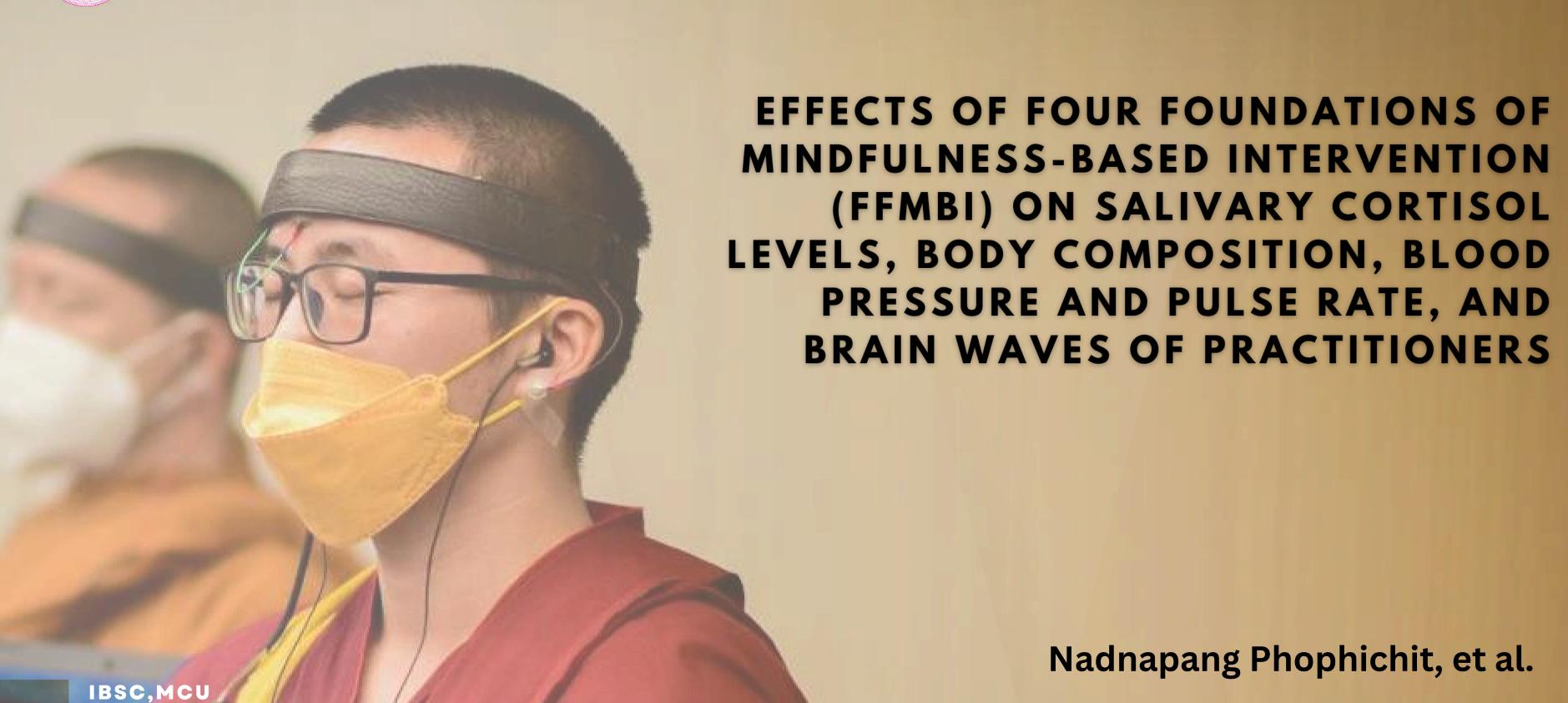
INTERNATIONAL BUDDHIST STUDIES COLLEGE (IBSC), MAHACHULALONGKORNRAJAVIDYALAYA UNIVERSITY (MCU), THAILAND









You are invited to be a part of the research project

To Foster Mindfulness and Concentration

to Deliver Wisdom and Morality to Enhance Peaceful Societies

Research Project Titled:

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

Research Objectives

- 1. To develop FFMBI.
- 2. To implement the FFMBI and test the hypothese.
- 3. To evaluate the effects of the FFMBI.































In-depth Interviews with Buddhist Scholars







In-depth Interviews with Buddhist Scholars





ASST. PROF. ZOLTÁN CSER, LECTURER
DHARMA GATE BUDDHIST COLLEGE, BUDAPEST, HUNGARY

ASST. PROF. DR. NORBERT NÉMETH, LECTURER DHARMA GATE BUDDHIST COLLEGE, BUDAPEST, HUNGARY



In-depth Interviews with Buddhist Scholars



















Meditation Practice Schedule for the Research Project
To Foster Mindfulness and Concentration to
Deliver Wisdom and Morality to Enhance Peaceful Societies

Research Project Titled:

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

Date: 8-15 July 2024 (7 days) Location: Wat Bhaddanta Asabharam, Nong Phai Kaeo, Ban Bueng Chonburi, Thailand

Time	Activities
03.30 hrs.	Morning wake-up bell / do personal
	missions with mindfulness
04.30 hrs.	Walking / Sitting Meditation
06.30 hrs.	Breakfast / Contemplation of minor activities
08.30 hrs.	Walking / Sitting Meditation
10.30 hrs.	Lunch / Contemplation of minor activities
12.00 hrs.	Leisure Time / Contemplation of minor activities
13.00 hrs.	Walking / Sitting Meditation / Meditation interview
16.00 hrs.	Shower / Personal missions with mindfulness /
	Contemplation of minor activities
16.30 hrs.	Mindful drinking
17.30 hrs.	Evening Chanting / Listening to Dhamma Talks
20.00 hrs.	Walking / Sitting Meditation
21.00 hrs.	Sleep with mindfulness / Contemplation
	of minor activities

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

Four Foundations of Mindfulness-Based Intervention (FFMBI)

7-DAY MEDITAION RETREAT PROGRAM

Time	Activities
03.30 hrs.	Morning wake-up bell / do personal
	missions with mindfulness
04.30 hrs.	Walking / Sitting Meditation
06.30 hrs.	Breakfast / Contemplation of minor activities
08.30 hrs.	Walking / Sitting Meditation
10.30 hrs.	Lunch / Contemplation of minor activities
12.00 hrs.	Leisure Time / Contemplation of minor activities
13.00 hrs.	Walking / Sitting Meditation / Meditation interview
16.00 hrs.	Shower / Personal missions with mindfulness /
	Contemplation of minor activities
16.30 hrs.	Mindful drinking
17.30 hrs.	Evening Chanting / Listening to Dhamma Talks
20.00 hrs.	Walking / Sitting Meditation
21.00 hrs.	Sleep with mindfulness / Contemplation
	of minor activities







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"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

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To Foster Mindfulness and Concentration

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"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

8th - 15th July 2024 (7 days)

Location: Wat Bhaddanta Asabharam, Nong Phai Kaeo, Ban Bueng Chonburi, Thailand



- Age of 20 years or older.
- Voluntary participation in the project and signing a consent form after a thorough understanding of the experiment.
- Thai nationality
- Can participate in the entire retreat, scheduled from 8-15 July 2024 at Wat Bhaddanta Asabharam, Nong Phai Kaeo, Ban Bueng, Chonburi Province,
- Having experience in practicing mindfulness according to the Four Foundations of Mindfulness at least once.
- Ability to practice Walking and Sitting Meditation according to the Four Foundations of Mindfulness for a minimum of 30 minutes per session.
- No chronic illnesses; good health.
- No mental health issues.
- No significant loss of a family member or changes affecting physical and mental health in the past 6 months.







