


UNC School of Social Work
Clinical Lecture Institute

Mindfulness for Personal and Professional Practice with Jeff Brantley

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Part I: Science and Mindfulness

Scientific perspectives on the importance of practicing mindfulness

What is Mindfulness?

- Awareness that is reflective, non-judging and accepting
- Natural human capacity
- Cultivated by meditation
- Effective way to reduce stress & anxiety
- Powerful means for connecting with our deepest and best qualities as human beings

Kabat-Zinn (2003). *Clin Psychol Sci Prac*, 10, 144-156.


Practicing Mindfulness

“Mindfulness practice means that we commit fully in each moment to being present. There is no “performance.” There is just this moment.”

--Jon Kabat-Zinn
Wherever You Go, There You Are (p. 22)



The Nature of Stress



“Man is not disturbed by events, but by the view he takes of them.”

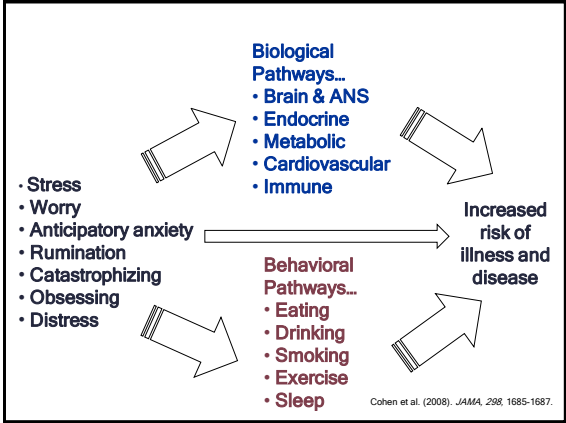
- Epictetus
Greek Philosopher

The Power of.....


Your *“Inner Narrative”*—what you are telling yourself, moment-by-moment, about what is happening and why.

Types of Thoughts That Can Activate the Stress Reaction

- ▶ Imagined scenarios of threat or failure
- ▶ Self-criticism or judgment
- ▶ Recall of disturbing events
- ▶ Rumination about a negative event
- ▶ Perceived stress
- ▶ Hostility
- ▶ Denial or avoidance
- ▶ Comparison to an imagined ideal



“YOU CAN'T STOP THE WAVES, BUT YOU CAN LEARN TO SURF.”

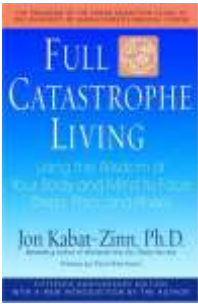



Jon Kabat-Zinn, Ph.D.
Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life

Mindfulness-Based Stress Reduction (MBSR)

- ▶ Teaches mindfulness meditation and application of mindfulness in daily life
- ▶ Emphasis on what a person can do to help themselves—using innate capacity for relaxation, attention, and awareness
- ▶ Classroom-based training for anyone regardless of religious orientation

Mindfulness-Based Stress Reduction (MBSR)

Typical MBSR Program

- ▶ Eight week class
- ▶ 2 to 2.5 hours / week
- ▶ Participants have diverse motivations that are health-based
- ▶ Variety of mindfulness methods taught
- ▶ Daily home practice
- ▶ Formal and Informal meditation
- ▶ Day of Mindfulness

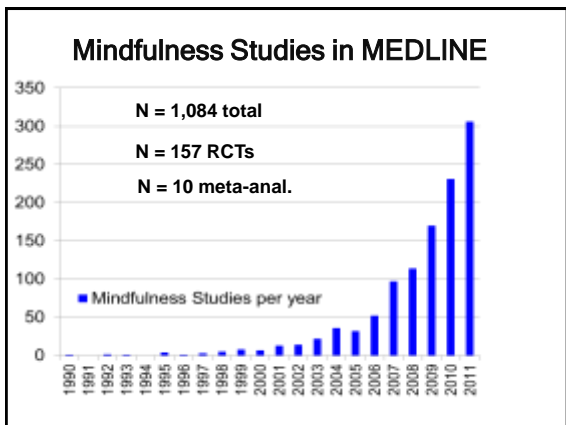
What Is The Connection Between Being Present and Being Healthy?

- ▶ Attention leads to awareness
- ▶ Awareness leads to insight and understanding
- ▶ Insight and understanding lead to increased choices

Inattention and Dis-ease

- ▶ Dis-attention leads to dis-connection
- ▶ Dis-connection leads to dis-regulation
- ▶ Dis-regulation leads to dis-order
- ▶ Dis-order leads to dis-ease

Jon Kabat-Zinn (2005). *Coming To Our Senses*. New York: Hyperion.



