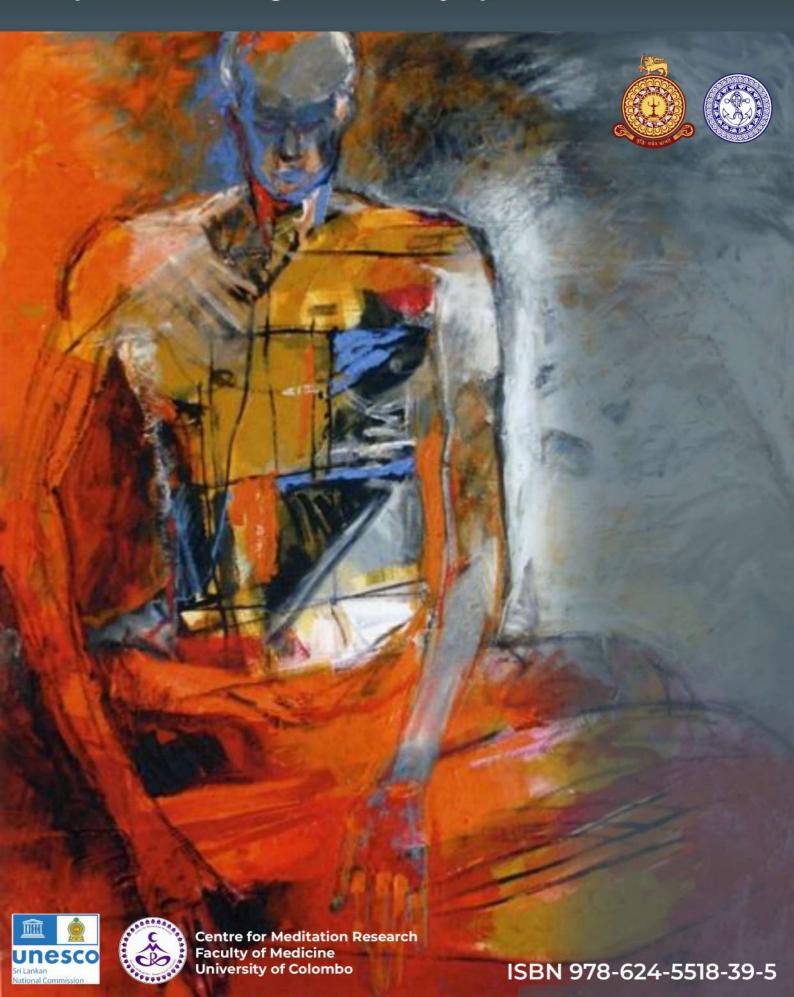
WORLD MEDITATION DAY 2024

Report of the Inaugural Global Symposium on Meditation



World Meditation Day 2024 Report of the Inaugural Global Symposium on Meditation

Aims and Scopes

World Meditation Day – Report of the Inaugural Global Symposium on Meditation provides a platform for sharing multidisciplinary insights on meditation. This peer-reviewed, open access publication features selected contributions from the global symposium, highlighting scientific, philosophical, and practical perspectives on the impact of meditation on health, education, and well-being.

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Coverpage Art

Thinker Meditating

Prof. Sarath Chandrajewa Acrylic on Canvas, 36 x 36 inches, 2006, Goethe Institute, Colombo chandrajeewasarath.blogspot.com

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FOREWORD



Professor Dilshani Dissanayake Director Centre for Meditation Research Faculty of Medicine University of Colombo

Meditation is an ancient practice that has been in existence for over 2,500 years, with some traditions suggesting its origins date back even further. Over time, it has evolved into a diverse array of techniques. When practiced consistently, meditation produces a wide range of positive outcomes, spanning physical health, psychological well-being, emotional regulation, and behavioral resilience.

The Centre for Meditation Research (CMR-UOC) was established as an extension of the University of Colombo's meditation research initiative. Originally developed under a project funded by the World Bank, the Centre now functions in collaboration with local and international organizations, maintaining a firm commitment to advancing the scientific understanding of meditation.

The research arm of CMR operates as a multidisciplinary research unit dedicated to exploring the genetic, physiological, psychological, and behavioral impacts of meditation techniques, mainly of Buddhist Theravada Origin. Our research is grounded in scientific rigour and a commitment to improving health and wellbeing through evidence-based interventions.

Key areas of focus of our research include conducting empirical studies to evaluate the health benefits of various meditation practices; designing, piloting, and validating meditation-based intervention protocols for diverse populations; supporting cross-disciplinary resource development to incorporate meditation into healthcare, education, and policy-making; advocating for evidence-based policy reforms that promote the integration of meditation into public health frameworks; facilitating academic and institutional collaborations both nationally and internationally and disseminating knowledge through symposia, workshops and certificate courses.

Our vision is to become a Centre of excellence in meditation research, recognized both locally and globally. We aim to set standards in meditation science, develop scalable intervention models, and contribute to global discourse on contemplative health practices.

In recognition of the growing global appreciation for meditation, the United Nations General Assembly declared December 21st as World Meditation Day to uphold the right of every individual to attain the highest possible standard of physical and mental well-being.

In Sri Lanka, this important occasion was marked by an online global symposium organized by the Centre for Meditation Research at the Faculty of Medicine, University of Colombo, in collaboration with the Sri Lankan National Commission for UNESCO (United Nations Educational, Scientific and Cultural Organization). As a specialized UN agency, UNESCO promotes peace, sustainable development, and intercultural dialogue through international cooperation in education, science, culture, and the arts.

The insights, discussions, and recommendations shared at this symposium are compiled into a comprehensive publication by CMR, with funding provided by the Sri Lankan National Commission for UNESCO. We are grateful to all the distinguished speakers and contributors who shared their expertise and granted permission to publish their presentations and ideas.

I extend my heartfelt thanks to my co-editors, Prof. Saroj Jayasinghe and Prof. Nirmalie Pallewatta, for their invaluable editorial input and guidance throughout the preparation of this publication.

Special appreciation goes to Ms. Sunesha Perera for her dedication to compiling materials, providing secretarial support, coordinating with the editorial team, and assembling the final publication. I also thank Mr. Lakdinu Samaranayake for his work in formatting, illustrating, and overseeing the administrative processes involved in finalizing the publication for print.

Through our continued research, training, and outreach efforts, the Centre for Meditation Research remains committed to pushing the boundaries of meditation science for the benefit of individuals, communities, and global well-being.

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MESSAGE FROM THE DEAN



Senior Prof. Vajira Dissanayake Dean Faculty of Medicine University of Colombo

The World Meditation Day Global Symposium was a first-of-its-kind initiative organized by The Centre for Meditation Research at the Faculty of Medicine, University of Colombo to celebrate the World Meditation Day declared by the United Nations in 2024. Established in 2023, the Centre has developed into a leading institution in this subject area drawing on extensive research in meditation and its various applications in medicine. Professor Saroj Jayasinghe, Emeritus Professor of clinical medicine, first proposed that the celebration of World Meditation Day in 2024 be marked by bringing together individuals from around the world in a virtual global webinar, thus facilitating a broader exchange of knowledge and experiences. This initiative was made possible through a partnership with UNESCO, and it is hoped that this collaboration will continue to grow in the future.

In a world facing with unprecedented challenges—from the daily pressures of modern life to the psychological toll of conflict and displacement—the need for mental resilience has never been

more urgent. Amid these growing concerns, the role of meditation is gaining global recognition as a scientifically credible and culturally grounded approach to enhancing mental and physical well-being.

It is in this context that I take great pride in the establishment and continued growth of the Centre for Meditation Research (CMR) at the Faculty of Medicine, University of Colombo. The faculty, often regarded as the "mother of all medical schools" in Sri Lanka, has a long-standing tradition of academic excellence and leadership in medical education, research, and community service. The CMR is a natural extension of this tradition—a bold and timely initiative that bridges ancient wisdom with modern scientific inquiry.

Under the aegis of the Faculty, the CMR brings together interdisciplinary expertise to investigate the physiological, psychological, behavioral, and even genetic effects of meditation—particularly practices rooted in Sri Lanka's own *Theravāda* Buddhist heritage.

The Centre is not only pioneering in its research focus but also in its efforts to translate findings into meaningful interventions that can inform public health policy, educational curricula, and clinical practice. I am especially pleased with the visionary leadership and collaborative spirit that have characterized the development of the Centre. Through partnerships with both local and international organizations, the CMR has positioned itself as a catalyst for innovation in the field of contemplative science.

Furthermore, Sri Lanka's instrumental role in the adoption of World Meditation Day by the United Nations stands as a testament to our nation's global leadership in promoting the benefits of meditation. As a co-signatory to this important declaration, Sri Lanka has helped elevate meditation to its rightful place on the global health and development agenda. This achievement not only underscores our commitment to holistic well-being but also reflects the country's rich spiritual and cultural legacy.

The Faculty of Medicine remains fully committed to supporting the work of the Centre for Meditation Research. Through continued investment in research, training, and outreach, we aim to foster a new generation of clinicians, researchers, and public health advocates who understand the value of integrative approaches to health. As we move forward, we envision the CMR becoming a regional and global hub for excellence in meditation research, contributing not only to academic knowledge but also to the healing and resilience of communities in Sri Lanka and beyond.

Let us continue to strengthen this vital work—uniting science and compassion in the service of humanity.

Message from the Chargé d'Affaires of the Permanent Mission of Sri Lanka at the United Nations in New York



Mr. Sugeeshwara Gunaratna
Director General for Europe & North America
Ministry of Foreign Affairs
Sri Lanka

It is my pleasure to provide this message for the virtual global symposium organized by the Centre for Meditation Research, Faculty of Medicine, University of Colombo. It is organized on meditation and its global impact to mark the World Meditation Day. It was my humble privilege to spearhead the United Nations General Assembly resolution on behalf of Sri Lanka, declaring 21st December as World Meditation Day along with the core group of countries comprising of Liechtenstein, Andorra, Mexico, Nepal and India. The resolution recognizes the link between meditation and Sustainable Development Goals, especially, target 3.4 on promoting mental health and wellbeing.

It also recognizes the universal applicability of meditation as well as complementary approaches to mental health and well-being. This initiative was a small but significant step to raise awareness of meditation in our effort to create a peaceful and sustainable world through the nurturing of contented and peaceful human beings. Sri Lanka, as a proud inheritor of the tradition of meditation practice, can take humble pride in being among the group of countries providing this gift to the world.