Register to participate



Free physical and mental health check-ups, consisting of 5 tests, conducted twice before and after engaging in the research project, valued at 1,800 THB per person, provided by the Holistic Health and Wellness Centre, Faculty of Medical Technology, Mahidol University

- Saliva Cortisol Test
- Body Composition Analysis
- Blood Pressure and Heart Rate Measurement
- Brainwave Measurement: Electroencephalogram; EEG
- Suanprung Stress Test; SPST
- Certificate of Participation in the Research Project
- Souvenirs from the Research Project
- Contribution to the Meditation and Mindfulness Cultivation Research Project for Delivering Wisdom and Virtue, Enhancing Peaceful Society

This research project is funded by the research grant from the International Buddhist Studies College (IBSC), Mahachulalongkornrajavidyalaya University (MCU) for fiscal year 2024, conducted by the research team of lecturers from IBSC, MCU and the Faculty of Medical Technology, Mahidol University (MUMT).

We are now accepting applications starting from today. Limited to only 30 participants!

This project has been certified by the Research Ethics Committee at the Buddhist Research Institute. Mahachulalongkornrajavidyalaya University. approval code R.263/2024, approved on May 9, 2024.

Research Project

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"



30 RESEARCH PARTICIPANTS

Inclusion Criteria

- Age of 20 years or older.
- Voluntary participation in the project and signing a consent form after a thorough understanding of the experiment.
- Thai nationality
- Can participate in the entire retreat, scheduled from 8–15 July 2024 at Wat Bhaddanta Asabharam, Nong Phai Kaeo, Ban Bueng, Chonburi Province, Thailand.
- Having experience in practicing mindfulness according to the Four Foundations of Mindfulness at least once.
- Ability to practice Walking and Sitting Meditation according to the Four Foundations of Mindfulness for a minimum of 30 minutes per session.
- No chronic illnesses; good health.
- No mental health issues.
- No significant loss of a family member or changes affecting physical and mental health in the past 6 months.

What participants will receive:

Free physical and mental health check-ups, consisting of 5 tests, conducted twice before and after engaging in the research project, valued at 1,800 THB per person, provided by the Holistic Health and Wellness Centre, Faculty of Medical

Technology, Mahidol University

- Saliva Cortisol Test
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Date

7 July 2024

8 July 2024

15 July 2024

Activities

From 8:30 AM onwards, participants will engage

in an Orientation activity and undergo a Pre-Meditation

Health Checkup comprising 5 tests

(valued at 1,800 THB per person) conducted by

the MUMT Holistic Health and Wellness Centre,

Faculty of Medical Technology, Mahidol University.

The event will take place at the Samma Panya Room,

4th Floor, Phra Prombundit Building, International Buddhist Studies College (IBSC),

Mahachulalongkornraja-vidyalaya University, Lam Sai Subdistrict, Wang Noi District, Phra Nakhon Si Ayutthaya Province, Thailand

Saliva Cortisol Test

Body Composition Analysis

Blood Pressure and Heart Rate Measurement

Brainwave Measurement: Electroencephalogram; EEG

Suanprung Stress Test; SPST

Opening Ceremony of the Meditation Retreat for

the Research Project at Wat Bhaddanta Asabharam

8-15 July 2024 Participate the Meditation Retreat for

the Research Project at Wat Bhaddanta Asabharam

Closing Ceremony of the Meditation Retreat for the Research Project

and Post-Meditation Health Checkup Comprising 5 Tests

(valued at 1,800 THB per person) conducted by

the MUMT Holistic Health and Wellness Centre, Faculty of Medical Technology, Mahidol University

at Wat Bhaddanta Asabharam



Contact for More Information

Scan QR Code to Confirm Participation in the Research Project Research Project

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

Medical Health Check Up By Holistic Health and Wellness Center Faculty of Medical Technology, Mahidol University

- Saliva Cortisol Test
- Body Composition Analysis
- Blood Pressure and Heart Rate Measurement
- Brainwave Measurement: Electroencephalogram; EEG
- Suanprung Stress Test; SPST

Total Time Measurement 25-30 minutes/person

1.
Pre-Meditation
(Before)
7 July 2024

Post-Meditation (After) 15 July 2024





Station 1 Registration



Station 2 Saliva Collection (Salivary Cortisol Test)



Station 3 Blood Pressure and Heart Rate Measurement



Station 4 Body Composition



Station 5 Brain Wave Measurement (Wisdom Cafe room) (Electroencephalography: EEG)

















Consent Form

Informed Consent Form for Research Participants

Ĭ <u>.</u>	age residin
at Sub-district	
Province Postal Code	Phone Number
Hereby express my willingness to participate in	the research project "Effects of Fou
Foundations of Mindfulness- Based Intervention (FFMB	II) on Salivary Cortisol Levels, Boo
Composition, Blood Pressure and Pulse Rate, and Brain Wa	ves of Practitioners"
I have been fully informed of the details of the	research project, its benefits, and th
potential risks involved. I understand everything clearly a	and agree to participate in the projec
mentioned above. I am aware that I can inquire about	any questions or concerns from th
researcher at any time and can withdraw from the research	ch project without any consequence
Furthermore, the researcher will keep my personal data	confidential and disclose it only in
summarized form for research outcomes. The disclosure	e of personal information to relate
agencies will be done only when necessary for academic re	easons.
Therefore, I give my consent to Dr. Nadnapang Ph	ophichit, Director of the Master of Ar
in Peace Studies Program (International Program) and a	lecturer at the International Buddhis
Studies College (IBSC), Mahachulalongkornrajavidyalaya Ur	niversity (MCU), to collect data for th
research project titled 'Effects of Four Foundations of Mine	dfulness-Based Intervention (FFMBI) o
Salivary Cortisol Levels, Body Composition, Blood Pressure	e and Pulse Rate, and Brain Waves o
Practitioners'.	
Participant's Signature	
Date/	
Researcher's Explanation	
I have clearly explained all aspects of the research	project to the participant, including
its purpose, benefits, and any potential risks.	
Researcher's Signature	
(Dr. Nadnapang Phophic	
Date/	

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

Stress Test (SPST-20) By Department of Mental Health, Ministry of Public Health

Stress Assessment Form (SPST-20) Department of Mental Health

<u>Instructions:</u> In the past 6 months, which of the following events have occurred in your life, and how did you feel about them? Please mark / in the stress level column. If an event didn't occur, skip it.

	Stress Level				
Questions for the past 6 months	Not Stress	Slightly 2	Moderate 3	High 4	Highest 5
1. Fear of making mistakes at work					
2. Not reaching set goals					
3. Family conflicts about money or housework					
4. Worry about toxins or pollution in air, water, noise, and soil					
5. Feeling the need to compete or compare oneself					
6. Not having enough money				П	
7. Muscle tension or pain				Ш	
8. Tension headaches					
9. Back pain					
10. Changes in appetite					
11. Migraine					
12. Feeling anxious					
13. Feeling frustrated					
14. Feeling angry or irritable				Ш	
15. Feeling sad				Ш	
16. Poor memory					
17. Feeling confused					
18. Difficulty concentrating					
19. Feeling tired easily					
20. Frequent colds					

Score interpretation:

0 - 23 points: You have low stress that usually passes quickly.

