Mindfulness for Stress Management & Wellness

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What is mindfulness?

“The awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment to moment.”

(Kabat-Zinn, 2003)
Mindfulness Based Stress Reduction (MBSR)

• Stress reduction clinic at Umass founded in 1979 by Jon Kabat-Zinn

• 8 weekly 2 ½ hour classes and a single 6 hour retreat

• Classroom format with guided practice and group discussion
Mindfulness practices

Formal meditation practices

Awareness of everyday activities
How is mindfulness different than relaxation techniques?

- Not trying to produce a special state
- Greater awareness of the mind as it is in the present moment
- Applicable to any situation
Health benefits

• Increased awareness:
  – Mind and body
  – Thoughts as passing events and conditioned
  – Relationship between thoughts and emotions

• Leads to decreased:
  – Automatic reactions
  – Stress
Clinical research

• MBSR effective for chronic pain, anxiety, depression, and other complaints

• Reduced psychological stress, increased well-being

• Reduced physiologic response to stress
Mindfulness-based approach to wellness

- Holistic – physical, mental and spiritual
- Strength-based – vast potential of inner resources to promote one’s own well-being
- Supports a “culture of wellness” for all stakeholders involved in the person-centered planning partnership
MINDFULNESS-INDUCED NEUROPLASTICITY
MBSR increases left-sided cortical activation

Davidson, et al. Alterations in brain and immune function produced by mindfulness meditation
Psychosomatic Medicine 65(4):564-70, 2003 Jul-Aug
Increased immune response

Davidson, et al. Alterations in brain and immune function produced by mindfulness meditation
Psychosomatic Medicine  65(4):564-70, 2003 Jul-Aug
Immune changes correlate with shift in prefrontal activation

Davidson, et al. Alterations in brain and immune function produced by mindfulness meditation
Psychosomatic Medicine 65(4):564-70, 2003 Jul-Aug
MINDFULNESS FOR STAFF
Westborough Adolescent Unit

Comments from focus group:
• things that upset me before I gain perspective about a lot quicker
• class helped me validate my purpose in this work
• this class helped me see my work as a process and not a series of deadlines
After the class, did you feel more or less:
- Physical or emotional energy?
- Prone to negative thinking about your job?
- Irritated by small problems, by co-workers and/or patients?
- Frustrated with parts of your job?

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<td>Counselor</td>
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CHANGES IN NEURAL CIRCUITRY
Limbic system

- Frontal lobe
- Thalamus
- Hippocampus
- Amygdala
- Hypothalamus
- Olfactory bulb
Amygdala connectivity correlates with mindfulness.

- Ventral OFC
- Middle OFC
- Medial OFC
- ACC
- Caudate
MBSR changes
amygdala connectivity

OFC

ACC

PreMBSR

PostMBSR
Stress response and wellness

• Amygdala is the fight or flight center

• Activation triggers cascade of neural, neuroendocrine, neuroimmune and behavioral responses

• Chronic activation of this circuitry responsible for effects of stress on health outcomes
Stress reduction correlates with structural changes in the amygdala

Britta K. Hölzel,1,2 James Carmody,3 Karleyton C. Evans,1 Elizabeth A. Hoge,4 Jeffery A. Dusek,5,6 Lucas Morgan,1 Roger K. Pitman,1 and Sara W. Lazar1

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Mindfulness-based treatments: anxiety and depression

Effect sizes showed MBI’s were moderately effective

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<tr>
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<td>Anxiety</td>
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<tr>
<td>All studies</td>
<td>.63</td>
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<td>Specific populations</td>
<td>.97</td>
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Hoffman et al. 2010
Depression treatment & relapse

• Treatment guidelines recommend antidepressant treatment for 6-12 mos. beyond remission of symptoms, but often not followed or patients stop treatment

• Majority of patients have incomplete response, non-response, recurrence, or drop out of treatment

• With each recurrence likelihood of future recurrence increases
• Segal, Williams, Teasdale research on depression relapse:
  – *Cognitive reactivity* to sad moods was a predictor of recurrence

  – With each recurrence, milder sadness and ruminative thinking could trigger recurrence
• Format similar to MBSR:
  – 8-week classes of 2.5 hrs/wk,
  – Participatory psychoeducational group
  – Classroom and home practice, 1-day retreat
  – Mindfulness practices
• Adaptations
  – ↑ emphasis on cognitions – decentering, seeing thoughts as passing mental events, how they influence feelings and behaviors
  – Explicit instructions to practice acceptance rather than judgment or avoidance
  – Classroom discussion focus on depression rather than stress or pain
### MBCT

Developing ability to directly experience difficulties

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<td>Body scan</td>
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<td>Mindful walking/stretching</td>
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<td>Sitting with thoughts</td>
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<td>Sitting with difficulty</td>
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Segal, et al 2010

• Maintenance phase assigned to 1 of 3 study conditions:
  – M-ADM
  – MBCT + ADM taper
  – Pla + Clin
• 18 month follow-up
- No difference between MBCT and M-ADM in recurrence
- Evidence-based practice
- UK’s National Practice Guidelines for Depression
Wellness

• Chronic or repeated activation of the stress response leads to health problems and reduces quality of life

• Wellness involves self-knowledge and self-education about one’s health and active engagement in activities to promote health

• Improved emotional well-being and quality of life
Wellness

• Learning to pay attention and be present with experience –
  – Decreases automatic reactions and stress
  – Encourages health-promoting behavior changes – informed exercise, nutritional awareness, and improved sleep
  – Promotes changes in unhealthy behaviors – smoking, emotional eating, and alcohol/drug use
Mindfulness-based approach to wellness

• Holistic – physical, mental and spiritual

• Strength-based – inner resources to promote one’s own well-being

• Participatory – consistent with person-centered planning partnership in supporting a “culture of wellness” for all stakeholders
References


Questions:

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