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Address by the Secretary General of the Sri Lankan National Commission for UNESCO



Dr. Sirimali FernandoSecretary General
Sri Lanka National Commission for UNESCO

The United Nations General Assembly unanimously adopted a resolution co-sponsored by Sri Lanka to designate December 21st of every year as a global day to celebrate the significance of meditation. This momentous decision marked a global recognition of meditation as a vital practice, not only for enhancing health and well-being, but also for spreading awareness of its transformative potential to cultivate peace and compassion worldwide.

In Sri Lanka, this historic occasion was marked with a virtual symposium organized by the Centre for Meditation Research in the Faculty of Medicine, University of Colombo, in collaboration with the Sri Lankan National Commission for UNESCO. The symposium aimed at exchanging ideas among contemporary researchers and rich meditation practitioners with academic research and health care communities, uniting traditional practices and insights with contemporary scientific explorations.

As is well known, UNESCO, the United Nations Educational, Scientific and Cultural Organization, was established in the aftermath of World War 2. Its founding principal declared, "Since wars begin in the minds of men and women, it is in the minds of men and women that the defenses of peace must be constructed ". This visionary statement underscores the mind's essential role as the creator of peace. However, despite this noble foundation, the immense potential of the mind as a transformative force for fostering unity, compassion, and harmony remains underexplored.

Across millennia, meditation has been one of humanity's most profound practices for understanding and nurturing the mind's limitless capabilities. In the present challenging times marked by armed conflicts, climate crisis, and rapid technological transformations, meditation offers us a vital pathway. Meditation serves as a reminder to cultivate peace, tolerance, and compassion not only within us, but also in our communities and the world at large. World Meditation Day is a call to nurture human consciousness as a means of supporting health and well-being while creating peace and harmony across borders.

Meditation, one of humanity's oldest spiritual practices, has been cherished across cultures and traditions. It reflects a shared aspiration not only for inner peace and transcendence but also for a deeper understanding of existence. In the Buddhist tradition, for example, the insight meditation known as Vipassana uses a concentrated mind to observe the realities of nature and existence through experiential learning. In contrast, western science, which has shaped the modern scientific era since the 13th century, has primarily focused on understanding physical phenomena through external experiments with limited understanding of the mind and emotions.

Recent advances in neuroscience and neurotechnology have created new opportunities to study the changes in the brain during meditation, with cognition and emotions and how it affects the overall well-being. However, as we embrace the potential of neurotechnology, it is important to remain vigilant about its ethical implications. UNESCO recognizes both the promise and perils of frontier technologies, including neurotechnology, which can access, manipulate and emulate brain functions. When combined with artificial intelligence, these advancements challenge our notions of identity, dignity, freedom of thought, and mental privacy. In response to these concerns, UNESCO is developing international guidelines to ensure the ethical use of such technologies, which will be adopted at its General Conference in 2025.

The symposium honoring the First World Meditation Day offered a unique platform to unite the wisdom of traditional meditation practices with the experimental rigor of modern scientific and technological research. Such meaningful exchanges would allow individuals to deepen their understanding of meditation's physical, emotional, and spiritual dimensions, while ensuring that scientific advancements in the field are guided by ethical principles. In conclusion, it is important to draw inspiration from meditation's timeless teachings- to pause, reflect, and cultivate peace within us and for the betterment of our world.

Global impact of meditation



Emeritus Prof. Saroj Jayasinghe

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Emeritus Professor of Medicine University of Colombo

Board Member
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The United Nations General Assembly recently declared the 21st of December as World Meditation Day. As with many UN declarations, this new resolution draws on previous resolutions and builds upon a foundation of prior commitments to global well-being and mental health. The focus of the Declaration is global health, and the positive health impacts of meditation. Examples of the latter include its efficacy in controlling hypertension, alleviating cancer pain, improving glycemic control in diabetes, and reducing stress and chronic pain.

Systematic reviews and numerous publications continue to support the view that meditation offers a wide range of health benefits. In the light of the Declaration, it is relevant to consider the broader implications of meditation beyond its health benefits. Specifically, would meditation equip individuals, organizations, and nations to effectively confront and navigate emerging challenges such as warfare, violence, and the climate crisis? Would it help to accelerate the achievement of the Sustainable Development Goals (SDG)?

Recent research has shown that meditation promotes connectivity to the environment. Recent studies have shown that meditation promotes vegetarianism and helps to reduce the carbon footprint. Furthermore, meditation has been shown to reduce consumption, which is relevant to contemporary society, which is a highly commercialized, consumption-driven society, generating large volumes of waste. Meditation has also been found to promote social harmony, connectedness to society, and encourage conflict resolution.

All these research advances suggest a role for meditation in achieving several SDGs, which is a global attempt to bring in a transformative change to society. It is important to also consider how meditation could promote other SDGs, such as those related to peace, biodiversity, urbanization, life below water, and climate action., and more. Therefore, the Declaration could be a call for action at a global level to reap the well-known benefits of meditation to improve well-being and health. Its practice could be mainstreamed by introducing it to the health system, the education sector – e.g. the 'Sati Pasela' or Mindfulness in Schools in Sri Lanka, and even to policymakers, decision-makers, and politicians.

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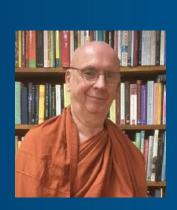
An example of the latter is the British Parliament, which has a parliamentary group actively practicing mindfulness.

The Declaration could be a stimulus to discuss global strategies to promote meditation through partnerships and UN partners such as UNESCO, WHO, and UNDP.

UNESCO may focus on the interface of meditation with education and culture, WHO

on health impacts, and the UNDP on meditation to meet the challenges of the SDGs. It could be an opportunity for the Southeast Asian region to take a lead in promoting meditation globally and in the region. Finally, this could provide the trigger to form a global consortium of meditation research that has databases and networks of sites and institutions offering meditation practices to people, research opportunities, and promotes collaborations.

Perspectives on Buddhist Meditation: Motivations, Challenges, and Applications in Life



Bhante Shravasti Dhammika

Former Advisor Buddha Dhamma Mandala Society Singapore

Co-Founder Nilambe Buddhist Meditation Centre Kandy Sri Lanka

Buddhist Author

It appears that meditation, particularly Buddhist meditation, is the only religious practice that has garnered significant attention and gained credibility from the scientific community. I will highlight a few observations based on my experience of practicing meditation and teaching it for over forty years. When I come across people who are practicing meditation or wanting to practice it, it seems to me that there are three underlying reasons. The first of these is 'therapeutic', meaning that an individual has some personality problem, perhaps even a psychological or psychiatric problem, and somewhere down the road, he has been told, or he has come to understand that meditation is a cure-all for such problems. They take up meditation, and it either has no effect on them or else their condition deteriorates.

Meditation has the potential to help people with mental health problems, but only if it is taught by somebody who has a solid grounding in psychiatry, psychology or counselling skills, and it seems to me that most traditional meditation teachers, who are usually monks, do not have such skills and therefore they are generally not well placed to help this type of person. The second reason why some people take up meditation is for 'spiritual purposes'. This type of person generally believes that it is possible to become fully enlightened or develop unity with God, and they have a rather romantic and unrealistic view of the spiritual goals that are being promoted by meditation teachers. This is found quite a lot in the Therayada tradition.

Whenever I talk with or listen to people like above, I notice that they are always talking about whether they attained the sixth stage or tenth stage and they are looking forward, probably quite unrealistically, to having a profound spiritual experience in a matter of months. Inevitably, they start having problems with profound anxiety. It seems that after a while, they give up practicing meditation out of frustration, and they have not attained anything other than anxiety. This type of approach to meditation is sometimes a result of listening to traditional meditation teachers talking about very exalted levels of meditation, meditational states which are certainly within reach, but not for a person

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who is married, has a family, a job, and probably still paying off their house mortgage.

The last of the reasons why some people take up meditation is for 'practicality'. There is some truth to the fact that meditation will help them function better in a complex and difficult world. It will help them deal with problems such as stress and anxiety. In other words, they have realistic goals, and they practice meditation for realistic ends, and this person generally does not have too much interest in Buddhist Philosophy, does not have much interest in Buddhist psychology, they do not want to learn Pali, they are purely interested in meditation to help them deal better with their life situation. Interestingly, it is this type of person who tends to benefit well from meditating and generally helps them in their daily life.

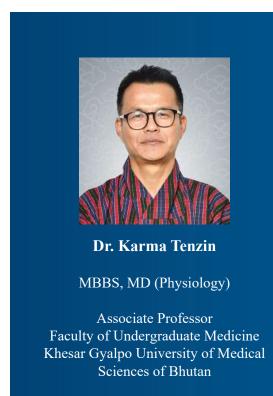
This sums up my experience: the three types of reasons why people meditate and the three types of people who are interested in meditation practice. As far as the future of meditation is concerned, it is very important to point out that in all schools of meditation, particularly in the case of the early Buddhist tradition, it seems to be very clear from the Pali Tripitaka that the goal and purpose of meditation is radical world

transcendence.

According to the Buddhist scriptures, engaging in meditation is not about trying to attain World Peace; it is not about living in better conditions with your neighbor; it is not about having a more stable and happy family life. All these things may come about because of meditation but the sole purpose of meditation, in the Buddhist tradition at least, is radical world transcendence, attaining a state whereby you opt out of what Buddhism calls *Sansara*. However, an important question to answer is, if what has been described is the goal of meditation in the Buddhist tradition, to what degree do we have to put that goal on the back burner when we teach people meditation?

Many types of meditation are clearly not meant to make an individual more comfortable in the world. For example, Buddhism has a meditation practice called "Pilikul Bhavana" and another meditation called Marananussathi: recollecting death. It is highly unlikely that an average person living at home with their family will benefit in any way from meditation like this. Finally, if Buddhist meditation is to be made available to people beyond the Buddhist tradition, certain aspects of meditation need to be put on the back burner and certain aspects taken forward, which may then help people live better in the world.