24 - 41 points: You have moderate stress (normal range). You can relax by doing

activities like exercising, listening to music, reading, etc.

42 - 61 points: You have high stress. You can relieve stress by practicing

breathing exercises, talking to someone you trust to find causes or

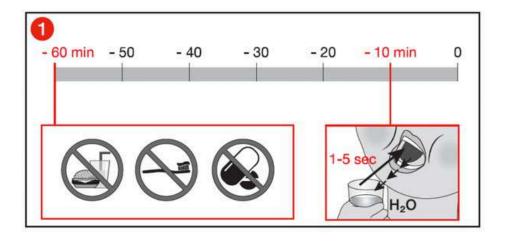
solutions.

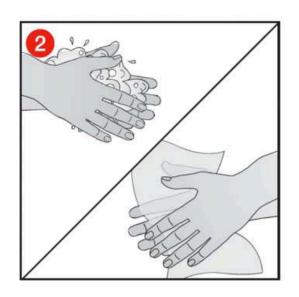
62 points or higher: You have severe stress. You should seek help from a counselor

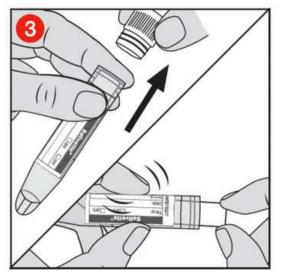
or specialist quickly.

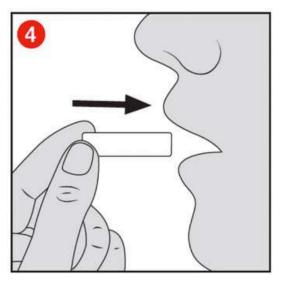


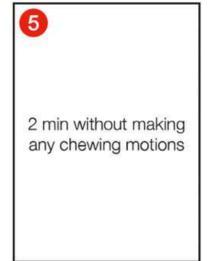
Saliva Cortisol Test: Sample Collection

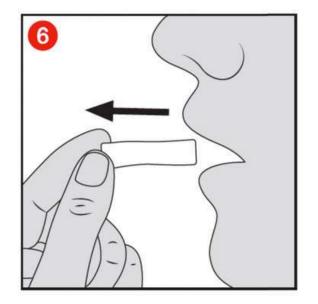


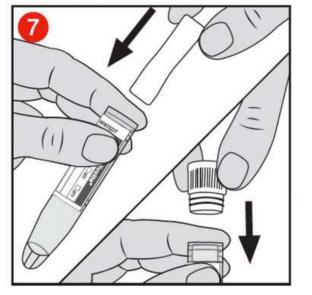


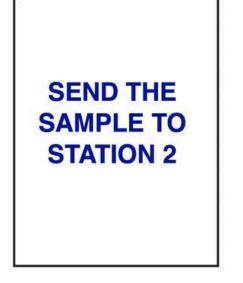












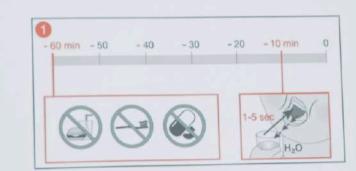




"Effects of Four Foundations of Mindfulness-Based Intervention (FMBI) on Salivary Cortisol Levels,
Body Compositions, Blood Pressure, Pulse Rate, and Brain Waves of Practitioners

Corticol Toots Composition

Saliva Cortisol Test: Sample Collection

















Blood Pressure and Heart Rate Measurement



Station 3

During Reading

- No talking
- Rest your arm with the cuff on a table at chest height
- Sit upright with back straight
- Do not cross over the legs & put both feet flat on the floor

Blood Pressure Categories



SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)		
LESS THAN 120	and	LESS THAN 80		
120-129	and	LESS THAN 80		
130-139	or	80-89		
140 OR HIGHER	or	90 OR HIGHER		
HIGHER THAN 180	and/or	HIGHER THAN 120		
	(upper number) LESS THAN 120 120-129 130-139 140 OR HIGHER	(upper number) LESS THAN 120 and 120-129 and 130-139 or 140 OR HIGHER or		

heart.org/bplevels

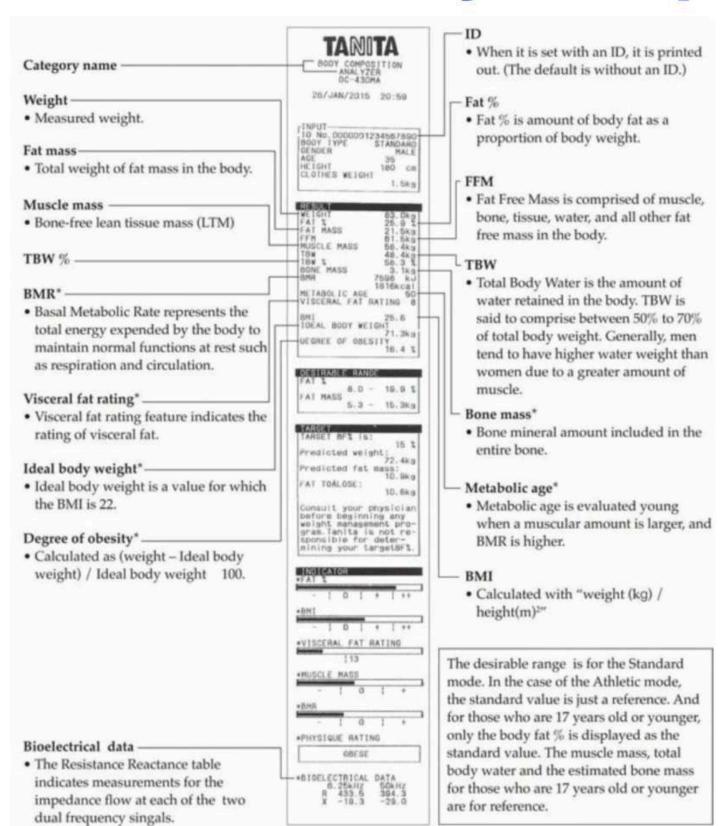








Body Composition Measurement





Station 4







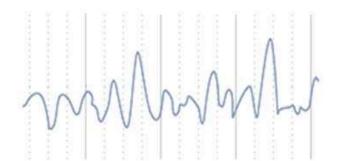


Four Categories of Brain Wave Patterns



Beta (14-30 Hz)

Concentration, arousal, alertness, cognition Higher levels associated with anxiety, disease, feelings of sparation, fight or flight



Theta (4-7.9 Hz)

learned material

Dreaming sleep (REM sleep) Increased production of catecholamines (vital for learning and memory), increased creativity

Integrative, emotional experiences, potential change in behavior, increased retention of learned material

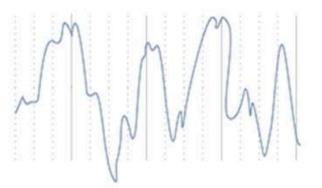
Hypnagogic imagery, trance, deep mediation, ress to unconscious mind .ess to nucouscions mind Hybnagogic imagery, trance, deep mediation,