Mindfulness Practice: Reported Physical Health Benefits

- chronic pain (Kabat-Zinn, 1982, 1985; Morone, et al., 2008)
- cancer (Specia, et al, 2000; Carlson, et al., 2007)
- insomnia (Kreitzer, et al., 2005)
- psoriasis (Kabat-Zinn, et al., 1998)
- type 2 diabetes (Rosenzweig, et al., 2007)
- fibromyalgia (Grossman, et al., 2007)
- rheumatoid arthritis (Zautra, et al., 2008)
- mixed medical diagnoses (Reibel, et al., 2001)
- organ transplant patients (Gross, et al., 2004)
- heart disease (Sullivan, et al., 2009)

**Mindfulness Practice:
Reported Mental Health Benefits**

- ❑ depression (Jain, et al., 2007)
- ❑ relapsing depression (Teasdale, et al., 2000)
- ❑ depression in bipolar patients (Williams, et al., 2008)
- ❑ anxiety (Kabat-Zinn, et al., 1992; Weiss, et al., 2005; Orsillo & Roemer, 2005)
- ❑ substance abuse (Marlatt & Chawla, 2007; Bowen, et al., 2009; Zgierska, et al., 2009)
- ❑ eating disorders (Baer, 2006)
- ❑ binge eating (Kristeller, et al., 1999)
- ❑ ADHD (Zylowska, et al., 2008)
- ❑ aggressive behavior in developmental disability (Singh, et al., 2007)

**Effects of Mindfulness on
the Brain**

**Mindfulness Practice Changes Brain
Function**

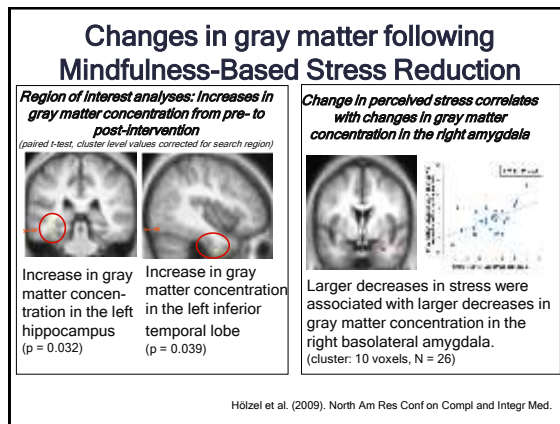
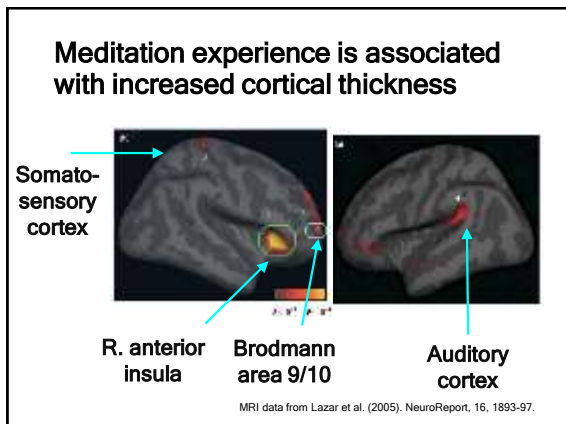
**“Neurons that fire together,
wire together.”**

– Donald Hebb, Ph.D.

**Is There Evidence from Neuroscience
Research to Support Mindfulness Training?**

- > Greater left prefrontal cortical activity is associated with mindfulness practice (Davidson, Kabat-Zinn, et al., 2003)
- > Reduced activity in areas of the brain associated with OCD found in patients who practiced mindfulness (Schwartz & Begley, 2002)
- > Higher levels of trait mindfulness is associated with a greater ability to engage the prefrontal cortex (PFC) to manage emotional reactions in the amygdala (Creswell, et al., 2007)
- > Mindfulness training over 8 weeks associated with greater neural activity in areas of the brain believed to subserve self-awareness (dorsolateral prefrontal cortex and medial prefrontal cortex) (Farb, et al., 2007)

**Mindfulness Practice Changes
Brain Mass**



Mindfulness and Gene Expression


How does mindfulness meditation alter neural, behavioral, and biochemical processes?