Insights and Experiences Related to Bhutan's Practice of Meditation



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One of the key meditation practices in Bhutan is Shamatha (calm-abiding meditation), where the primary focus is on experiencing and following one's breath throughout the entire meditation process. This practice is anchored in mindfulness of breathing. Another common meditation practice is Vipassana, in which the meditator seeks to visualize, understand, and gain insight into their inner experience. A third widely practiced form of meditation in Bhutan involves chanting mantras, often associated with specific Buddhas. For example, many people chant the mantra of Manjushree, the Buddha of wisdom. This type of meditation is not only practiced by the deeply spiritual but also by those who may not identify as being particularly religious. Additionally, movement meditation, particularly in the form of mask dance, is another prevalent practice in Bhutan. This type of meditation integrates physical movement with spiritual expression. Further, more spiritually advanced individuals often participate in intensive retreats, such as the 3-year, 3-month, and 3-day meditation retreat, where they isolate themselves from all external contact to enable for deep contemplation. A

s for the significance of meditation at a national level, in Bhutan's unique Gross National Happiness (GNH) framework, which emphasizes well-being over material wealth, three of the nine domains explicitly include meditation as an indicator of national progress. Further, over the past 5-10 years, Shamatha meditation has been simplified and introduced to a broader population, including office workers and students. More importantly, around 90% of Bhutan's civil servants have been trained in the Search Inside Yourself program, which incorporates common meditation and mindfulness techniques, supported by solid scientific research. This program has received widespread acceptance not only in Bhutan but also in countries such as Bangladesh, Timor-Leste, Saudi Arabia, and various European nations. Additionally, given the high levels of stress in medical fields, where professionals can become desensitized to their emotions, cultural contexts, and the needs of others, meditation has been integrated into curricula to support emotional resilience. Another recent, yet significant initiative in Bhutan requires all citizens who turn 18 to undergo 12 months of training at the Gyalsung Academy, where meditation plays a central role in helping young people

develop mental resilience and well-being.

Investigating the Science of Traditional Indian Meditation: A Signal Processing Perspective



Prof. Aurobinda Routray

B.Sc Eng (NIT Rourkela), MTec (IIT), PhD (Sambalpur), PostDoc (Purdue)

Professor, Department of Electrical Engineering, IIT Kharagpur



This research explores the physiological and neurological effects of traditional Indian meditation practices using modern signal processing and neuroimaging techniques. Rooted in ancient Indian philosophy, particularly the concepts of *prāṇa* (breath) and *manas* (mind), the study focuses on how controlled breathing leads to states of meditative stillness and altered consciousness. It blends traditional knowledge systems with empirical scientific inquiry, aiming to define and measure the tangible effects of meditation on the body, breath, and brain.

Traditional Foundations vs. Modern Perspectives

In the Indian tradition, meditation is not merely a technique for relaxation or emotional regulation—it is a path toward *chitta vritti nirodha* (the cessation of mental fluctuations). The breath is seen as the vehicle for mind control, and through practices such as $pr\bar{a}n\bar{a}y\bar{a}ma$, japa (chanting), and $mudr\bar{a}$ (gestures), one can access deeper meditative states and even transcend thought. Modern psychological definitions, however, describe meditation as a conscious, intentional, and non-judgmental practice involving awareness of the present moment. It is associated with emotional regulation, reducing stress, and enhanced cognitive functioning. This study seeks to integrate these two worldviews, scientifically quantifying the outcomes of traditional techniques using biometric and neurophysiological metrics.

Methodology: Measuring Stillness

The research has been conducted across more than 1,000 subjects representing varying levels of meditative experience—novices, intermediate practitioners, and long- term meditators. A wide range of measurements are taken before, during, and after meditation sessions. Subjects are divided into experimental (meditating) and control (non-meditating) groups. Three main domains, Body Stillness, Breath Stillness, and Brain Stillness, are analyzed. These domains are assessed using the techniques listed below.

1. Body Stillness

- Eye movements: Electrooculogram (EOG) to measure saccades and fixations
- Muscle activity: EMG for muscular tone and movement
- Thermal imaging: Blood flow and temperature variations in facial regions
- Posture and gesture: Recorded using video and computer vision
- Skin conductance: GSR to detect arousal or relaxation states

2. Breath Stillness

- Heart and respiratory rate: Measured through ECG and contactless sensors
- Breath patterns: Voice analysis and airflow measurement
- Balance in breathing: Assessed using thermal and hyperspectral imaging

3. Brain Stillness

- Electroencephalography (EEG): Scalp EEG with inverse modeling to localize activity
- Functional connectivity: Examined using coherence and synchrony analysis
- Neurochemistry: Salivary neurotransmitters such as serotonin measured pre- and post-meditation
- 4. Behavioral and Cognitive Assessment
- Cognitive tasks: Stroop and Trail Making Tests (TMT)
- Emotional reactivity: Behavioral observations and self-assessment tools
- Alertness: Quantified via saccadic velocity, which was found to increase significantly after meditation

Protocol Overview

A standard experimental session includes baseline checklists and initial measurements, EEG and EOG recordings for 20 minutes followed by a rest phase, Cognitive testing (Stroop, TMT), Guided meditation session with OM chanting (~8 minutes), Follow-up testing and recordings and Final cognitive and emotional assessments

This protocol ensures that physiological and cognitive shifts are accurately captured across meditative states.

Key Findings

Our key findings are listed below

- Increased Alertness: Post-meditation data consistently shows increased saccadic velocity, indicating heightened mental alertness and faster visual processing.
- Enhanced Brain Connectivity: EEG results reveal improved synchrony and coherence across brain regions in experienced meditators, suggesting a more integrated and efficient neural network.
- Improved Physiological Regulation: Heart rate, breath rate, and facial blood flow patterns stabilize significantly post-meditation.
- Neurochemical Shifts: Saliva samples indicate increased levels of neurotransmitters associated with well-being and stress reduction, such as serotonin and dopamine. These effects are observed consistently across different subject types, suggesting that even short-term meditation has measurable benefits.

Challenges in Meditation Research

Several challenges are inherent in this line of inquiry:

- Authenticity of Techniques: Identifying and validating traditional meditation practices based on texts like the Yoga Sūtras requires close collaboration with monasteries and traditional lineages.
- Subject Recruitment: Finding experienced meditators who can participate under experimental conditions is logistically demanding.
- Instrument Interference: EEG caps and monitoring equipment can disrupt meditative absorption.
- Individual Variability: Human subjects present diverse baseline physiologies and responses, making pattern extraction and feature engineering essential.
- Environmental Control: Ensuring a quiet and controlled setting for the duration of meditation experiments is critical and often difficult.

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Ongoing Work and Collaborations

The research group has a strong publication record in areas like EEG microstates, functional connectivity, and hyperspectral imaging. They have ongoing collaborations with academic institutions in India and internationally. In India, the SATYAM program under the Government of India funds studies in traditional medicine and meditation. The group also works with industry partners on developing products for meditation assessment and biofeedback.

Conclusion

The convergence of traditional Indian meditation and modern scientific techniques offers a promising avenue for advancing our understanding of consciousness, emotional regulation, and cognitive function. Through breath-centered practices, measurable shifts occur across the body, breath, and brain, validating millennia-old insights through contemporary tools. This interdisciplinary research has practical implications for mental health, particularly in high-stress educational and occupational environments, and opens pathways for collaboration across cultures and scientific disciplines.

Reflections on the Global Impact of Meditation: Insights from Four Decades of Practice and Teaching in Malaysia



Mr. Chee Bock Chwee

Meditation Practitioner

Malaysia

Over the course of four decades spent practicing and teaching meditation, I have observed the transformative power of meditation on individuals and communities. These experiences highlight how personal practice can serve as a foundation for broader social and global change.

The impact of meditation, as described, begins with the individual. As one cultivates inner peace, that calmness radiates outward—first to family and close networks, then to communities, nations, and ultimately, the world. Among the most significant benefits of meditation are its contributions to mental well-being and its complementary role in managing physical health challenges. Many long-term practitioners who began meditating before the onset of illness—particularly serious conditions like cancer—were better equipped to face these challenges. Through sustained practice, they had developed skills in mindfulness and acceptance, allowing them to face suffering with composure. Rather than responding with fear, agitation, or despair, they used meditation to manage their emotional responses and support their healing journey. Some of these individuals continued to live for 20 to 30 years after diagnosis and treatment, attributing much of their resilience and improved quality of life to their meditation practice.

In contrast, elderly individuals who began meditating only after becoming ill often struggled. Without prior experience, they found it difficult to develop concentration or mindfulness, particularly when contending with the physical and emotional burdens of disease. This often resulted in discouragement and, in many cases, discontinuation of practice. These observations underscore the importance of encouraging meditation early in life, rather than waiting until later years when the mind and body may no longer adapt as easily. Loving-kindness meditation, in particular, is emphasized as a powerful practice for fostering harmony. When practiced regularly and across diverse populations, it has the potential to create profound positive shifts in interpersonal and societal relationships, contributing to a more peaceful world.

The COVID-19 pandemic, despite its challenges, also presented unique opportunities. With in-person sessions

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restricted, meditation instruction shifted online. This allowed participants from various regions—including India, Germany, South America, and Australia—to attend sessions that were once limited to local audiences. The expansion of online meditation classes significantly broadened access, strengthened global connections, and enhanced the collective impact of meditation practice. Moreover, meditation has demonstrated its capacity to reduce stress-related suffering and dependency on medication. The financial and emotional burden of medical treatment can be overwhelming, and in many cases, the fear of illness causes greater distress than the illness

itself. Meditation helps individuals regulate these responses, thereby improving their overall wellbeing and resilience.

In summary, my experiences underscore meditation's potential as a tool not only for personal transformation but also for global benefit. By cultivating mindfulness, compassion, and emotional balance, individuals can reduce suffering and contribute to a more peaceful and interconnected world. The continued promotion and accessibility of meditation, especially through digital platforms, offers a meaningful way forward in addressing both personal and collective challenges.

Exploring Myanmar's Meditation Heritage: Techniques and Traditions



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(IMU)
Malaysia



Myanmar is renowned for its deep-rooted Buddhist traditions and diverse meditation practices that attract practitioners from around the world. There are two main types of meditation practiced in Myanmar. The first is Vipassana meditation (insight meditation). This form of meditation focuses on mindfulness and awareness. Further, the practices involve observing sensations and mental states without judgment. The aim is to develop insight into the nature of reality. The second form is Samatha meditation (concentration meditation). This form of meditation emphasizes developing a common, concentrated mind and often involves focusing on breathing. Whilst Vipassana and Samatha are primary practices of meditation, another commonly practiced form of meditation is Metta Meditation (lovingkindness). This is practiced by repeating phrases such as "may all beings be peaceful" whilst focusing on radiating kindness.