Alpha (8-13.9 Hz)

Relaxation, superlearning, relaxed focus, light trance, increased serontonin production

Pre-sleep, pre-waking drowsiness, mediation, beginning of access to unconscious mind



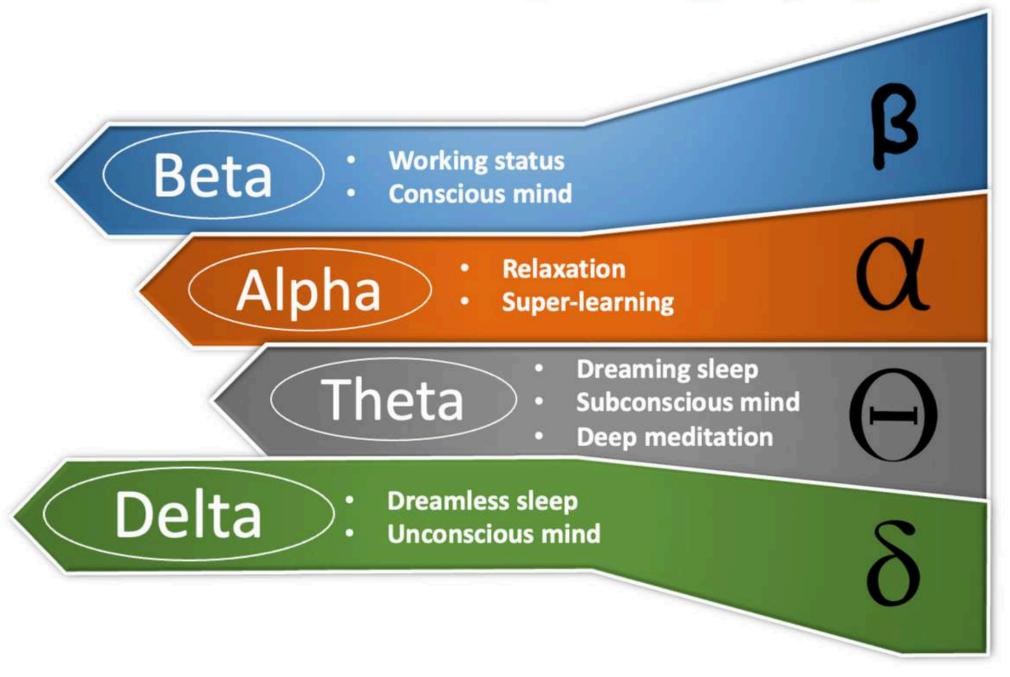
Delta (.1-3.9 Hz)

Dreamless sleep Human growth hormone released

Deep, trance-like, non-physical state, loss of body awareness

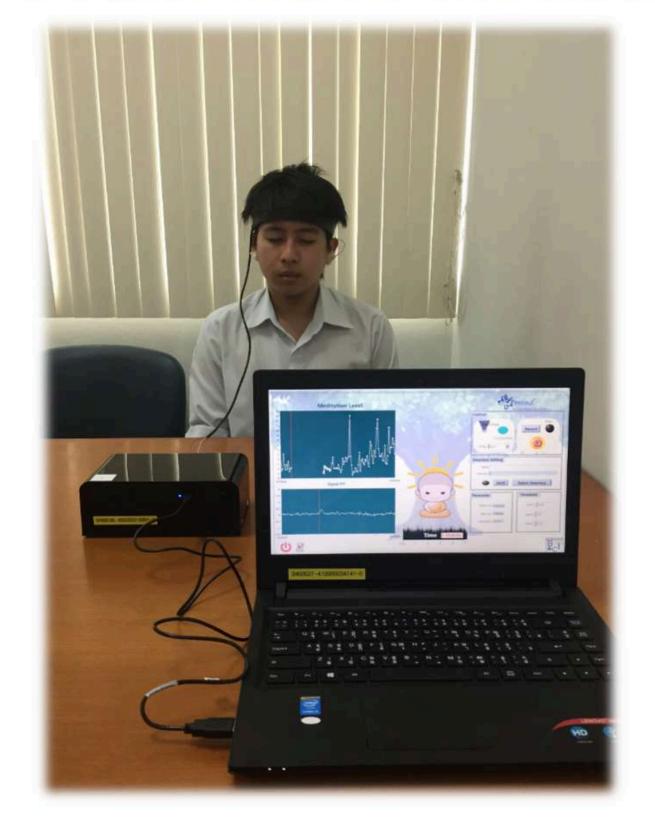
Access to unconscious and "collective unconscious" mind, greatest "push" to brain when induced with Holosync"

Access to unconscious and "collective unconscious" mind, greatest "push" to brain when induced with Holosync"



