Mind Body Medicine: Meditation/Mindfulness

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Mind Body “Medicine” What is it?

- An approach to health focusing not only on physical body and conscious mind
- Central tenet: interconnectedness of mind and body
- Interconnectedness can be “mined” in various ways
Biological Substrates of Mind-Body Connections

- Nervous System
- Endocrine System
- Immune System
- Optimally, interaction of these systems maintains homeostasis and wellness
The Sympathetic Nervous System

- Integrates the ‘fight or flight’ response
  - Release of norepinephrine & epinephrine
  - Increased heart rate & blood pressure
  - Increased respiratory rate and bronchial dilation
  - Increased glycogen to glucose in liver
  - Increased pupil diameter
  - Decreased GI activity

Important: Sympathetic responses to acute stress normally dissipate quickly
The Parasympathetic Nervous System

• Integrates the ‘feed & breed’ response
  – Release of acetylcholine
  – Decreased heart rate & blood pressure
  – Decreased respiratory rate and bronchial constriction
  – Decreased glycogen to glucose in liver
  – Pupillary constriction

  – Increased GI activity

Also known as ‘rest and RELAXATION’
Examples of “Mining” Connection/Mechanism

• Acupuncture: primarily somatic
• Hypnosis/imagery: primarily psychological
• Yoga: simultaneous?
Some Exercises that Elicit the Relaxation Response

- Autogenics/Biofeedback
- Hypnosis
- Meditation
- Progressive Relaxation
- Visualization
- Massage
- Yoga
- Aromatherapy
Meditation/Mindfulness

• What is it?
• What different types exist?
• How does it work?
• When is it useful?
• What’s the evidence?
For Some:

“I am so past enlightenment.”
What is it? (Meditation) Many definitions common theme

• Mental training: a process of familiarization with one’s own mental life

• Cultivation of beneficial mental capacities: calm, concentration, love, joy

• Refining the mind
A narrow definition:

- A **family of self-regulation practices** that focus on **training attention and awareness** in order to bring mental processes under greater voluntary control and thereby foster general mental well-being and development and or specific capacities such as **calm, clarity, and concentration**

- Walsh and Shapiro. April 2006 American psychologist
Broader definition:

A family of practices to train one in paying attention on purpose (intention) in a particular way (attitude)
Broader Definition Broken Down

- **Attention**: observation of experience in the present moment

- **Intention**: perhaps lost in translation, panic attacks and BP?

- **Attitude**: acceptance, non-judging, kindness, non-striving, letting go, patience, curiosity, trust, openness, non-reactivity
What Different Types Exist

• Concentrative- TM, mantra, image, rosary
• Expressive- chanting,
• Movement-yoga, qi gong, walking, whirling
• Mindfulness
What It Isn’t

- Achieving bliss
- Cultivating special powers
- Only having happy, nice feelings
- Absence of pain
- “nothing happens next”
Types of practice

Formal

Informal
Mindfulness

• Meditation form derived from Theravada Buddhist tradition known as Vipassana
• Developed as a means to cultivate greater awareness and insight
• Translated as “to see with discernment”
• Direct experience of current reality in the moment
• Non-judgmental moment to moment awareness
Mindfulness

“Paying attention in a particular way:
  – On purpose
  – In the moment
  – Non-Judgmentally”

Try it:
Interpersonal Mindfulness Dialogue

www.metta.org/home
"Big Picture" Thinking
The Trifid Nebula. A 'stellar nursery', 9,000 light years away where new stars are being born.
The Hourglass Nebula, 8,000 light years away
How Does It Work?

• Clear thought: big mind

• Biologic plausibility?
Big Mind Cultivation Of:

• Empathy
  – A sense of shared experience, including emotional and physical feelings, with someone or something other than oneself.

• Compassion
  – The humane quality of understanding the suffering of others and wanting to do something about it.
When Is Meditation Useful?

- Depression
- Anxiety
- PTSD
- Eating Disorders
- Substance abuse
- Borderline personality disorder
- Enhancing joyful existence
What’s The Evidence? (so far)

- Skin
- PSA
- Depression
- Chronic Pain
- Suicidal/self-harm behavior
- Attention
- Positive Affect
Fig. 1. Pre-study versus post-study PSA slope by patient, ordered according to increasing pre-study slope.
Mindfulness-Based Cognitive Therapy for Depression

A New Approach to Preventing Relapse

Zindel V. Segal
J. Mark G. Williams
John D. Teasdale
• The Clinical Journal of Pain: 1986-V2-Issue 3
• Four-Year Follow-Up of a Meditation-Based Program for the Self-Regulation of Chronic Pain: Treatment Outcomes and Compliance
• Kabat-Zinn, J.; Lipworth, L.; Burncy, R.; Sellers, W.
Dialectical Behavioral Therapy

• DBT cognitive behavioral techniques for emotion regulation plus mindful awareness and acceptance

• DBT is the first therapy that has been experimentally demonstrated to be effective for treating BPD

• DBT is also effective in treating patients who represent varied symptoms and behaviors associated with spectrum mood disorders, including self-injury.

Mental Training Enhances Attentional Stability: Neural and Behavioral Evidence

The Journal of Neuroscience, October 21, 2009 • 29(42):13418 –13427

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EEG
FUTURE

Rat Race
(Veggie Burger)

Happiness
(Ideal Burger)

PRESENT

Nihilism
(Worst Burger)

Hedonism
(Junk Food Burger)

from
“Happier” by Tal Ben-Shahar
The Pie of Life

- Spirituality
- Sleep
- Sexuality
- Eating
- Socializing
- Exercise
- Work
- Hobbies
Stress Reduction Kit

BANG HEAD HERE

Directions:
1. Place Kit on FIRM surface.
2. Follow directions in circle of kit.
3. Repeat step 2 as necessary, or until unconscious.
4. If unconscious, cease stress reduction activity.

www.benzo.org.uk
The problem in my life and other people’s lives is not the absence of knowing what to do, but the absence of doing it.

-Peter Drucker
Thought Provoking Readings

- **Meditation**


Some Useful Books (list available on request)

References (list available on request)