As for monastic practices of meditation, monks follow structured meditation schedules that include sitting and walking meditation for extended periods. As for a lay person meditation practice, it is most common during festivals or as part of daily rituals. Additionally, laypeople participate in short-term meditation retreats to enhance mindfulness.

Myanmar's role in preserving Theravada Buddhist meditation traditions has led to its historical significance. Further, meditation is deeply woven into Myanmar's religious and social life, highlighting its cultural integration. Importantly, the influence of Eminent meditation teachers like *Mahasi Sayadaw* and, *Lede Sayadaw* who taught meditation to laypeople, making mindfulness practices available to individuals outside monasteries. All these aspects make Myanmar not only a significant, cultural and spiritual hub but also a bridge connecting ancient practices of meditation with modern day meditation practices.

Myanmar is also known for its notable meditation centers. These centers provide peaceful and supportive environments, allowing practitioners of all levels to

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deepen their understanding of mindfulness and meditation. Key meditation techniques practiced in Myanmar are Mindfulness of breathing (*Anapanasati*): this practice involves focusing on the natural flow of the breath: a common entry point for beginners (either at the nostrils or the rising and falling of the abdomen), Walking Meditation: cultivating awareness through slow,

deliberate steps and Body scan technique: observing sensations from head to toe. In conclusion, Myanmar stands out when it comes to meditation due to several reasons. Some of which include: the authenticity of teaching, renowned teachers and systems, accessibility of meditation centres, cultural integration, and global impact.

Unique Perspective on Thai Meditation and its Profound Impact on Life and Art



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Meditation at its core is a tool for seeing the world clearly. It unveils the layers of our being, sharpens our awareness and helps us embrace the impermanence of life. Through its practices, we find meaningful ways to live? and create, to connect deeply with ourselves and others. In Thailand, this unique universal practice has found unique expression through Theravada Buddhism, shaping a cultural identity that resonates far beyond its borders. While meditation is practiced globally, in Thailand it is deeply rooted in Theravada Buddhist teachings, and central to this tradition is mindfulness, a state of active awareness and engaging with the present moment.

Mindfulness is not passive observation, but it is a deliberate act of being present with clarity and intention. It is accompanied by clear comprehension which fosters insight into the nature of impermanence. Thai meditation practices such as breathing meditation, walking meditation and dynamic hand movement meditation provide practical ways to embody these mindfulness teachings. This method integrates physical movement with mindfulness observation, turning ordinary actions into profound meditative experiences. By paying close attention to the rhythm of the breath or the sensation of walking practitioners develop a heightened awareness of their connection to the present moment.

In my work, as a performance arts practitioner and educator, I try to integrate Thai Buddhist meditation practice with somatic movement principles, creating a framework for performance to cultivate embodied presence. This presence -the ability to fully inhabit one's physical and mental experiences is central to effective and meaningful performance. This training is structured around mindfulness or meditation-based movement. Practitioners engage in exercises that combine breathing, sensory awareness, and movement improvisation. For

stimuli of the five senses and their impact on movements.

example, in breathing and movement, performance practitioners explore how different breathing patterns influence movement. There are two main types of performance-related activities Exploring the senses: activities focus on observing The stimuli become sources of inspiration, linking awareness to external engagement.

Mental phenomena and responses: Performers are guided to observe their thoughts, emotions and memories as they arise during movement, learning to respond creatively rather than react passively. This exercise builds a performer's ability to embody their experiences authentically. They learn to observe and deconstruct their physical and mental processes, transforming these insights into creative resources for performance.

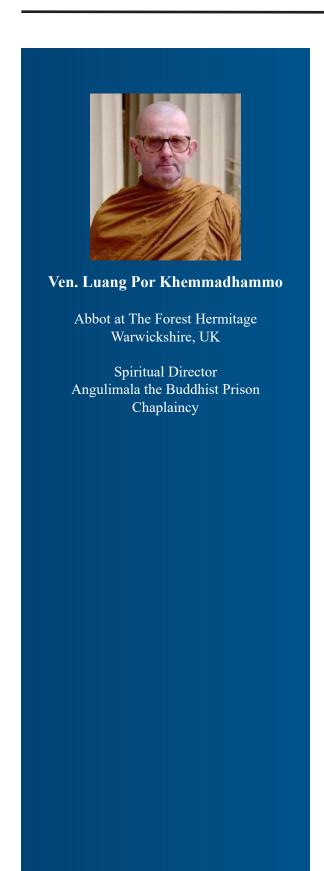
By cultivating mindfulness, performers gain access to a deeper well of creativity. They learn to work with vulnerability and impermanence, turning these challenges into strengths. In a world that often prioritizes speed and efficiency, these practices remind us of the importance of stillness and contemplation. Meditation provides a counterbalance to the demands of the burdens of life, offering tools for resilience, creativity, and connection. Moreover, the integration of mindfulness and movement highlights the universal nature of meditation. Whether through walking, dancing, or breathing, the principles of Thai meditation can be adapted to diverse cultural and artistic contexts. This adaptability makes them not only relevant but essential in fostering global understanding and collaboration.

Meditation teaches us to observe without judgement, to accept without clinging and to engage without fear. In art, this translates into technically skilled performances. But also, deeply human. The Buddhist perspective on impermanence is particularly relevant here in acknowledging that everything is in flux. Performers learn to embrace the ephemeral nature of their craft. A movement, a gesture, or a moment on stage is fleeting, yet it holds immense meaning. This awareness enriches their artistry, fostering authenticity and presence of mind.

In broader terms, meditation offers a framework for practicing life itself, encourages humans to slow down, to pay attention, to observe and to act with good intention. These qualities are not only affected in art and valuable in performance, but also in how we navigate relationships, challenges, and opportunities in our daily lives.

Before concluding, I want to address the broader connotation of meditation. Often meditation is seen as a solitary or as a passive activity, but in Thai meditation practice it is seen as an active engagement with life. It is about being aware of the subtleties of experience, recognizing the interconnectedness of all things, and responding with wisdom and compassion. In life, it means cultivating relationships and actions that reflect our shared humanity. Meditation is not just a practice; it is a way of being.

Meditation as a Path to Understanding and Liberation: A Personal Perspective



From the perspective of a long-time practitioner and teacher rooted in the Buddhist tradition, the primary motivation for engaging in meditation practice stems from the desire to confront and alleviate suffering. A teacher, who identifies as a Buddhist and takes refuge in the Buddha, Dhamma, and Sangha, emphasizes that the investigation and training of the mind are central to addressing the causes of human difficulty and uncovering the true nature of existence. Early in my engagement with Buddhism, it became clear that the only meaningful way to respond to personal suffering was through introspection and disciplined mental cultivation. Ven Luang believes that mindfulness and mental training provide a direct path to insight, rather than relying on external or conceptual solutions.

This perspective also involves a degree of skepticism toward empirical or academic approaches to meditation. Ven Luang expresses concern that attempts to study or analyze meditation through conventional research methodologies may lead practitioners to evaluate their progress through a distorted lens—potentially viewing meditation as a means to gain material or worldly benefits, rather than as a path toward renunciation and inner freedom. From this viewpoint, authentic meditation practice requires letting go of the desire to achieve measurable outcomes. I see a lack of alignment with scientific frameworks for evaluating meditative experiences and consider myself as an outsider to such discourse. Instead, my commitment lies firmly with the spiritual dimension of meditation as a tool for liberation.

Furthermore, I observe the current proliferation of meditation practices that are divorced from their traditional roots. In my observation of the contemporary landscape in the United Kingdom, many forms of meditation appear to serve merely as mechanisms for temporary relief or personal pleasure, rather than structured practices aimed at mental discipline and spiritual insight. Such applications, they argue, risk diluting the transformative potential of meditation when it is practiced solely for comfort or emotional regulation. Meditation remains a vital and purposeful component of the Buddhist path—one that is deeply connected to the pursuit of Nirvana. It is not viewed as an accessory to life, but rather as an essential means of freeing oneself from suffering and understanding the deeper truths of existence.

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Meditation: The US Experience



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The United States is a culturally and religiously diverse nation, with a growing number of individuals identifying as religiously unaffiliated. Amidst this diversity, an alarming rise in stress and stress-related illnesses is evident—a trend not unique to the U.S., but part of a broader global phenomenon.

Stress affects people across all walks of life. High-powered professionals such as corporate executives, physicians, and other educated individuals commonly report burnout, insomnia, and poor work-life balance. Meanwhile, those in the lower-middle class and working poor face different but equally severe challenges, including long work hours, financial strain, and job insecurity. These stressors not only diminish quality of life but also contribute to serious health conditions and shortened life expectancy.

In response, many individuals and institutions are actively seeking effective, accessible tools to manage stress. One approach that has gained widespread attention is meditation—an ancient, cost-free practice that is proving to be both practical and transformative for many Americans.

Popular Forms of Meditation in the U.S.

Among the various meditation practices embraced in the U.S., three stand out as especially common:

- Mindfulness Meditation
- Breath Meditation
- Vipassana Meditation

At its core, meditation is a mental training technique. While definitions vary, its primary goal is to focus and calm the mind. Breath meditation, for instance, trains attention on the act of breathing. Other techniques use visual objects like a blue dot or candle flame to anchor focus.

Mindfulness meditation expands this concept, inviting individuals to be fully present in everyday activities. Something as routine as washing dishes can become a meditative act when done with full awareness, rather than allowing the mind to wander. This not only calms the mind but often increases efficiency in daily life.

Vipassana Meditation is a specific type of mindfulness practice that emphasizes non-judgmental awareness, often beginning with the breath. Over time, it cultivates insight into the impermanence and fluidity of life, helping practitioners develop a sense of acceptance and emotional resilience.

Emerging Interest in Compassion Practices

Although less common, Loving-Kindness Meditation is gaining traction, particularly in healthcare settings. Practitioners are encouraged to cultivate compassion—first toward themselves, and then toward others. This self- compassion can improve emotional well-being, foster forgiveness, and promote better self-care.

Other Popular Techniques

Other meditation styles, including Transcendental Meditation, yoga-based practices, and chanting, have strong followings, especially along the East and West Coasts. These, too, are tools for training the mind to remain centered.

In recent years, **prayer** has increasingly blended with meditation, reflecting a fusion of spiritual and secular traditions.