Station 5 Wisdom Cafe





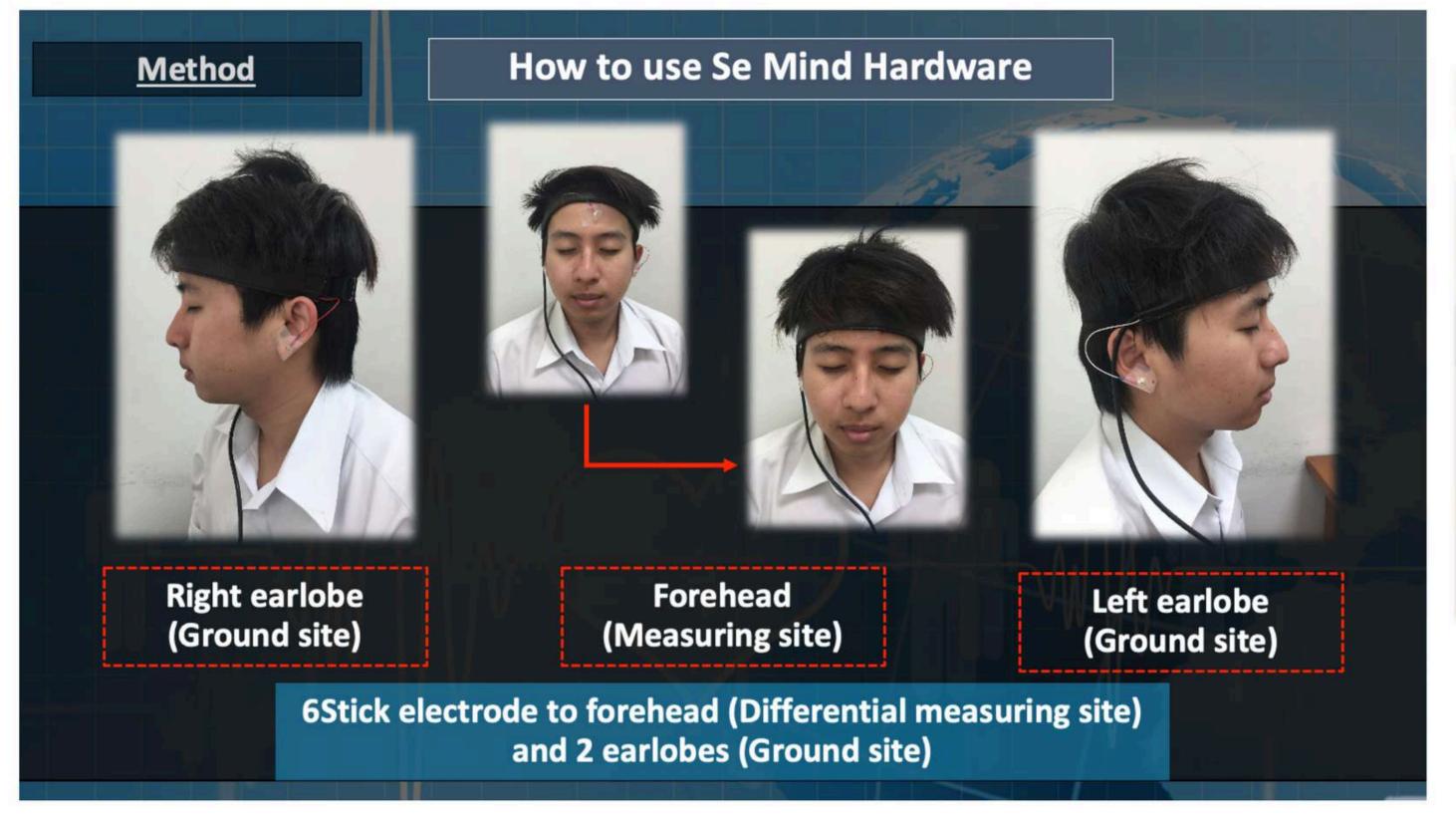




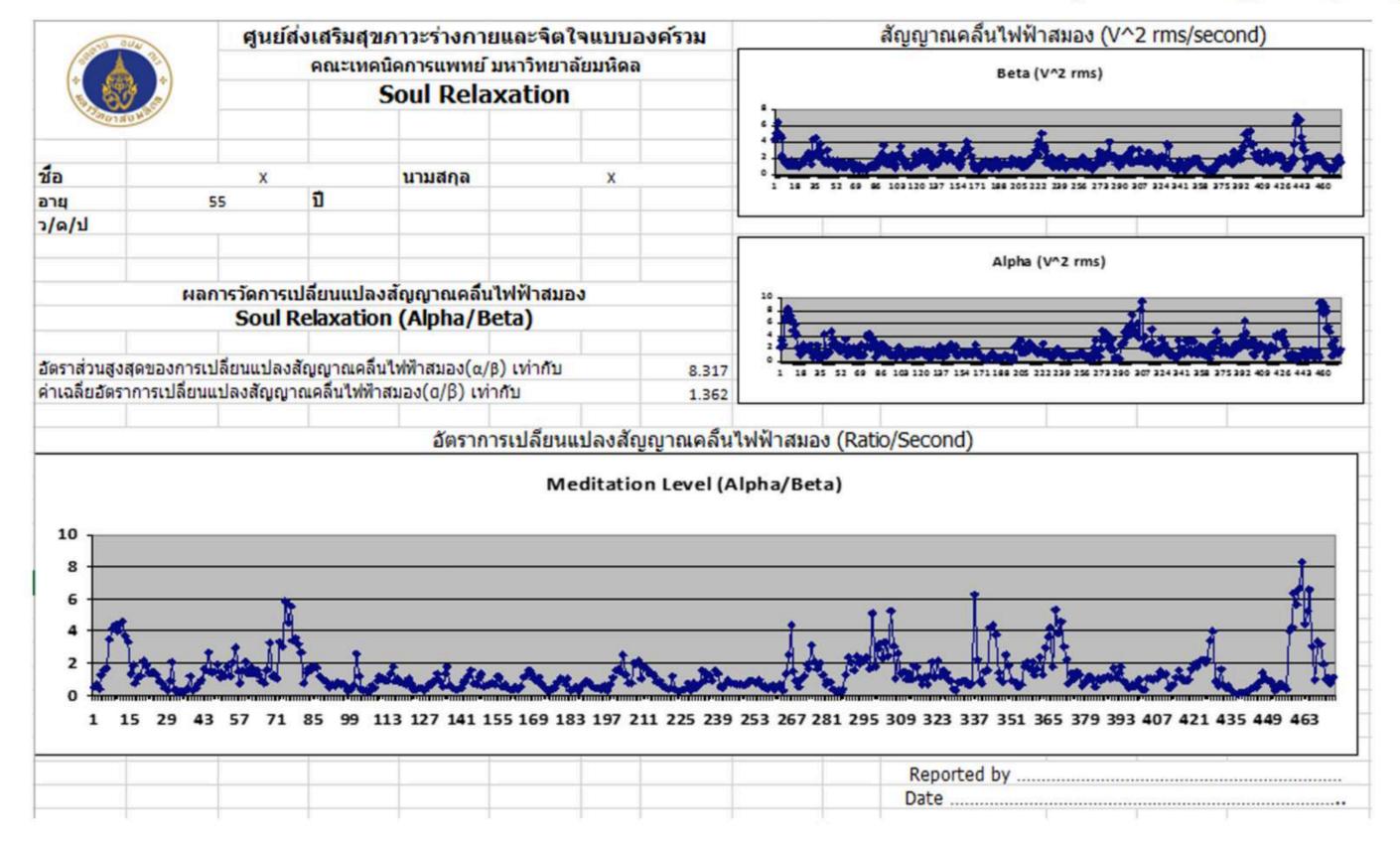




































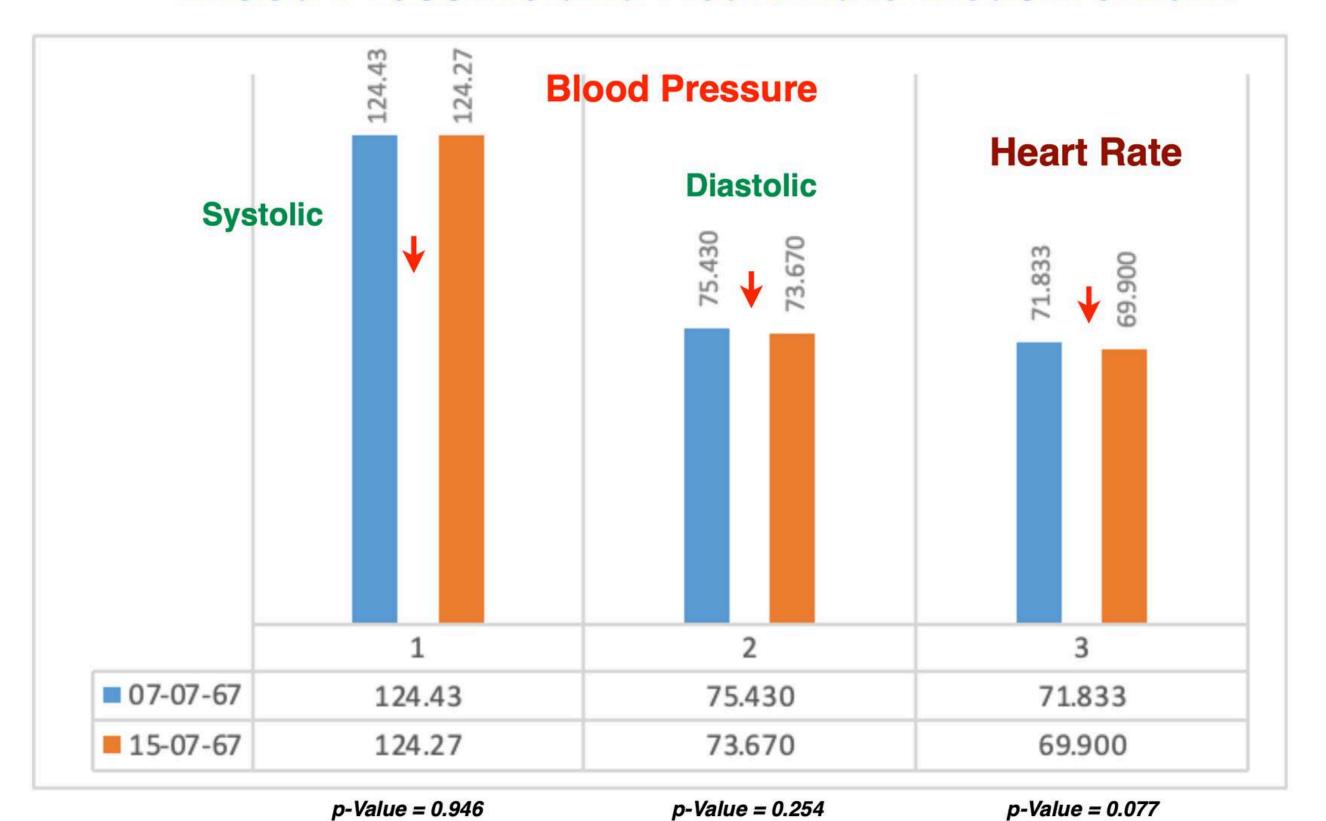