- ▶ Rapidly evolving field since landmark article by Jacobs and Epel in 2010.
- ▶ Studies often focused on gene expression, regulation, and dysregulation in clinical conditions, especially cancer and mechanisms of inflammation in the body

The Human Chromosome

- ▶ *Cellular senescence* is the phenomenon by which normal cells lose the ability to divide, normally after about 50 cell divisions in vitro.
 - ▶ In response to DNA damage (including shortened telomeres), cells either age or self-destruct if the damage cannot be easily repaired..
- http://en.wikipedia.org/wiki/Cellular_senescence

Telomere



The red ends show regions of telomeres in a chromosome. This is the structure in the cell nucleus that contains DNA, histone and non-histone proteins.

Telomerase

- ▶ An enzyme concerned with the formation, maintenance, and renovation of telomeres, the ends of chromosomes.
- ▶ It regulates the proliferative capacity of human cells.
- ▶ Telomerase activation plays a critical role in the progression of cancer and normal somatic cells.
- ▶ Failure to activate sufficient telomerase promotes disease.

Psychosomatic Medicine (2011) 38, 464–481

available at www.sciencedirect.com

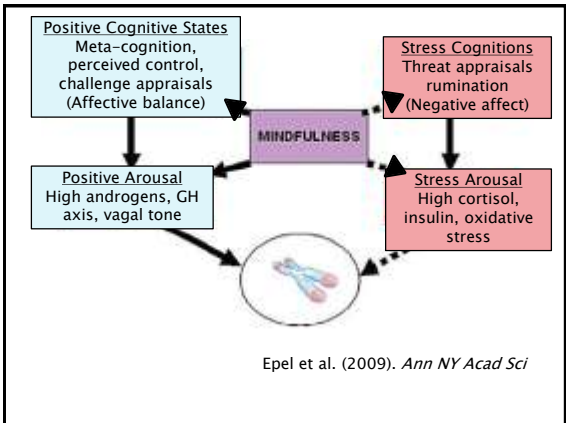
ScienceDirect

Intensive meditation training, immune cell telomerase activity, and psychological mediators

Tonya L. Jacobs^{a,*}, Elissa S. Epel^b, Jue Lin^c, Elizabeth H. Blackburn^d, Owen M. Wolkowitz^e, David A. Bridwell^f, Anthony P. Zanesco^g, Stephen R. Alchele^h, Baljinder K. Sahdraⁱ, Katherine A. MacLean^j, Brandon G. Kling^k, Phillip R. Shaver^l, Erika L. Rosenberg^m, Emilio Ferrerⁿ, B. Alan Wallace^o, Clifford D. Saron^{a,21}

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“Mindfulness-Based Stress Reduction training reduces loneliness and post-inflammatory gene expression in older adults”

Cresswell, JD, Irwin, MR, and Burkland, LJ
Brain, Behavior, and Immunity, Vol. 26 (7), October 2012, pp. 1095–1101.

- ▶ N=40, MBSR vs. wait-list control group
- ▶ results: Decreased reports of loneliness and evidence of decreased cellular inflammation markers in circulating white blood cells of MBSR participants.

Part II: Practicing Mindfulness—some points to emphasize

- ▶ Inhabiting awareness by cultivating relaxed, flexible attention
- ▶ Embodiment and the Present Moment Perspective
- ▶ Developing a wise relationship to thoughts, emotions, and all sensory experience

What meditation is...

- ▶ Paying attention in a particular way for a particular purpose.
- ▶ Many forms of meditation, all involving intention, attention, awareness, and growing understanding.
- ▶ “Mindfulness meditation” could be understood as paying attention on purpose in order to develop greater awareness in this moment.

Three critical elements of mindfulness practice

- ▶ **Intention**—to practice being mindful, as formal meditation, and in the moments of daily life
- ▶ **Attention**—through practice, developing an attention that is both strong and flexible
- ▶ **Attitude**—cultivating an attitude that welcomes and is curious towards what is being noticed mindfully.
- ▶ This spirit is captured in the seven MBSR attitudes of non-judging, patience, beginner’s mind, trust, non-striving, acceptance, and letting go.

