



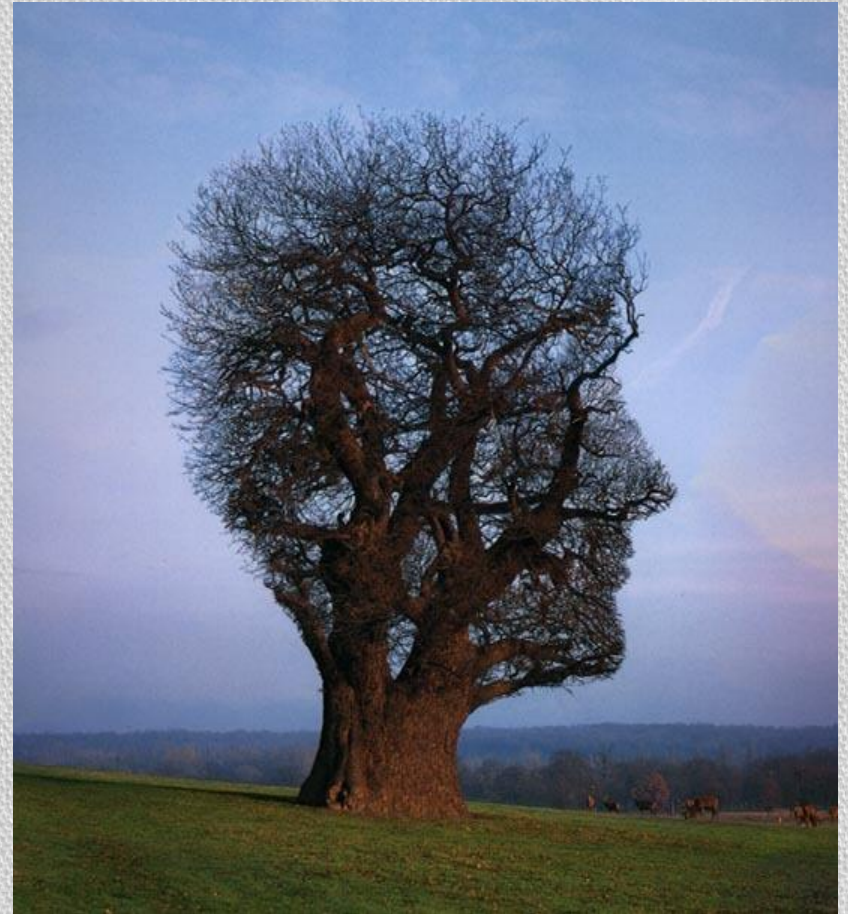
MINDFULNESS

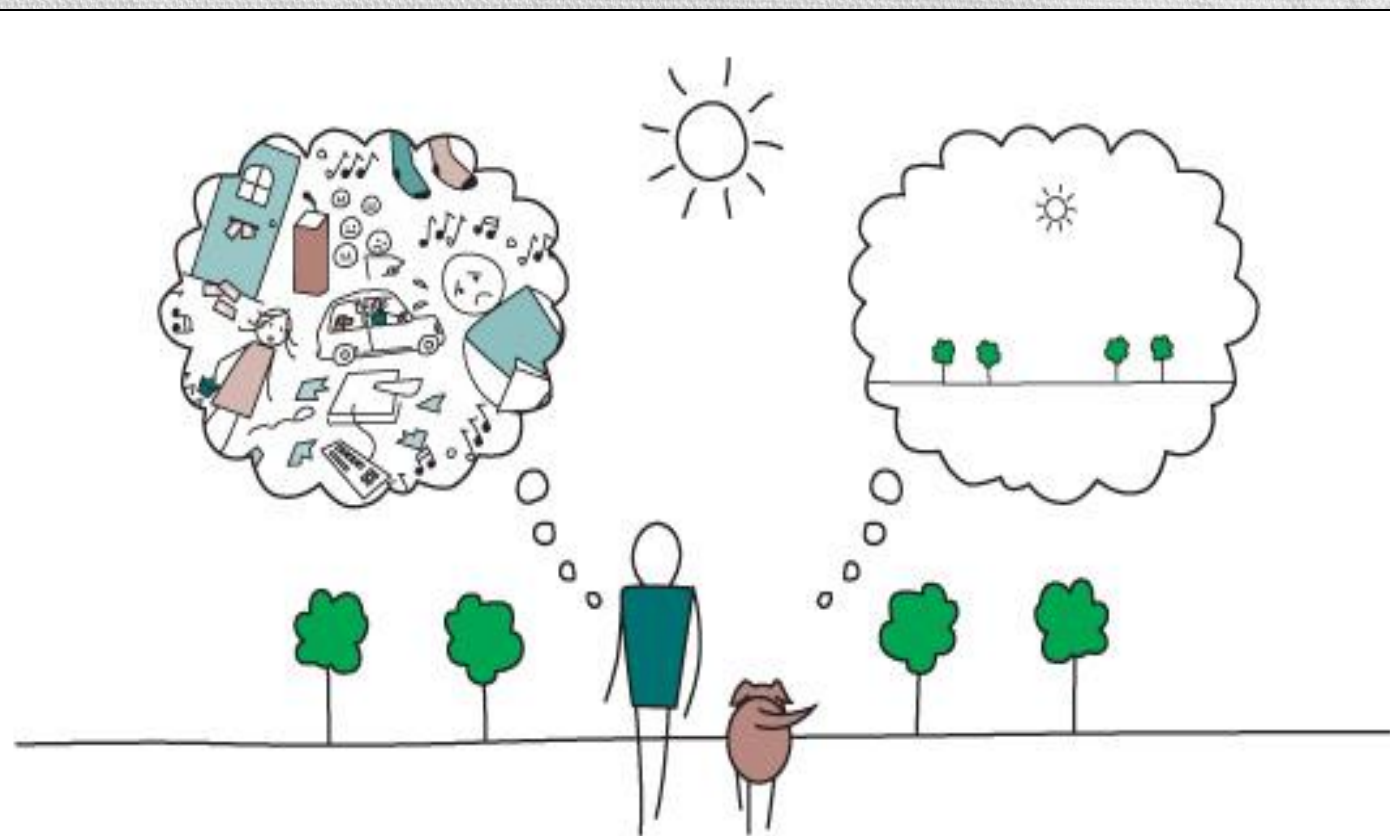
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What is Mindfulness?