Results:

Statistical Significance: p-Value < 0.05

Blood Pressure and Heart Rate Measurement

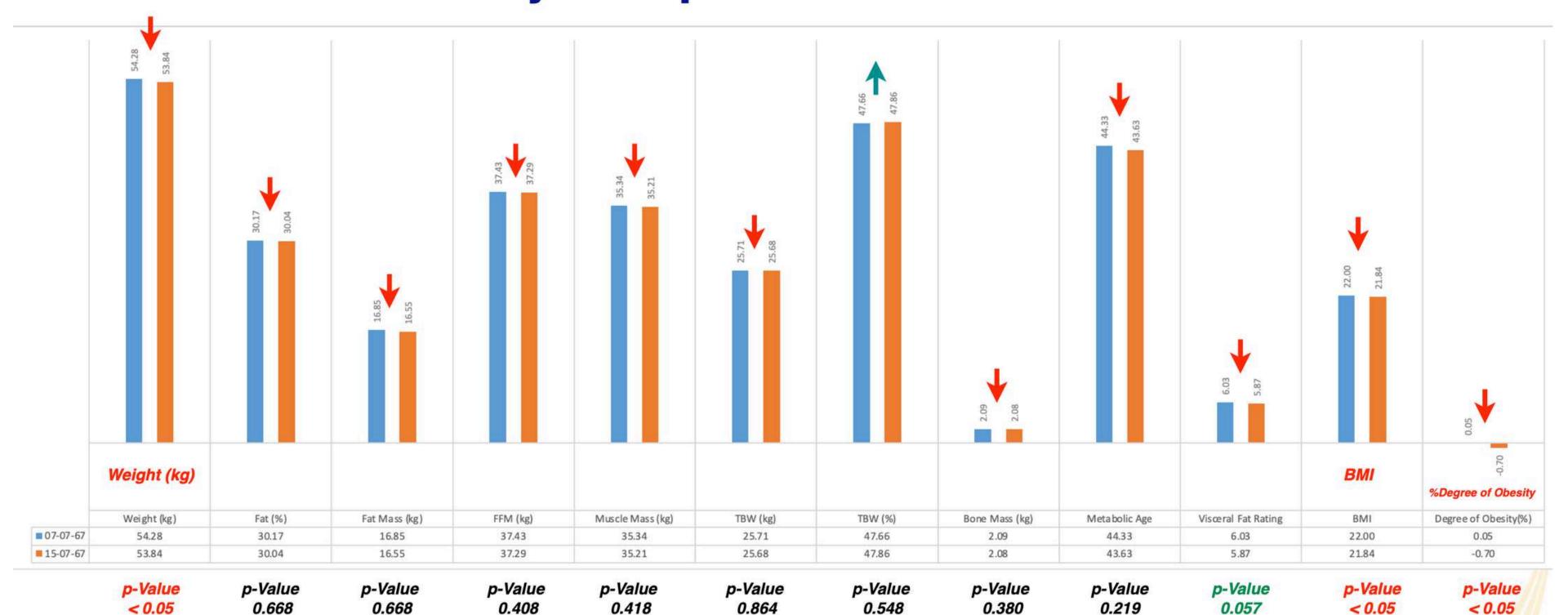


Statistical Significance: p-Value < 0.05



Results:

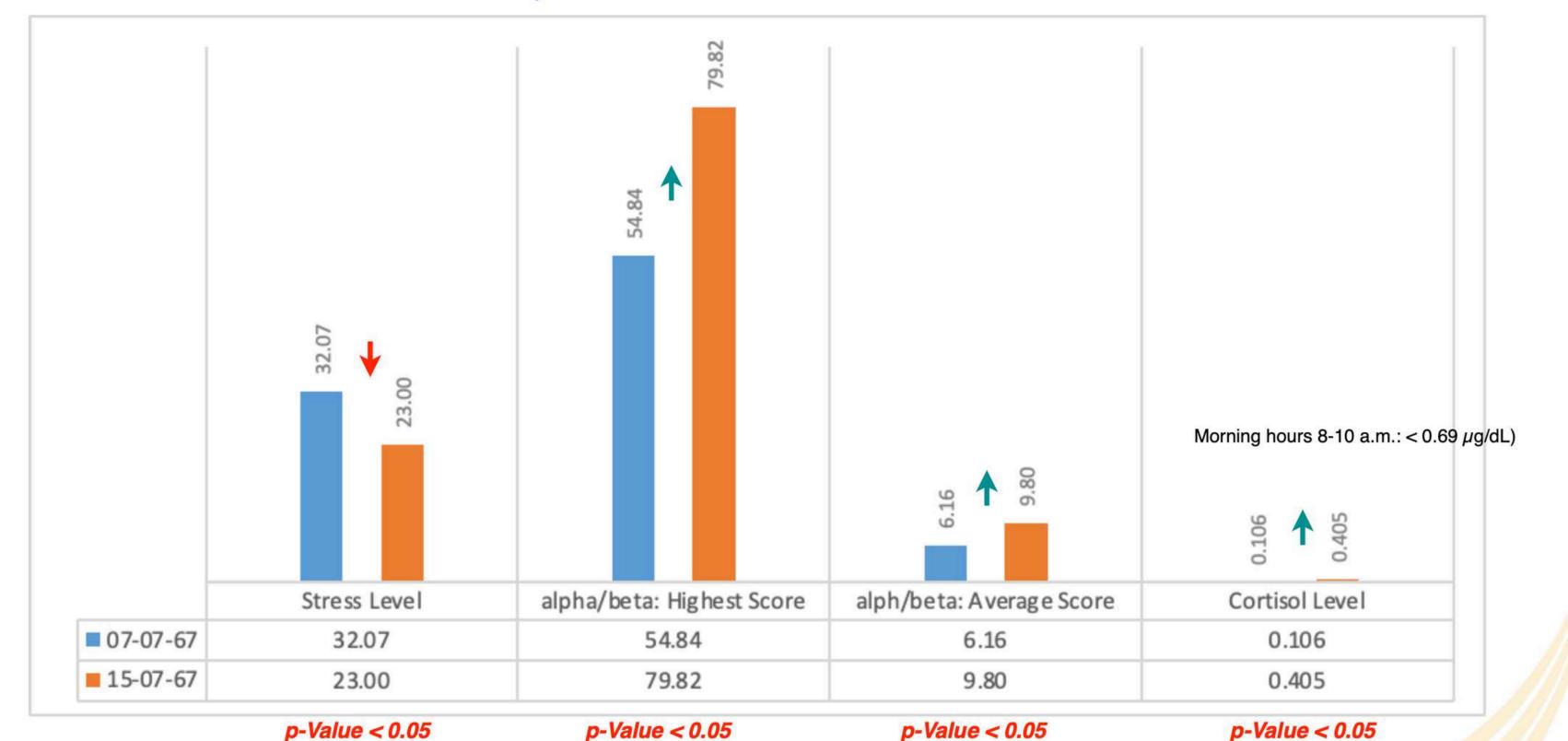
Body Composition Measurement



Results:

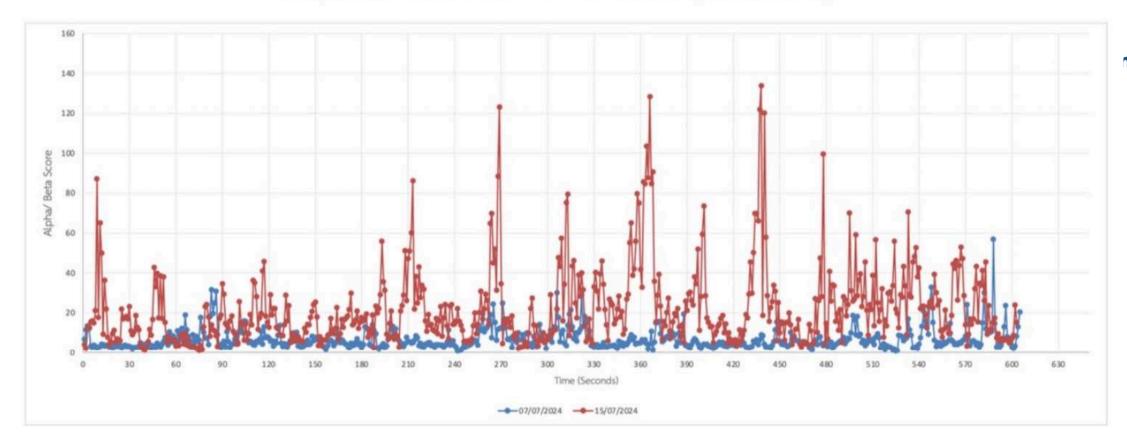
Statistical Significance: p-Value < 0.05

Stress Assessment, Brainwave Measurement and Cortisol Levels





BrainWave Measurement: Alpha/ Beta Score vs Time (Seconds)



Example Case of Brain Wave Analysis

Analysis Results of Brain Wave "the Alpha/ Beta Ratio Score" n wave measurements taken pre- and post-activity, 10 minutes/ session

The Alpha/ Beta Ratio Score	Pre 7/7/2024	Post 15/7/2024	
The <u>Highest</u> Alpha/ Beta Ratio Score	56.837	133.738	
The <u>Average</u> Alpha/ Beta Ratio Score	6.870	22.068	1



Interpretation (Focus primarily on the average Alpha/Beta ratio scores)

The Alpha/Beta ratio score refers to calculating a score by dividing the electrical potential of Alpha by Beta brain waves

The blue graph/ blue numbers represent the Alpha/Beta ratio score pre-activity (on 7/7/2024)

represent the Alpha/Beta ratio score post-activity (on 15/7/2024) The red graph/ red numbers

A high score means calmness and relaxation

A low score means less relaxation, or being focused on a particular matter, or using a lot of mental effort

The difference in the 'positive direction' or a 'green arrow pointing up' means increased relaxation post the activity

The difference in the 'negative direction' or a 'red arrow pointing down' means decreased relaxation post the activity



Overall of Results

No.	Parameter	Sub-parameter	07-07-67	15-07-67	p-Value
1	Blood Pressure	Systolic	124.433	124.270	0.946
2		Diastolic	75.433	73.667	0.254
3	Heart Rate		71.833	69.900	0.078
4	Body Composition (3/12)	Weight (kg)	54.280	53.840	0.001
5		Fat (%)	30.170	30.043	0.668
6		Fat Mass (kg)	16.850	16.550	0.128
7		FFM (kg)	37.430	37.290	0.409
8		Muscle Mass (kg)	35.340	35.213	0.418
9		TBW (kg)	25.710	25.680	0.864
10		TBW (%)	47.663	47.863	0.548
11		Bone Mass (kg)	2.090	2.077	0.380
12		Metabolic Age	44.333	43.633	0.219
13		Visceral Fat Rating	6.033	5.867	0.057
14		BMI	22.003	21.840	0.008
15		Degree of Obesity (%)	0.050	-0.700	0.008
16	Brain Wave Measurement	alpha/beta: Highest Score	54.845	79.821	0.008
17		alpha/beta: Average Score	6.161	9.802	0.002
18	Stress Level		32.067	23.000	0.001
19	Cortisol Level		0.106	0.405	0.000

Mahidol University Faculty of Medical Technology

Research Team



DR. NADNAPANG PHOPHICHIT

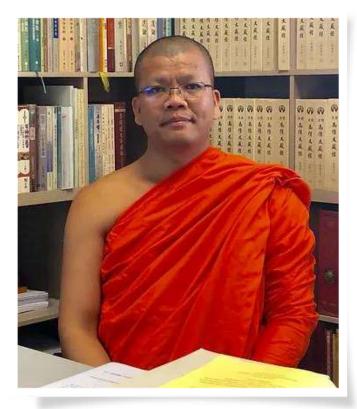
PRINCIPAL INVESTIGATOR (PI) IBSC, MCU, THAILAND



Phramaha Phuen Kittisobhano, Asst. Prof. Dr., Faculty of Humanities, MCU



Dr. Sakchai Sakabucha IBSC, MCU



Phramaha Anon Anando, Asst. Prof. Dr., IBSC, MCU



Assoc.Prof.Dr. Wilasinee J. Faculty of Medical Technology, MU



Phramaha Duangthip Pariyattidhari, Dr. IBSC, MCU



Dr. Tararat Khaokhiew Faculty of Medical Technology, MU



Research Presentation at the International Conference 2024





The research study was presented at the PsyCon Budapest – International Conference on Psychology & Psychiatry, held on 25–26 September 2024 at Óbuda University, Budapest, Hungary This conference, organized by the Healthcare and Biological Sciences Research Association (HBSRA), provided an international platform to share insights from the research with a global audience.