The Science of Stillness

Our mind's function much like computer processors: the more data they receive, the harder they work. But every processor has its limits. Meditation slows this constant influx of information, allowing the brain to operate more efficiently. The result? A calmer, more focused, and less stressed version of ourselves.

Making Meditation Part of Everyday Life

You don't need a retreat or a quiet mountaintop to meditate. Even a few quiet moments in a parked car, while waiting for a bus, or during a work break can provide relief from daily stress. The key is to **start small**:

- "On-the-go" meditation: When stuck in traffic or standing in line, take three slow, mindful breaths. This alone can reset your stress response.
- 10-minute sessions: When time permits, set aside 10–15 minutes for a more intentional practice. Choose a quiet, comfortable, clutter-free space—even a corner of your home or workplace. Try to meditate when you're well-rested, not hungry or thirsty, and free from urgent distractions. Like exercise, meditation is more effective when you're physically and mentally prepared—but it can also be used to help calm the mind before tackling pressing tasks.

Final Thoughts

You don't need special equipment, a perfect environment, or extensive training to begin. Just three minutes a day can make a meaningful difference. As the benefits become clear—less stress, better focus, and more emotional balance—you may naturally find yourself wanting to practice longer.

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Research Findings CMR Meditation, Mindfulness and Health Project Funded by the World Bank (2019- 2022)



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The Meditation, Mindfulness, and Health Project conducted by the University of Colombo, with the support of the World Bank, marks a historic milestone in the global scientific community—it is the first comprehensive scientific exploration investigating the effects of meditation on the human body as an integrated whole. Although meditation is practiced in diverse cultural and religious traditions around the world, its roots are widely recognized as originating from Buddhist practices and philosophies dating back over 2,500 years.

In Sri Lanka, where the rich philosophical heritage of Buddhism continues to shape cultural and spiritual life, meditative practices have been organically integrated into community life for generations. However, despite longstanding anecdotal recognition of its benefits, scientific inquiry into meditation remained limited until a group of committed scientists, academic scholars, and researchers—many of them experienced meditators themselves—formulated a research proposal at the University of Colombo to bridge this gap.

The project was designed to examine the multifaceted effects of meditation on both the internal (i.e., psychological and physiological) and external (i.e., environmental, educational, and social) dimensions of human life. Our aim has been to foster a broader local and global acceptance of meditation as a practice supported by robust empirical evidence, with benefits that transcend boundaries of culture, religion, socioeconomic status, and personal beliefs. This is where our journey—and our success story—begins. This large-scale research programme comprises a broad spectrum of investigations into how meditation affects the human body and brain—from genes, molecules, and neurochemicals to organ systems such as the cardiovascular, respiratory, gastrointestinal, endocrine, and nervous systems, as well as behavioural and psychological domains including learning, emotional wellbeing, social harmony, and connectedness with nature.

The project brought together scholars from multiple faculties within the University of Colombo: Medicine, Arts, Science, Education, and the Institute of Biochemistry, Molecular Biology and Biotechnology (IBMBB). The integration of STEM (Science, Technology, Engineering and Mathematics) and HEMS (Humanities, Education, Management and Social Sciences) disciplines formed a unique research ecosystem. The core team includes senior academics from these faculties and eight PhD scholars.

Phase I focused on understanding meditation as practiced within the Sri Lankan context. This involved in-depth dialogues with experienced meditators, Buddhist monks, and meditation instructors across the island. Team members also participated in various meditation sessions to gain experiential insight. The key scientific outcome of this phase was a cross-sectional comparative study between skilled meditators and age- and gendermatched non-meditating controls. This comparison spanned a wide range of biological and behavioural parameters, including genomics, neurochemistry, organ system functions, and psychological traits. A major methodological breakthrough during Phase I was the development and validation of a psychometric screening tool: the University of Colombo Intake Interview to Identify Skilled Meditators for Scientific Research (UoC-IISM). This tool addresses a major gap in global meditation research by providing a standardized method to identify experienced meditators for empirical studies. Findings from this phase revealed that longterm meditation practice can lead to measurable changes in physical, psychological, and social domains. Key results included positive effects on: Telomere length and cellular aging, Enzyme activity and immune function, Neurochemical and hormonal profiles related to stress and wellbeing, Cardiovascular functions such as blood pressure and heart rate, Respiratory parameters, Neurophysiological functions (nerve conduction, evoked potentials, EEG), Metabolic indicators like glucose and lipid regulation, Psychological outcomes related to resilience, anxiety, depression, and teacher immunity, Pro-environmental attitudes, including connectedness with nature and reduction of carbon footprint These findings have been published in reputed peer-reviewed journals, with 40 abstracts and seven conference papers presented at national and international conferences. Of the 15 articles submitted to indexed international journals, 10 have already been published and cited. Additionally, the UoC-IISM tool was featured in a national journal. Senior researchers are currently developing books based on Phase I findings,

and seven PhD students are finalizing their dissertations.

The project has embraced multiple platforms for disseminating research findings. These include: Newspaper articles and magazine features, Academic symposiums and public lectures, Television broadcasts via Sri Lanka Rupavahini Corporation, Monthly university-wide meditation sessions initiated during the COVID-19 pandemic to promote mental resilience, A dedicated YouTube channel with recorded sessions and research highlights

In November 2021, the team hosted a special research symposium featuring study participants and academics to discuss Phase I findings with the broader public. Inspired by the promising outcomes of Phase I, Phase II focuses on evaluating implementing and meditationbased interventions through ethically approved Randomized Controlled Trials (RCTs). These interventions target specific populations: Patients with Parkinson's disease, Epilepsy, Chronic Kidney Disease, and Diabetes Mellitus, and healthy working individuals facing high levels of occupational stress We have completed the interventions for Parkinson's disease, Epilepsy, and Diabetes Mellitus. The results indicate that meditation has significant positive effects on neurophysiological markers in Parkinson's and Epilepsy, and metabolic control in diabetes. These findings were presented to key stakeholders during a symposium held on August 7, 2023. In order to institutionalize this important body of work, the Centre for Meditation Research was established at the Faculty of Medicine, University of Colombo. The Centre is supported by a multidisciplinary board of scholars from the research team. Weekly and monthly meditation programmes, which are open to the public, serve as one of the Centre's key outreach initiatives. The Centre has received funding from national and international organizations, including the Rekhi Foundation for Happiness, USA.

The Meditation, Mindfulness, and Health Project has been—and continues to be—a transformative journey. It represents a rare fusion of science and spirituality, of academic rigour and inner inquiry. For the research team, it has been an intellectually enriching and personally fulfilling experience—one that is paving the way for Sri Lanka to be a global leader in meditation research.

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Take home messages from the PhD candidates based on the findings of their projects



Ms. Nirodhi Dasanayaka
PhD Student
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Effects of Meditation on Genetics and Epigenetics

Meditation is more than a relaxation technique—it is a structured mental training that cultivates emotional stability, calmness, and focused attention. While its psychological benefits have long been acknowledged, growing evidence now suggests that meditation can also produce measurable biological effects, particularly in relation to the ageing process. One of the most important markers of biological ageing is the telomere. Telomeres are protective DNA sequences at the ends of chromosomes, often compared to the plastic tips on shoelaces, which prevent chromosomes from fraying. Each time a cell divides, telomeres shorten, and excessive shortening eventually leads to cellular ageing, dysfunction, and a higher risk of disease.

Because of this, telomere length is widely recognized as a key biomarker of ageing. Research has proposed that meditation may positively influence telomere biology by not only maintaining telomere length but also enhancing telomerase activity, the enzyme responsible for rebuilding telomeres. With this in mind, we conducted a study to investigate how long-term meditation practice affects telomere regulation.

In our study, thirty long-term meditators were recruited and compared with a control group of non-meditators matched for age, gender, and educational background. Blood samples were collected and analyzed to measure telomere length, plasma telomerase levels, and the expression of two key genes—hTERT and hTR—that are central to telomerase function.

The findings revealed significant differences between the two groups. Meditators showed longer telomere lengths, significantly higher levels of plasma telomerase, and upregulated expression of both hTERT and hTR genes. These results strongly suggest that long-term meditation is associated with healthier cellular ageing mechanisms and improved telomere regulation. In simple terms, meditation seems to activate and maintain the body's natural ability to protect its cells against the damage of ageing.

The implications of these findings are far-reaching. They highlight a powerful mind-body connection, showing that psychological practices can bring about tangible changes at the cellular and genetic levels. Meditation, therefore, can be seen not only as a tool for mental well-being but also as a potential lifestyle intervention for promoting healthy ageing and resilience against stress-related biological decline. As a low-cost, non-invasive, and widely accessible practice, meditation could become a valuable addition to integrative medicine approaches aimed at improving longevity and quality of life.

In conclusion, our research demonstrates that long-term meditation practice can go beyond relaxation, offering measurable benefits in delaying cellular ageing through its positive effects on telomere regulation. This opens up exciting possibilities for meditation to be incorporated more systematically into public health strategies, with the potential to support both mental and physical well-being across populations.

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Mr. James ThambyrajahPhD Student
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A study on selected immunological, hormonal and biochemical parameters of the stress response in experienced Buddhist meditators and non-meditators.

The primary objective of this study was to evaluate the immunological, hormonal, and biochemical parameters associated with the stress response in a Sri Lankan group of experienced Buddhist meditators, compared with a control group of non-meditators who were matched for age, gender, and educational background. The study focused on three major domains: immunological markers, hormonal indicators, and neurotransmitter levels, all of which are central to understanding how the human body manages stress and maintains balance.

Under the category of immunological parameters, the results demonstrated that meditators had significantly higher antioxidant capacity, as well as elevated levels of enzymes such as superoxide dismutase, catalase, and glutathione peroxidase. These enzymes play a crucial role in neutralizing free radicals and reducing oxidative stress within the body. By reducing oxidative stress, meditation appears to create a protective effect at the cellular level, supporting longevity and resilience against degenerative diseases.

When examining hormonal parameters, the study revealed further remarkable outcomes. Meditation was associated with significantly increased levels of serotonin and melatonin—two hormones essential for mood regulation, emotional stability, and healthy sleep cycles. At the same time, levels of adrenaline and cortisol—the body's primary stress hormones—were significantly reduced. This suggests that meditation not only alleviates the physiological effects of stress but also helps create a hormonal environment conducive to relaxation, emotional well-being, and improved restorative processes.