Some Elements That Will Support Your Personal Mindfulness Practice

- ▶ Commit to bringing mindfulness into your life through daily practice as formal meditation and informally in any moment.
- ▶ Establish time and place for formal meditation and stick to it.
- ▶ Pause and take a mindful breath, a mindful step, or a mindful bite from time to time in the flow of daily life. Likewise, pause to listen mindfully, or simply notice how your surroundings look, sound, and feel.
- ▶ Take the time to do longer periods of intensive practice, including going on days of mindfulness or on longer retreats.
- ▶ Work with acknowledged teachers and utilize resources such as readings, classes, and recordings, or Internet-based resources.
- ▶ Associate with like-minded people, and discuss your interest in meditation with them, offering and giving support to each other.

Meditation is not...

- ▶ Positive thinking. It is not thinking at all!
- ▶ Just another relaxation technique. It is about increasing awareness, which is much more powerful.
- ▶ Going into a trance or “blissing out”.
- ▶ Blanking your mind. It is actually about recognizing and disentangling from the usual ruminations and thought patterns that dominate your life.
- ▶ Just for monks, nuns, or priests, and it is not a religion.
- ▶ Selfish or self-centered. It is actually “self-full” in that it helps you become more in touch with your wholeness and potential as a human being.

Awareness of Breathing/Mindful Breathing

- ▶ This is an awareness practice, NOT a breathing exercise.
- ▶ Allow your body to breath naturally, and place attention on the sensations of your body breathing.
- ▶ Let the breath sensations come to you, and simply rest in awareness, noticing the flow of sensations through your body.
- ▶ When your mind wanders or fills with thoughts, you have not made a mistake or done anything wrong. It is just what the mind does. Patiently bring your attention back to the breath sensations.
- ▶ In this practice, you do not have to control your thoughts or “blank” your mind, you can let them be; and, you do not have to follow or feed your thoughts, you can let them go.

What is Mindfulness?

“Simply put, mindfulness is moment-to-moment non-judgmental awareness. It is cultivated by purposefully paying attention to things we ordinarily never give a moment’s thought to.”

--Jon Kabat-Zinn

One mindfulness, many methods

- ▶ Practicing and training attention to focus on a chosen object (like breath sensations, or the sensations of walking);
- ▶ or not selecting a particular focus, but mindfully including all experience, such as practicing “bare attention” to the constantly changing flow of sensory experience impinging on consciousness in each moment.
- ▶ The method can involve any object of attention, and any degree of attentional focus, from narrow to totally open.

Part III: How Mindfulness Practice Supports Therapeutic Work

- ▶ Strengthens Presence—for self and others
- ▶ Provides relief from ruminations and self-absorption
- ▶ Nurtures understanding, self-care, and self-compassion to build resilience and reduce burn-out

Examples of Current Mindfulness Based Therapies

- ▶ DBT—Dialectical Behavior Therapy
- ▶ MBCT—Mindfulness Based Cognitive Therapy
- ▶ ACT—Acceptance and Commitment Therapy
- ▶ Addiction and Relapse Prevention Therapies

Presence.....

the fact or condition of being present, of being fully engaged, here and now...

for the well-being of self and others, by promoting:

- ▶ awareness and understanding,
- ▶ empathetic resonance,
- ▶ reducing feelings of isolation, and
- ▶ enhancing feelings of connection.

More on Mindfulness

“An awareness of present experience with acceptance.” Germer, Siegel, & Fulton, *Mindfulness and Psychotherapy*, Guilford, 2005 (p. 7)

- ▶ Mindfulness as an abiding awareness that is always present within:

“Your awareness is a very big space within which to reside. It is never not an ally, a friend, a sanctuary, a refuge. It is never not here, only sometimes veiled.”

Jon Kabat-Zinn, (2005). *Coming To Our Senses*, Hyperion, p. 298.

Each breath, each moment of lived experience, is your opportunity....

to drop into mindful awareness simply by:

Paying attention, on purpose, not trying to fix or judge anything, and being friendly, including, and allowing of what is happening—here and now.

Practicing mindfulness provides relief from being lost in...

- ▶ endless ruminations and self-absorbed narratives.
- ▶ ...through recognition that we are NOT our thoughts, and we do not have to take them so personally!

The Fear Reaction in Mind and Body: the critical role of thoughts

- ▶ Fear and negative affects stimulate widespread sympathetic nervous system activation (Thayer & Brosschot, 2005)
- ▶ Fearful cognitions and interpretations can manifest in somatic symptoms, and the same physiological responses arise for either real or imagined threats (Brosschot, et al., 2005; 2006; Thayer and Brosschot 2005)
- ▶ Example of how “depressogenic thinking” can transform momentary emotional distress into longer-lasting mood disturbance (Segal, Williams, & Teasdale, 2002)

Judgments About Others Affects Brain Empathic Response

- ▶ How we judge others affects empathic brain responses.
- ▶ Lack of empathy-related brain activation in the anterior insula when a person in pain was perceived as unfair in their social behavior



Singer, T., et al. (2006). Empathic neural responses are modulated by the perceived fairness of others. *Nature*, 439, 466-469.