- Paying attention in a particular way:
 - On purpose
 - In the present moment
 - Non-judgmentally

- Jon Kabat-Zinn





Mind Full, or Mindful?

Breathe!



Research on Mindfulness

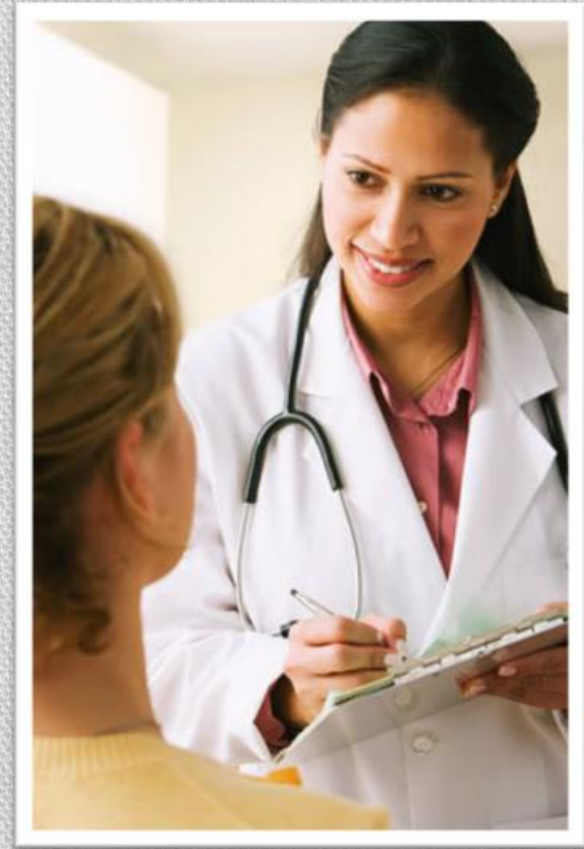
- Mindfulness Research Guide – D. S. Black
- www.mindfulexperience.org

- Articles Published on Mindfulness

• 1980	0
• 1990	5
• 2000	21
• 2005	77
• 2010	373
• 2012	477

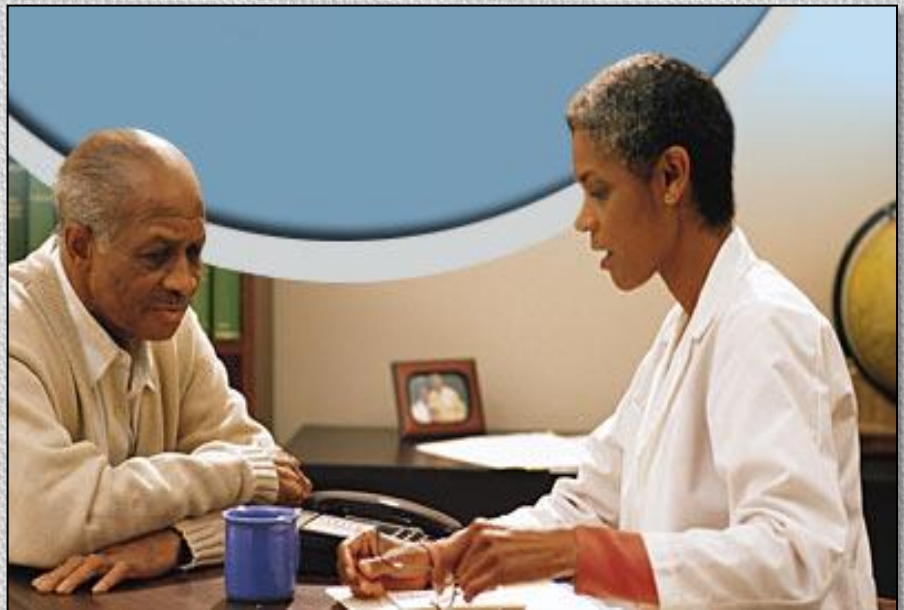
Medical Settings

- “Mindfulness meditation is a secular contemplative practice focusing on cultivating an individual’s attention and awareness skills.” (JAMA)
- Mindfulness Based Stress Reduction (MBSR)