The study also uncovered notable shifts in biochemical parameters, particularly with respect to neurotransmitters. Meditation was found to significantly increase gamma-aminobutyric acid (GABA), a neurotransmitter that plays a central role in calming the nervous system and regulating anxiety. In contrast, levels of glutamate—a neurotransmitter often associated with excitotoxicity and stress-related neural damage—were decreased in meditators. Additionally, meditation significantly elevated dopamine levels, a neurotransmitter crucial for motivation, focus, and the experience of reward.

In summary, this study demonstrates that meditation exerts a wide-ranging impact on stress response systems at multiple levels—immunological, hormonal, and neurochemical. By lowering oxidative stress, enhancing antioxidant defenses, increasing mood-stabilizing and sleep-regulating hormones, and balancing neurotransmitters related to anxiety and reward, meditation emerges as a holistic practice that strengthens both physical health and psychological well-being.



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An exploration of cardiorespiratory and autonomic function parameters in healthy, long-term meditators: A Sri Lankan study.

Meditation has been linked to many physiological benefits. While numerous studies have explored the physiological changes with meditation, the scientific evidence on cardiorespiratory and autonomic function changes in healthy individuals with long-term practice of meditation is limited. Hence, as a part of the AHEAD project, we investigated the cardiorespiratory and autonomic function in healthy long-term meditators (LTMs) compared to a group of non-meditators (NMs) to better understand the physiological mechanisms causing meditation effects on these systems to provide valuable insights into potential mechanisms for disease prevention and health promotion.

We conducted a cross-sectional comparative study involving 30 healthy LTMs and 30 age-sex- matched NMs. The cardiorespiratory function was assessed at rest and during submaximal exercise. The resting cardiorespiratory parameters: resting respiratory rate (RR), heart rate (HR), and blood pressure (BP) were recorded in all participants in a supine position following a mandatory 30-minute rest in supine. Resting HR was measured using the lead II electrocardiogram (ECG), while the resting RR was calculated using respiratory signals recorded by a respiratory belt transducer (AD Instruments, Australia). Systolic (SBP) and diastolic (DBP) blood pressure were measured using an automated BP meter calibrated against a standard mercury sphygmomanometer. Resting spirometry was assessed using a Fitmate- Med PRO cardiopulmonary assessor (Cosmed, Rome, Italy) according to American Thoracic Society (ATS) guidelines, where all measurements were recorded in the upright seated position using an antibacterial filter. All participants underwent a maximum breath-hold test to record the maximum inspiratory and expiratory breath-holding time (BHT). BHT was measured in seconds in an upright seated position using a respiratory belt transducer, and the maximum value of 3 similar trials at 5-minute intervals was analyzed. The change in cardiorespiratory parameters in response to submaximal exercise was assessed using the six-minute walk test (6MWT) conducted according to the ATS guidelines. The total distance walked by each participant, rounding to the nearest meter, was recorded as the six-minute walk distance (6MWD), which was then used to calculate the maximal oxygen consumption (VO2 max) of each participant.

The autonomic function in healthy LTMs and NMs was assessed by a standard battery of 5 cardiovascular reflex tests (CARTs) and resting heart-rate variability (HRV). The 5 CARTs were the HR responses to deep breathing, the Valsalva maneuver, the lying-to-standing test (LTS), and the BP response to the LTS and sustained isometric handgrip test (IHG). The resting HRV parameters of the study participants were derived from 5-minute lead II ECG recordings in the supine position recorded using the Power Lab 4/26 data acquisition system (AD Instruments, Australia) at a sampling frequency of 1000 Hz/1kHz, with a mains filter. The resting HRV parameters were obtained using the time-domain and frequency-domain analysis.

Our results indicated that the LTMs exhibited better cardiorespiratory function at rest, as reflected by significantly lower RR, SBP (p < .001), HR, DBP (p < .01) and higher PEFR (p < .05) and longer inspiratory BHT (p < .01) compared to their age-sex-matched NMs with comparable physique and physical activity levels. However, LTMs did not show any significant difference in cardiorespiratory function changes in response to submaximal exercise compared to the NMs assessed by the 6MWD and estimated VO2 max during 6MWT. Additionally, LTMs exhibited better autonomic function compared to NMs with higher expiration-to-inspiration (E: I) ratio, Valsalva ratio (p < .05), lower SBP change in response to LTS, and a significantly lower DBP increase during IHG (p <. 01). Resting HRV analysis further revealed greater parasympathetic activity in LTMs, as evidenced by significantly higher RMSSD, SDNN, and HF power %, along with lower LF power and LF/HF ratio signifying lower sympathetic activity and better autonomic balance with parasympathetic dominance respectively. Moreover, the dose-dependent relationships observed between the above parameters and meditation practice variables reflect amplified effects on cardiorespiratory and autonomic function with greater practice. The LTMs with greater years of practice in meditation had slower RRs, higher PEFR, and higher SDNN values, while LTMs with greater retreat participation experience had slower RRs, higher PEFR, tidal volume, and vital capacity. Additionally, the LTMs who reported a higher frequency of practice per week had lower HRs, higher 30:15 ratio, and E: I ratio exhibiting higher parasympathetic activity with increased frequency of practice.

Our findings suggest that long-term meditation may contribute to better cardiorespiratory function at rest and better autonomic regulation, potentially contributing to overall health and disease prevention. The dose-dependent relationships highlight the importance of consistency and duration of meditation practice in enhancing these physiological benefits. These results align with growing evidence supporting meditation as a non- pharmacological tool for cardiovascular and respiratory health.



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Effect of meditation on selected neurophysiological parameters and assessing the effect of meditation on clinical outcomes of Parkinson's disease and epilepsy.

This study investigated five key neurophysiological parameters, including electroencephalography (EEG) and nerve conduction studies (NCS), to compare differences between two groups: long-term meditators and meditation-naïve controls. The findings revealed that peripheral nerve conduction was significantly better in long-term meditators compared to their matched non-meditating counterparts, suggesting that meditation practice may enhance neural efficiency and peripheral nervous system functioning.

Building upon these findings, the study applied the insights from neurophysiological parameters to design a therapeutic protocol aimed at two specific patient groups—those with epilepsy and those with Parkinson's disease. Among patients with Parkinson's disease, meditation was shown to produce beneficial effects on both motor and non-motor symptoms. This is particularly important as Parkinson's is not only characterized by motor dysfunctions such as tremors and rigidity, but also by non-motor complications including mood disturbances, sleep problems, and cognitive decline. The improvement observed in both domains suggests that meditation may provide a holistic supportive therapy for managing Parkinson's disease.

For individuals with epilepsy, the practice of meditation demonstrated a noteworthy clinical benefit, as it was associated with a reduction in seizure frequency compared to non-meditators. Given that seizure control is often difficult to achieve with conventional pharmacological treatments alone, this finding highlights the potential of meditation as a complementary therapeutic approach. By positively influencing neurophysiological processes, meditation may enhance overall neurological stability and resilience.

In summary, the results of this study suggest that meditation can produce measurable improvements in neurophysiological functioning, which can be translated into therapeutic protocols with real-world clinical relevance. Specifically, it appears to enhance peripheral nerve conduction, support better management of both motor and non-motor symptoms in Parkinson's disease, and reduce seizure frequency in epilepsy. These outcomes highlight the promise of meditation as an effective, non-invasive, and low-cost adjunct therapy in the management of chronic neurological disorders.



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Centre for Meditation Research

Meditation and psychological health

The aim of this study was to investigate potential differences between a group of 64 skilled meditators and an equal number of age- and gender-matched non-meditating controls in relation to several key psychological parameters that are central to mental health. These included levels of mindfulness, psychological resilience, perceived quality of life, and psychological distress. The findings revealed that skilled meditators demonstrated significantly higher levels of psychological protective factors such as mindfulness and resilience, alongside a greater perceived quality of life. In contrast, they reported significantly lower levels of psychological distress, as indicated by reduced symptoms of depression, anxiety, and stress, compared to their non-meditating counterparts.

Importantly, the study also highlighted the role of meditation duration and frequency as critical factors in strengthening these psychological benefits. A longer duration and more consistent practice of meditation were found to correlate strongly with higher levels of mindfulness, particularly in the dimension of non-reactivity—the ability to remain calm and composed in the face of challenging thoughts and emotions. Additionally, a higher frequency of practice was significantly associated with enhanced mindfulness in the dimension of observing, reflecting an increased capacity for awareness and attentional control.

Taken together, these results provide strong evidence that meditation practice not only cultivates mindfulness and resilience but also contributes to improved overall mental health and subjective well-being. By reducing psychological distress while enhancing protective psychological factors, meditation emerges as a powerful tool for promoting emotional balance, adaptive coping, and improved quality of life. Moreover, the correlation between meditation frequency and duration with specific facets of mindfulness underscores the importance of consistency and sustained engagement in practice for maximizing psychological benefits.



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Effects of meditation on metabolic health in healthy individuals and in patients with type 2 diabetes.

This body of work investigated the effects of meditation on metabolic health in both healthy individuals and patients with type 2 diabetes mellitus (T2DM). Meditation, defined as intentional self-regulation of attention through focused awareness and selfmonitoring, has been shown to influence metabolic outcomes via neurohumoral modulation. Prior studies suggest that regular meditation is associated with favourable metabolic parameters, and even short-term practice may improve glycaemic control in T2DM.

The research was conducted in three phases. First, a comparative cross-sectional study examined baseline metabolic parameters in healthy, experienced meditators versus sex- and education-matched non-meditators. While no statistically significant differences were found in glycaemia or body mass index, meditators exhibited a trend towards a more favourable lipid profile, with more individuals achieving desirable LDL levels.

Second, a systematic review and meta-analysis of 14 eligible studies (including eight RCTs) assessed mindfulness meditation and glycaemic control in T2DM. Six RCTs reported significant HbA1c reductions, and pooled analysis revealed a small but significant effect, despite notable heterogeneity and potential publication bias.

Finally, a 12-week, open-label RCT evaluated mindfulness meditation in 64 patients with T2DM (diagnosed ≤5 years). Participants were randomised to a meditation group or waitlist control. The meditation protocol, developed with an expert instructor, included mindfulness of walking, breathing, sitting, and eating, delivered through guided inperson sessions, home practice, and online support. Outcomes included HbA1c, fasting glucose, lipid profile, fasting insulin, insulin resistance, cortisol, gut hormones, autonomic function, heart rate variability, and gastrointestinal transit time. Interim analysis indicated no significant HbA1c change between groups, although meditators showed a statistically significant increase in HDL cholesterol and favourable lipid trends.