Mindfulness and Neuroscience

Where is “I”?

From *Buddha's Brain* by Rick Hanson, PhD (2009) chapter 13, pages 208-211

- ▶ The experience of “self” depends upon physical substrates, and connections and interactions of areas of your brain.
- ▶ Different parts of your brain are responsible for your different “selves”
 - ▶ **reflective self:** ACC, PFC, hippocampus
 - ▶ **emotional self:** amygdala, hypothalamus, brain stem
 - ▶ **autobiographical self:** reflective plus emotional areas
 - ▶ **core self:** non-verbal feeling of “I”, subcortical and brain stem structures, no sense of past or future

When your mind is very quiet, the autobiographical self seems largely quiet, corresponding to relative deactivation of its neural substrate, especially the Pre-Frontal Cortex (PFC)


The Brain's Default Mode Network (DMN)

- ▶ An anatomically defined brain system is active when individuals are
 - engaged in internally focused tasks, including
 - autobiographical memory retrieval,
 - envisioning the future, and
 - conceiving the perspectives of others
 - self-referential processing,
 - and also mind-wandering.
- ▶ Two primary nodes: Medial Prefrontal Cortex (MPC) and the Posterior Cingulate Cortex (PCC)

Buckner, Andrews-Hanna, and Schacter (2008). The Brain's Default Network: Anatomy, Function, and Relevance to Disease, *Ann. NY Acad. Sci.*, 1124, 1-38

Two primary nodes of function in the Default Mode Network:

- medial prefrontal cortex (MPC)
- posterior cingulate cortex (PCC)



DMN, Mindfulness, Self Referencing

- In real-time fMRI neurofeedback studies of individuals practicing mindfulness meditation:
 - increased PCC activity corresponded with the subjective experience of mind wandering, and
 - decreased PCC activity corresponded to the subjective experience of focused attention to present moment experience.

Mindfulness training can help individuals be free of feeling “caught up” in experience, such as

- drug craving
- attachment to particular viewpoint (e.g., being right”), possibly by its deactivation impact on the PCC.

Brewer, Garrison, and Whitfield-Gabrieli (2013). What about the “self” is processed in the posterior cingulate cortex?, *Frontiers in Human Neuroscience*.

DMN, Mindfulness, Self Referencing, and Addictions

- Research has suggested that after 8 weeks of MBSR, individuals had decreased DMN activity when viewing emotionally evocative pictures, or tasks focused on mindful awareness versus the personal meaning of specific words.
- DMN deactivation (less mind-wandering and less self-referential processing) was common in concentration, loving-kindness, and choiceless awareness forms of mindfulness practice.
- Mindfulness training may help individuals “decouple” craving from addictive behavior by its deactivation impact on the PCC and related structures.

Brewer, Elwafi, and Davis. (2013). Craving to Quit: Psychological Models and Neurobiological Mechanisms of Mindfulness Training as Treatment for Addictions, *Psychology of Addictive Behaviors*, 27(2).


Mindfulness nurtures...

Capacity for self-care, greater self-awareness, better emotion regulation and cognitive processing, and more skillful actions and behaviors...

Resulting in greater Resilience!

RESILIENCE

- The capacity to respond to stress in a healthy way such that goals are achieved at minimal psychological and physical cost
- Resilient individuals “bounce back” after challenges while also growing stronger.



“Mindfulness is strongly related to compassion, and it is compassion that serves as a source for all healing intentionality.”

– Stefan Schmidt, Ph.D.
Mindfulness and Healing Intention: Concepts, Practice, and Research Evaluation

Schmidt (2004). *J Alt Complement Med*, 10, S7-S14.



"We do not need to suffer to remove suffering from others."
--Thich Nhat Hanh

Do You Know Anyone:


- who tends to blame themselves for anything that goes "wrong?"
- who is never satisfied when things go "right?"
- who has that "little voice inside" that is always criticizing (usually themselves even more than others)?"