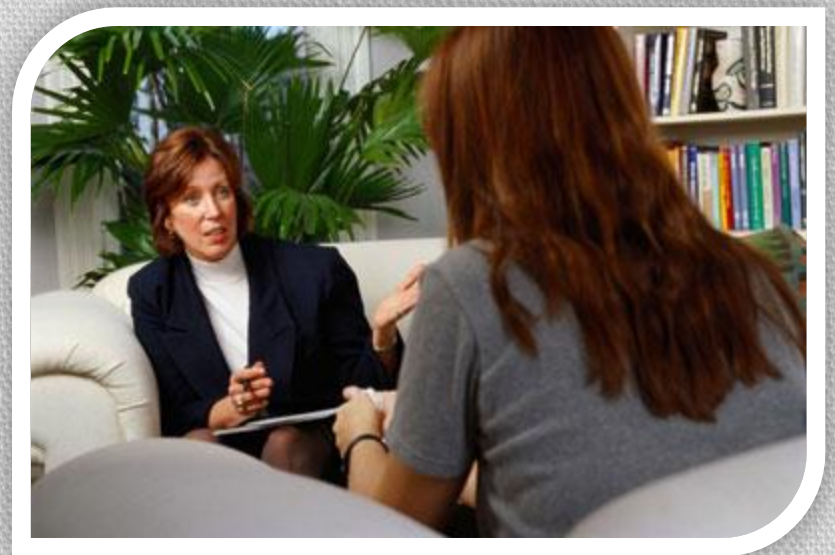
MBSR Outcomes

- Increased Immune Function
- Shorter and Less Severe Colds
- Reduced Fatigue in Cancer Patients
- Decreased Pain Intensity and Unpleasantness
- Increased Cognitive Function in Traumatic Brain Injury
- Reduction in symptoms of IBS
- Reduction in myocardial infarction and stroke risk



Mental Health and Wellbeing

- Mindfulness Based Cognitive Therapy (MBCT)
- Decreased Depression
- Fewer Relapses in Depression
- Decreased Anxiety
- Increased Emotional Regulation



Body Scan



Mindfulness Offerings at VCIH

Groups

MBSR, MAPPS, OMS

Mindful Stress Reduction for Faculty
and Staff

Movement

Yoga, Tai Chi, Qi Qong,

Workshops

Mindful Eating

Trainings



Mindfulness and Neuroscience

- Directed Neuroplasticity
- Changes in Brain Structure
- Changes in Brain Function



Brain Structure

- Increased Grey Matter in the Hippocampus
- Decreased Grey Matter in the Amygdala



Brain Structure

- Increases in Brain Thickness
 - Prefrontal Cortex
 - Insula



Brain Function

- Increased Neural Integration
- Reduced Lateralization
- Increased communication between the brain stem, the limbic system, and the cortex



Brain Function

- Left Cortical Shift
- Approach vs. Avoidance of Difficult Emotions
- More Positive Emotions such as Love, Compassion, Contentment



Additional Studies

- Loving Kindness Meditation
- Increase in Empathy and Compassion



Loving Kindness Meditation



Restoration of Awe?



Less Influence from
“Invariant Cortical
Representations”

References

- **Selected Articles:**

- Britton, W. B., Shahrar, B., Szepsenwol, O., Jacobs, W. J. (2012). Mindfulness-Based Cognitive Therapy improves emotional reactivity to social stress: Results from a randomized controlled trial. *Behavior Therapy*, 43, 365-380.
- Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well---being. *Journal of Personality and Social Psychology*, 84(4), 822.
- Greenberg J, Reiner K, Meiran N (2012) “Mind the Trap”: Mindfulness Practice Reduces Cognitive Rigidity. PLoS ONE 7(5): e36206. doi:10.1371/journal.pone.0036206
- Moyer, C. A. et al. (2011). Frontal Electroencephalographic Asymmetry Associated With Positive Emotion Is Produced by Very Brief Meditation Training. *Psychological Science*
- Siegel, D. J. (2007). Mindfulness training and neural integration: Differentiation of distinct streams of awareness and the cultivation of well---being. *SCAN*, 2(4), 259.

References

- **Selected Books:**

- Fredrickson, B. (2012). *Love 2.0*
- Hanson, R. (2009). *Buddha's brain: The practical neuroscience of happiness, love and wisdom.*
- Kabat-Zinn, J. (2012). *Mindfulness for Beginners.*
- Kornfield, J. (2011). *A lamp in the darkness: Illuminating the path through difficult times.*
- Siegel, D. J. (2007). *The mindful brain: Reflection and attunement in the cultivation of well-being.*