These findings suggest potential metabolic benefits of meditation, particularly in lipid modulation, warranting further long-term and mechanistic studies.



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Unlocking potential: The role of meditation in environmental attitudes, behaviours, and quality of life.

Meditation is increasingly recognized not only as a practice for cultivating inner peace but also as a transformative tool for broader social and ecological change. Beyond its personal psychological and physiological benefits, meditation has the potential to foster a deeper sense of interconnectedness with the natural world and to nurture a heightened sense of responsibility toward the earth. This perspective suggests that the influence of meditation extends beyond the individual to encompass collective well-being and sustainable living.

The present study set out to investigate the relationship between meditation experience and three key areas: environmental attitudes, pro-environmental behaviors, and overall quality of life among experienced meditators. The findings demonstrated that as individuals' meditation experience increased, so did their environmental consciousness, reflected in more positive attitudes toward ecological sustainability and stronger engagement in environmentally responsible practices. Moreover, meditators with greater experience reported a significantly higher perceived quality of life, suggesting that the cultivation of mindfulness not only supports personal well-being but also fosters values and behaviors aligned with ecological balance.

A particularly noteworthy observation was that higher levels of mindfulness were associated with a reduced per capita carbon footprint. This finding points to a unique and powerful link between inner transformation and outward ecological impact, highlighting how greater awareness and presence can translate into more sustainable lifestyle choices. In this sense, mindfulness functions not merely as a psychological skill but as a catalyst for ethical, responsible, and ecologically sensitive living.

Taken together, the results of this study suggest that meditation can serve as an important driver of social transformation, inspiring meaningful action toward sustainability and ecological preservation. By cultivating mindfulness, compassion, and a sense of interconnectedness, meditation encourages individuals to align their values and behaviors with the urgent need to protect the planet. Thus, meditation emerges not only as a practice for personal well-being but also as a pathway to building a more sustainable and harmonious future for humanity and the earth.

Take home messages from the research project findings based on **Meditation and Social Harmony**



Prof. Iresha Lakshman Professor & Head Department of Sociology Faculty of Arts University of Colombo

Meditation and Social Harmony

Previous research has consistently demonstrated that meditation not only enhances individual well-being but also strengthens social connectedness, while simultaneously cultivating greater self-awareness and self-control. These qualities are particularly valuable in the context of violence prevention, as they help individuals regulate impulses, respond thoughtfully to challenges, and foster more harmonious interactions within their communities. Beyond the individual level, social harmony has been shown to play a vital role in promoting economic development and enabling societies to live in balance with nature. In communities where mutual trust, cooperation, and respect prevail, collective progress tends to be more sustainable, equitable, and aligned with ecological stewardship.

Taking these interrelated factors into account, the present study sought to examine the relationship between meditation and social harmony by developing a comprehensive questionnaire designed to assess an individual's level of social harmony. This tool incorporated a wide range of aspects that are critical to the cultivation of harmonious living, including effective communication, mutual respect, community engagement, forbearance, and the ability to remain composed under provocation. By capturing these dimensions, the study aimed to provide deeper insights into how meditation might contribute not only to personal growth but also to the fostering of more peaceful, resilient, and cooperative communities.

Take home messages from the research project findings based on Meditation and Education



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Meditation and Education: Perceived impact of meditation on teacher immunity to workplace stressors.

Teacher immunity to workplace stressors is a theoretical construct that incorporates a range of psychological and professional dimensions, including self-efficacy, resilience, burnout, coping strategies, attitudes toward teaching, openness to change, and classroom effectiveness. It offers valuable insights into how teachers not only survive but also thrive in the face of emotional upheavals, systemic challenges, and threats to psychological well-being. This study specifically explored how teachers who regularly engage in meditation perceive its impact on their ability to manage workplace stressors and sustain their professional responsibilities.

The findings revealed that meditation played a significant role in enhancing teachers' teaching self-efficacy, allowing them to feel more confident and competent in their professional duties even under stressful circumstances. Teachers who practiced meditation consistently were also found to be more resilient, showing greater emotional stability and adaptability when confronted with challenges both inside and outside the classroom. Furthermore, meditation was associated with an improvement in overall classroom effectiveness, as teachers were better able to maintain composure, clarity, and focus in their teaching practice.

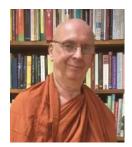
Another important aspect highlighted by the study was the shift in coping strategies. Teachers who meditated tended to adopt more problem-focused coping mechanisms rather than avoidance or emotion-focused responses. This proactive approach not only enabled them to address workplace issues more constructively but also fostered a sense of responsibility and accountability in managing their roles as educators. As a result, meditation was seen not only as a personal stress management tool but also as a practice that positively influenced professional attitudes and behaviors.

In conclusion, the results suggest that the regular practice of meditation has the potential to strengthen teacher immunity to workplace stressors by enhancing self-efficacy, resilience, and effective coping strategies. These improvements ultimately benefit not just the teachers themselves, by safeguarding their mental health and professional satisfaction, but also their students, who are more likely to experience a stable, focused, and positive learning environment. In this way, meditation emerges as a promising intervention for promoting both teacher well-being and educational outcomes.

Panel Discussion

Meditation in Contemporary Society: Insights from Experts on Meditation Training, Education, Research and Health

Panelists



Bhante Shravasti Dhammika



Ven. Luang Por Khemmadhammo



Senior Prof. Vajira Dissanayake



Dr. Iresha Goonesinghe



Mr. Chee Bock Chwee

Moderators



Emeritus Prof. Saroj Jayasinghe



Prof. Dilshani Dissanayake

Q: What has been the experience of using meditation in correctional facilities?

Ven Luang Por Khemadhammo: (UK-based Buddhist Chaplain):

I've been teaching Buddhism in UK prisons since 1977. While I don't have quantitative data on meditation's outcomes, I can attest to a sustained interest among inmates. Though the full Goenka-style *Vipassana* retreats haven't been possible in UK prisons due to logistical limitations, meditation is still widely practiced. As the Buddhist advisor to the prison service in England and Wales, I support over 50 Buddhist chaplains who serve in correctional institutions. Through our multifaith chaplaincy system, we offer meditation as an integral part of Buddhist training, and it is generally well-received by inmates.

Dr Iresha Goonesinghe:

While I haven't personally worked in correctional centres, there's a compelling TED Talk about teaching *Vipassana* meditation to prisoners in Alabama. The impact reported was unexpectedly profound; participants showed significant behavioural changes, becoming more peaceful, accepting, and kind. The results surprised even the facilitators.

In South Asia, particularly in India and Sri Lanka, *Vipassana* is more commonly used in correctional institutions. It would be valuable to hear from someone who has firsthand experience in this area.

Q: How effective is meditation for university students and young people dealing with academic stress?

Mr. Chee Bock Chwee:

I've supported students from pre-university through to their professional lives. A common issue among them is sleep disruption caused by stress, excessive workloads, and emotional pressure. What I've found effective is teaching students meditation techniques tailored to their needs. For instance, loving-kindness (*metta*) meditation helps those struggling with daytime anger, while body scan techniques or breath-based mindfulness—such as focusing on the "rising and falling" of the abdomen—can calm the mind and promote sleep. Many of these students continue to use these methods long after graduation. Some also experience distressing dreams. In such cases, I guide them in reflective practices to help them understand and process these subconscious experiences.

Q: How can researchers reduce bias in studies assessing the benefits of meditation?

Emeritus Professor Saroj Jayasinghe:

That's an important point. Many studies suffer from selection bias since participants are often individuals already inclined toward meditation. However, researchers attempt to mitigate this by using randomized controlled designs, sometimes comparing novice meditators to control groups practicing alternative relaxation techniques. Despite these efforts, biases are still a valid concern and should be transparently acknowledged in study design and interpretation.

Q: What is the most suitable form of meditation for patients with heart diseases?

Dr Iresha Goonesinghe:

There's no one-size-fits-all approach. I began meditating at age nine, and over the years, I've found that different patients benefit from different techniques depending on their emotional needs—be it insomnia, fear, self-criticism, or anxiety. When working with patients—most of whom are non-Buddhists—I focus on understanding their emotional states through deep conversation. Based on this, I introduce meditation techniques using accessible, secular language. Techniques such as mindfulness, loving-kindness, and breath awareness can all be helpful, depending on the individual's situation.

Q: One participant, a professional actor, asked about managing emotions. How does meditation fit into this challenge?

Emeritus Professor Saroj Jayasinghe:

This is a compelling question. Actors must evoke complex emotions in their craft while maintaining emotional stability off-stage. This can create a psychological tension between embodying intense emotional states and remaining centered in daily life. While no single panelist addressed this in depth, it raises important intersections between mindfulness, emotional regulation, and the performing arts—an area deserving further exploration. Meditation may serve as a grounding tool, helping performers witness emotions without becoming overwhelmed by them.

Meditation in Practice: Insights on Journaling, Mental Health, and Mindfulness in Daily Life

Q: Dr. Goonasinghe you spoke about "journalizing" as a tool to support meditation practice. Could you elaborate on how that works?

Dr. Iresha Goonesinghe:

Certainly. Journalizing—by which I mean expressive journaling—has been a lifelong practice for me, and I've introduced it to many patients, both Buddhist and non-Buddhist. It's particularly helpful in managing thought proliferation, a concept often discussed in Buddhist meditation. When the mind becomes overwhelmed—say, in anger—we tend to cycle through related thoughts, dredging up grievances from years ago, and the suffering compounds.

By putting thoughts on paper—regardless of whether it's in English, Sinhala, or any language—we disrupt this cycle. The problem that felt like one tangled mass begins to untangle and separate. If someone journals consistently for 21 days, they often report that the intensity of the issue naturally dissipates. It becomes easier to attain calm and enter *samādhi* (concentration). Personally, I still rely on this practice to clear mental clutter before meditation.

Q: What meditation techniques have you found most beneficial over time?

