



MEDITATION: IMPROVING MENTAL FOCUS AND MENTAL HEALTH

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COLUMBUS STATE

UNIVERSITY

WHY MEDITATE?





GUIDED MEDITATION

Thoughts



CULTURE OF BUSY

SIMMER ANALOGY

Hypothesis #1: We must continuously return to a relaxed state in order to access said relaxed state in stressful situations.

Meditation is a continuous PRACTICE.

CULTURE OF BUSY



CULTURE OF BUSY



CULTURE OF BUSY AND MEDITATION

- **Paradox #1**: The problems that meditation can help us overcome are often what deter us from meditating in the first place (Robert Wright)
 - **Myth #1**: It's difficult to meditate
 - **Truth #1**: It's sometimes difficult to sit with unpleasant things



WHY MEDITATE?

Science



SCIENCE

- Physiological Changes
- Psychological/Behavioral Changes

SCIENCE- BRAIN STRUCTURE

TRUTH #2: A regular meditation practice changes the structure of the brain.

- Increases myelin
- Increases grey matter where it counts
- Strengthens the connection between left and right brain
- Changes in brain waves

SCIENCE- BRAIN STRUCTURE

Increases Myelin (White matter)

- ❑ Function: protects nerves and speeds rates of impulses.
- ❑ Dysfunction: degenerative disease (MS) breaks down myelin
- ❑ Learning is accompanied by increases of myelin

SCIENCE- BRAIN STRUCTURE

Increases Grey Matter

- ❑ Increases in Grey Matter found in Hippocampus, responsible for learning and memory
- ❑ Increases in Grey Matter found in structures associated with self-awareness, compassion, and introspection
- ❑ Decreases in Grey Matter found in Amygdala, reptile brain and home of fight of flight response

SCIENCE- BRAIN STRUCTURE

Strengthens connection between Left and Right brain

- ❑ Corpus Collosal
- ❑ Larger structure in long time meditators vs control group

SCIENCE- BRAIN STRUCTURE

Increases Theta Brain Waves

- ❑ Mostly experienced in dream states, REM
- ❑ Associated with learning, memory, vivid imagery, creativity, and intuition

PHYSIOLOGICAL CHANGES- AGING

- Changes in DNA: length of telomeres
- Age related cognitive decline: brain atrophy

Hypothesis #2: Age may matter.

MIND BODY CONNECTION

- Promotes the **Parasympathetic Nervous System** (relaxation) over the Sympathetic Nervous system (fight or flight)
- Reduces physical STRESS RESPONSE
- Stress produces INFLAMMATION
 - Negative Floating Brain (Donna Jackson Nakazawa)
 - Release of adrenaline, cortisol, and macrophages (immune cell releasing cytokines that in turn cause inflammation)
- Prolonged states of stress have an undeniable effect on the body
- Digestion



PSYCHOLOGICAL AND BEHAVIORAL CHANGES

- **Truth #3:** Perspective can be life altering

P.S. The world doesn't make stress, YOU do.

PSYCHOLOGICAL AND BEHAVIORAL CHANGES

- Increased Focus [increases in the prefrontal cortex and right anterior insula]
- Decreased Anxiety [decreases in amygdala (lizard brain)]
- Increases Self Awareness
- Increases Emotional Connection
 - ❖ [Emotional EQ, attributed to temporoparietal junction (TPJ), which is increased in mass with meditation]

MEDITATION PHILOSOPHY

- **Paradox #3**: The path to enlightenment is found by not looking for it.
- **Paradox #4**: Success in meditation is best achieved by not pursuing success. (Robert Wright)
- Default Mode Network



MEDITATION PHILOSOPHY

Types of Meditation

- Open Monitoring --- Mindfulness Based Stress Reduction (MBSR)
- Focused Attention --- Transcendental Meditation (TM)

TYPES OF MEDITATION

- Others
 - Loving Kindness (Metta)
 - Walking
 - Zazen
 - Chakra
 - Kundalini
 - Qigong
 - Vipassana
 - Mantra
 - Pranayama
 - Vedic
 - Gazing (Trataka)
 - Third Eye



MEDITATION PHILOSOPHY

MEDITATION ELEMENTS:

1. Sit
2. OVERRIDE Default Mode Network
3. NON-JUDGEMENT or NON-ATTACHMENT

HOW TO MEDITATE

- Phone apps for meditation
 - CALM
 - HEADSPACE
 - SIMPLE HABIT
 - INSIGHT (MEDITATION) TIMER

Hypothesis #3: Apps are minimal help in creating a daily practice for college age students.

SURVEY RESULTS

Stress Release

Very helpful 43%

Somewhat helpful 35%

Slightly Helpful 22%

Not Helpful 0%

Reduction of Anxiety

Very helpful 41%

Somewhat helpful 36%

Slightly Helpful 14%

Not Helpful 9%

Ability to Focus

Very helpful 44%

Somewhat helpful 30%

Slightly Helpful 22%

Not Helpful 4%

SURVEY RESULT

Meditation during the class

13%	Rarely
57%	Sporadically
17%	Regular practice few times a week
9%	Regular daily practice
4%	Regular twice daily practice

Meditation After the class

48%
35%
0%
17%
0%

SURVEY RESULTS

“I don’t practice meditation as much on my own. Even though I should. It helped a bunch when I was in school and I need to get back into it again.”

“Meditation was very helpful to me. Spring 2017 was my hardest semester to date, and I meditated as a way to handle the stress and anxiety of the day. I meditated before and after performances, in the middle of the day, and at night if I couldn't sleep. By the end of the semester, I was meditating 30-45 minutes per day just to keep my head clear. For personal reasons, I have stepped away from meditation, but it was a great help to me during that time.”

“Meditation is still a struggle for me. There is an anxiety that surrounds it for some reason. I think it is a combination of my personality/generation. My mind needs to be going fast constantly. I struggle with doing work without another stimulus like listening to music. Or I can only clean my apartment when the tv is on. For some reason, multiple avenues of brain activity helps be productive. So the act of shutting all that down is a big struggle for me.”



MEDITATION PHILOSOPHY

Paradox #5: the effects of meditation can often only be fully experienced in the absence of meditation.



PRACTICAL APPLICATION

- As needed basis
- Devoted class
- Studio class concentration
 - Book study
 - Guests
- Promote it as part of practice
- Mindfulness Week/Month (MAY)



FURTHER RESOURCES

See Handout

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QUESTIONS???