Research Presentation at the International Conference 2024





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Research Contribution at the Dharma Gate Buddhist College (DGBC), Budapest, Hungary



Dr. Nadnapang Phophichit, Head of the Research Project, was invited to deliver a lecture and present the research findings to master's students and faculty members at Dharma Gate Buddhist College (DGBC), Budapest, Hungary, on 23–24 September 2024.



Research Contribution at the Dharma Gate Buddhist College (DGBC), Budapest, Hungary









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Research Contribution at the Dharma Gate Buddhist College (DGBC), Budapest, Hungary









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Research Contribution at the Rotary Club of Bangkok







Dr. Nadnapang Phophichit, Head of the Research Project, was invited to present the research findings at the Rotary Club of Bangkok on 10 January 2025. This presentation was delivered to an audience of professionals, academics, and community leaders, providing a valuable opportunity to share insights from the research project and promote the application of mindfulness-based interventions within diverse societal contexts.



effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners

Nadnapang Phophichit et al.

Phramaha Phuen Kittisobhano
Phramaha Anon Anando
Phramaha Duangthip Pariyattidhari
Sakchai Sakabucha
Wilasinee Jeungprasopsuk
Tararat Khaokhiew

This study examines the effects of the Four Foundations of Mindfulness-Based Intervention (FFMBI) on physiological and psychological markers, including salivary cortisol, body composition, blood pressure, pulse rate, and brain waves. A mixed-methods approach involved interviews with 12 Vipassanā meditation masters and Buddhist scholars to develop the FFMBI program, followed by a 7-day retreat with 30 volunteers. Results showed significant reductions in self-reported stress (SPST-20 scores from 32.07 to 23.00) and improvements in brainwave alpha/beta ratios (highest scores from 54.84 to 79.82; average scores from 6.16 to 9.80), indicating enhanced mental relaxation. Body weight, BMI, and obesity levels improved, though heart rate and blood pressure changes were not significant. Unexpectedly, salivary cortisol levels increased, suggesting the need for further investigation. Overall, the findings highlight the positive impacts of FFMBI on both physical and mental well-being.



Nadnapang Phophichit, PhD. is the Director of the Certificate in Mindfulness Master Program (International Program) at the International Buddhist Studies College, Mahachulalongkornrajavidyalaya University, Thailand. She lectures on Buddhist Studies, Buddhist Psychology, Innovative Mindfulness, and Peace Studies. Her research integrates the Four Foundations of Mindfulness-Based Interventions (FFMBI), Buddhist teachings, Vipassana meditation, well-being, and stress resilience. Dr. Nadnapang has led several significant research projects in these fields and collaborated internationally, delivering lectures combined with meditation sessions. She has been invited to speak on mindfulness and its effects on mental and physical health at universities and Rotary Clubs. Her research aims to integrate the wisdom of the Buddha's teachings with contemporary science, promoting mindfulness and Vipassana meditation as tools for inner and outer peace in individuals and communities worldwide. She can be reached at nadnapang@ibsc.mcu.ac.th.

> Received January 21, 2025 Revised February 9, 2025 Accepted February 10, 2025

Keywords

Vipassana meditation, Mindfulness-Based Intervention, body composition, stress reduction, brainwave

SPIRITUALITY STUDIES 11-1 SPRING 2025 6 19



Research Team

- 1.Dr. Nadnapang Phophichit
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Journal:

Spirituality Studies (Scopus Q2)

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Congratulations!

Research Paper

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Waves of Practitioners"

Keywords:

- Vipassana Meditation
- Mindfulness-based Intervention
 - Body Composition
 - Stress Reduction
 - **Brainwave**







Research Paper Publication





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Effects of Four Foundations of Mindfulness-Based Intervention on Salivary Cortisol Levels, Body Composition, Blood Pressure and Pulse Rate, and Brain Wayes of Practitioners

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This study examines the effects of the Four Foundations of Mindfulness-Based Intervention (FFMBI) on physiological and psychological markers, including salivary cortisol, body composition, blood pressure, pulse rate, and brain waves. A mixed-methods approach involved interviews with 12 Vipassana meditation masters and Buddhist scholars to develop the FFMBI program, followed by a 7-day retreat with 30 volunteers. Results showed significant reductions in self-reported stress (SPST-20 scores from 32.07 to 23.00) and improvements in brainwave alpha/beta ratios (highest scores from 54.84 to 79.82; average scores from 6.16 to 9.80), indicating enhanced mental relaxation. Body weight, BMI, and obesity levels improved, though heart rate and blood pressure changes were not significant. Unexpectedly, salivary cortisol levels increased, suggesting the need for further investigation. Overall, the findings highlight the positive impacts of FFMBI on both physical and mental well-being



rector of the Certificate in Mindfulness Master Program (International Program) at the International Buddhist Studies College, Mahachulalongkornrajavidyalaya University, Thailand. She lectures on Buddhist Studies, Buddhist Psychology, Innovative Mindfulness, and Peace Studies. Her research integrates the Four Foundations of Mindfulness-Based Interventions (FFMBI), Buddhist teachings Vipassana meditation, well-being, and stress resilience. Dr. Nadnapang has led several significant research projects in these fields and collaborated internationally, delivering lectures combined with meditation sessions. She has been invited to speak on mindfulness and its effects on mental and physical health at universities and Rotary Clubs. Her research aims to integrate the wisdom of rary science, promoting mindfulness and Vipassana meditation as tools for inner and outer peace in individuals and communities worldwide. She can be reached at nadnapang@ibsc.mcu.ac.th

> Received January 21, 2025 Revised February 9, 2025 Accepted February 10, 2025

Keyword

Vipassana meditation, Mindfulness-Based Intervention, body composition stress reduction, brainwave

← Photography by Martin Dojčár, 2025.

SPIRITUALITY STUDIES 11-1 SPRING 2025 69 19

Phophichit, N., Kittisobhano, P. P., Anando, P. A., Pariyattidhari, P. D., Jeungprasopsuk, W., Khaokhiew, T., & Sakabucha, S. (2025). Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on salivary cortisol levels, body composition, blood pressure and pulse rate, and brain waves of practitioners. *Spirituality Studies*, 11 (1), 19–39.



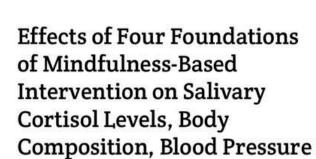
Research Paper Publication

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NADNAPANG PHOPHICHIT

and Pulse Rate, and Brain Waves of Practitioners

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INTERNATIONAL BUDDHIST STUDIES COLLEGE (IBSC), MCU

Joint Research Project between IBSC, MCU & DGBC, Hungary

"Effects of Four Foundations of Mindfulness-Based Intervention (FFMBI) on the Mental Well-being of Hungarian Practitioners

A Case Study of Hungarian Students at Dharma Gate Buddhist College, Budapest, Hungary"

> 7-day Meditation Retreat (17-24 June 2025)



Phra Medhivajarapundit Prof. Dr. IBSC, MCU, Thailand



Gábor Karsai DGBC, Hungary



Dr. Sakchai Sakabucha IBSC, MCU, Thailand



Cser Zoltán DGBC, Hungary



Dr .Nadnapang Phophichit IBSC, MCU, Thailand



Melinda Irtl Földiné DGBC, Hungary



A 3 day-meditation retreat project

At the Dhamma Gate Buddhist College, Budapest, Hungary Duing 5-7 November 2024

































