Bhante Shravasti Dhammika:

Although I no longer teach regularly—teaching often cuts into one's personal practice—I've found three core practices to be consistently valuable:

- 1. Mindfulness of Breathing It's foundational and widely applicable.
- 2. Loving-Kindness (*Metta*) Meditation But I must emphasize, it should not be used to suppress negative emotions like anger. Using metta mechanically to override anger can be psychologically unhelpful. In my view, it's best practiced when one is already in a positive emotional state. That's when metta tends to deepen and expand naturally.
- 3. Recollection (*Anussati*) Practices These are underappreciated. Recollecting one's virtues or good deeds can counterbalance the self-criticism that often arises in sincere meditators. Similarly, contemplating gratitude, friendship, or even mortality can dissolve emotional knots and bring perspective. For example, reflecting on mortality—what we call maranasati—can reduce ill will by helping us see how insignificant our grievances are in the grander context of life.

Q: Can meditation be harmful for people with unresolved trauma or mental health challenges?

Bhante Shravasti Dhammika:

In my 20 years of teaching meditation in Singapore, I've seen cases where meditation exacerbated psychological issues. Some individuals without prior symptoms developed distress after beginning intense meditation, while others with mild conditions saw them worsen.

One issue is the mismatch between teacher and student. For example, some traditional approaches encourage people struggling with sexual desire to meditate on the impurity of the body (asubha), which can be psychologically destabilizing for certain individuals. Others are pressured to reach specific meditative states—like the first or second jhāna—within set timeframes. This creates performance anxiety. In short, the effectiveness of meditation depends as much on the teacher's approach as on the student's disposition. Skillful guidance and sensitivity are crucial.

Q: Is there a role for mindfulness in managing eating habits or weight loss?

Ven Luang Por Khemadhammo:

Absolutely. In Buddhist monastic communities, mindful eating is part of daily life. Monks and nuns typically eat once or twice a day, and each meal is taken with awareness of its purpose—not for indulgence, but to sustain the body for practice. Before eating, practitioners reflect: "I eat this not for pleasure, beauty, or strength, but to support my spiritual work." This mindset helps regulate appetite and prevent overeating. Practicing this habitually trains both body and mind to approach food with mindfulness, which has shown benefits in reducing impulsive eating behaviors in lay communities as well.

Q: You mentioned loving-kindness meditation as a powerful healing tool. Could you elaborate on its psychological effects?

Mr. Chee Bock Chwee:

Over time, loving-kindness meditation helps untie psychological knots. It softens internal narratives of hostility and isolation. Unlike analytical meditation, which often focuses on observation or inquiry, loving-kindness invites direct emotional transformation. It's not instant, but practiced consistently, it shifts the way people relate to themselves and others. This rich discussion highlights the diversity and depth of meditative practices—and the importance of applying them with discernment. From journal writing to guided breathwork, from traditional recollections to mindful meals, meditation continues to evolve in its relevance for modern lives.

Meditation Beyond Relaxation: Vision, Ethics, and Strategy for a Global Movement

Q: Ven. Luang Po posed a profound question: Should meditation be pursued for research, for overcoming suffering (dukkha), or for personal liberation? How should global organizations like the UN or academic institutions approach this?

Ven Luang Por Khemadhammo:

This question takes me back 50 years to my time in Thailand. An American psychiatrist used to visit our monastery regularly, distributing questionnaires designed to measure meditative "progress." I refused to participate—not out of fear, as he assumed, but because I felt it introduced competitiveness into what should be a non-striving practice.

Meditation, in its essence, is not about achievement or ego development. It's about letting go, not building up new identities around how "advanced" one is. I've never had my brainwaves or heart rate measured while meditating, but I wonder if being observed in that way alters the very quality of the experience.

Q: But could scientific research still serve a purpose in introducing meditation to new audiences?

Dr. Iresha Goonesinghe:

Absolutely. I see it in three layers:

- 1. Introduction Some people are deeply rooted in scientific rationalism. Research helps open the door for them to even consider meditation.
- 2. Harm Reduction In areas affected by violence, fear, or unrest, even secular forms of meditation can promote peace and reduce unwholesome actions.
- 3. Medical Integration In clinical practice, I use meditation alongside conventional medicine—for example, to reduce blood pressure or improve sleep—especially in patients reluctant to rely on medication.

These are secondary to the ultimate aim of *nibbāna* in Buddhism, but they are meaningful and may eventually lead individuals to deeper exploration.

Q: What are the risks of misaligned or poorly taught meditation practices?

Ven Luang Por Khemadhammo:

One major risk is mismatch between technique and individual. Some are given austere or psychologically intense methods that do more harm than good. Teachers must adapt, not impose. Interestingly, I began meditating when I was an actor with the National Theatre. I found mindfulness especially relevant on stage—it enhanced presence, self-awareness, and focus. But there's also a danger in performance circles of inflating the ego. That's why mindfulness as a practice of humility and insight is so crucial.

Q: With the UN's recognition of World Meditation Day, where should we go from here?

Ven Luang Por Khemadhammo:

The declaration is a powerful opportunity—but we must be clear about what we mean by "meditation". There are apps and courses today that simply teach people to imagine being on a beach. While that's relaxing, it is not mental development in the Buddhist sense.

Meditation should cultivate skillful states of mind, deepen insight, and dissolve greed, hatred, and delusion. A murderer or a narcissist can sit in stillness and call it meditation. But true transformation arises when meditation is directed toward understanding, ethics, and mental purification.

Q: So the goal must be inner transformation—not just relaxation?

Ven Luang Por Khemadhammo:

Yes. If a person truly practices for understanding, then unwholesome tendencies—like violence or delusion—will naturally fall away. That's the heart of what meditation offers. And that's what World Meditation Day should emphasize.

Q: What practical strategies should global institutions and meditation centres adopt in the next year?

Mr. Chee Bock Chwee:

A simple but impactful idea: Let every meditation center, monastery, and temple mark December 21st—World Meditation Day—with public programs. Talks, workshops, open sits—something that draws in the wider public. Let it become a recurring, international celebration of inner development.

Emeritus Professor Saroj Jayasinghe:

That's already underway in some institutions. Going forward, we might also form international networks or consortia to coordinate these efforts. While the philosophical caution around "meditation for research" is noted, evidence still plays a vital role in convincing policymakers and institutional leaders. Having well-designed studies—on what works and what doesn't—will help us make a compelling case.

Meditation as Intervention: Science, Strategy, and the Way Forward

Q: There's consensus that meditation offers health benefits. But how do we move toward using meditation as a formal intervention—particularly for disease management—in the scientific and medical world?

Senior Prof Vajira Dissanayake:

That's an important challenge. To integrate meditation into conventional treatment regimes, especially for specific diseases, we must treat it as a formal intervention—just like any pharmacological therapy. This means we need randomized controlled trials (RCTs) that compare clinical outcomes between groups who meditate and those who receive standard care alone. Without such evidence, medical establishments and policymakers will remain hesitant to adopt meditation more broadly.

At the same time, we must not overlook what ancient scriptures say. There's great value in bridging scriptural knowledge with modern evidence, especially in understanding the mechanisms and long-term impacts of these practices. It's a dual approach—scientific and scriptural—that's needed in today's complex world.

Q: Given that, what concrete next steps are being considered to promote meditation in a more structured, interdisciplinary way?

Senior Prof Vajira Dissanayake:

From a practical standpoint, I propose establishing a quarterly Global Meditation Forum. This could bring together diverse participants—scholars, clinicians, contemplatives, and policymakers—for focused discussions. Each forum might center on a theme, with a keynote followed by roundtable debates. I also envision a collaborative partnership between the Center for Meditation Research and our Center for Health Systems Policy and Innovation, possibly with support from the World Health Organization's regional office. These alliances could lead to well-structured intervention studies and help standardize meditation protocols.

Further, we would like to explore the possibility of hosting a global meditation conference in 2025. Sri Lanka, having led the UN resolution to declare World Meditation Day, is in a strong position to offer a venue—particularly at our university faculty, where we have existing infrastructure. Such an event would give visibility to the cause and deepen diplomatic and scientific engagement.

Q: How do we ensure younger generations, especially future doctors and healthcare leaders, are meaningfully involved in this movement?

Dr. Iresha Goonesinghe:

This is crucial. I've noticed a distinct difference in mindset between older generations and emerging young doctors. The new generation is more open to integrative medicine, mental health, and contemplative practices. Being embedded in the faculty gives us a unique opportunity. We need to actively involve students—not just as passive learners but as collaborators, researchers, and advocates. Meditation must be normalized within medical and allied health training, not treated as an optional add-on.

Q: Can meditation be linked to the broader Sustainable Development Goals (SDGs)?

Emeritus Professor Saroj Jayasinghe:

Absolutely. As Ven. Luang Po rightly emphasized earlier, transformation of the human mind is foundational to achieving any lasting change—be it peace, equality, or sustainability. Meditation helps build mental resilience, reduces reactivity, fosters ethical action, and cultivates empathy. These are psychological underpinnings of the SDGs. So if we're truly committed to global well-being, meditation can and should be part of that toolkit.

Q: Final thoughts? How do we unify ancient tradition with modern science without compromising either?

Professor Dilshani Dissanayake:

What we're doing is attempting to harmonize a longstanding religious tradition with neuroscientific inquiry and health systems. This is no small task. As a neuroscientist, I see how deeply our reward pathways are conditioned. Even meditation can become a goal-driven pursuit—seeking outcomes, creating expectations, building self-images. But the true spirit of meditation asks us to let go of those very constructs. We must be cautious not to commercialize or instrumentalize meditation in ways that dilute its essence. Still, science has a place—not to dominate the tradition, but to translate its benefits into language that policy, education, and healthcare systems can use. That's where real change happens.

Closing Thoughts

As the panel wrapped up, one theme echoed across every response: Meditation is not just a technique—it's a path. Whether introduced for health, peace, or curiosity, its true power lies in its ability to transform the mind and, through it, society. The coming years will require collaboration between scholars, teachers, and global institutions to preserve the essence of meditation while expanding its reach. As the world confronts division, violence, and despair, training the mind may prove not only relevant—but essential.

Conclusion: The Road Ahead

From clinical trials to global forums, and from student engagement to diplomatic advocacy, the panel outlined a robust roadmap for advancing meditation in a modern context. The shared vision is clear: meditation is more than relaxation. It is a profound tool for healing, transformation, and peacebuilding—individually and collectively. As World Meditation Day becomes a recurring global event, the task now is to ensure that its potential is fully realized—not just as a celebration, but as a sustained strategy for societal change.