That person could be:

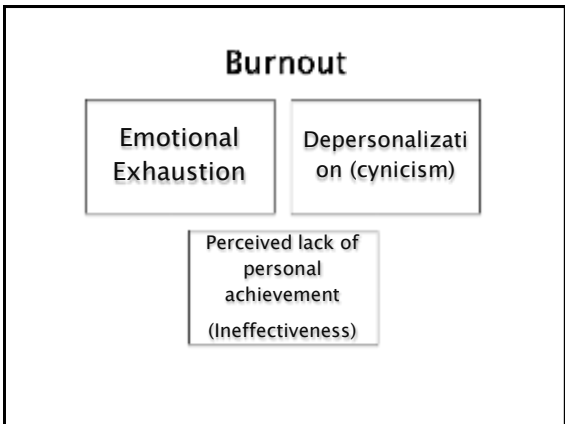
- ...acting as their own worst stressor.*
- ...adding risk factors that threaten their health and well-being.*
- ...increasing the odds of making errors at work.*
- ...interfering with the appreciation of joy, wonder, and connection in their life.*

The Nature of Stress

"Man is not disturbed by events, but by the view he takes of them."



**- Epictetus
Greek Philosopher**



What is Compassion?

"Compassion is not an entity "we" show toward the "other." ... We need to lose the dichotomy. It is not something I have, and give to you. It manifests in the relationship between beings..."

If we are wholeheartedly engaged in each moment, responding to what is front of us, not judging or labeling ourselves or others, then I believe that compassion cannot fatigue."

Lisa Marr, M.D., (2009). *Journal of Palliative Care*, 12, (8).

Factors That Mitigate Compassion Fatigue and Burnout

- ▶ Developing self-awareness
- ▶ Developing self-awareness to enhance self-care
- ▶ (when self-awareness permits the clinician simultaneously to attend to and monitor the needs of the patient, the work environment, and his or her own subjective experience).

Kearney, et al., (2009). *JAMA*, 301, (11).

Mindfulness intervention to reduce burnout

- ▶ 8-weekly classes plus 1/month for 10 months, included home mindfulness practice, discussion, and narrative medicine exercises
- ▶ 70 primary care physicians

Led to:

- ▶ reductions in burnout
- ▶ improvement in empathy, mood states, and emotional stability

Krasner, et al., (2009). Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*, 302 (12): 1284-93



How Are You Treating Life?

"Do not despise the world, for the world too is God."

--Muhammad

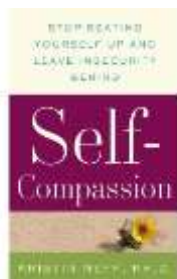
"Perhaps everything that frightens us is, in its deepest essence, something helpless that wants our love."

--Rainer Marie Rilke



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Self-Compassion: Stop Beating Yourself Up and Leave Insecurity Behind



By Kristin Neff, Ph.D.

Published by
William Morrow
April 2011

Self-Compassion

- ▶ Self-compassion is extending compassion to one's self in instances of perceived inadequacy, failure, or general suffering.

Elements of Self-Compassion

Self-kindness

(treat yourself as nicely as you would a stranger)

Common humanity

(realizing that we are all “only human”, one can practice patience and forgiveness for self and others)

Mindfulness

(learn to access the awareness that notices, sees clearly, and does not judge what is present)

Source: <http://www.self-compassion.org>

“Meditation practice isn’t about trying to throw ourselves away and become something better. It’s about befriending who we already are.”

--Pema Chödrön

Metta for Caregivers

- ▶ May I offer my care and presence unconditionally, knowing it may be met by gratitude, indifference, anger, or anguish.
- ▶ I care about your pain, and I cannot control it.
- ▶ May I remain in peace, and let go of expectations.
- ▶ I wish you happiness and peace, and I cannot make your choices for you.
- ▶ May I find the inner resources to truly be able to give.
- ▶ May I see my limits compassionately, just as I view the suffering of others.
- ▶ May this experience help me to open to the true nature of life.


Roshi Joan Halifax and Sharon Salzberg

Part IV: More Mindfulness Skills and Applications

- ▶ Mindful speaking and listening—a mindfulness practice
- ▶ Suggestions for talking with others about mindfulness
- ▶ Suggestions for guiding mindfulness meditations

Listen deeply

- Open heart – Open mind
- Without judgment
- With curiosity
- Witnessing not fixing



Suggestions for talking with others about mindfulness

- Meet people where they are. Why have they come to listen to you? Who are they?
- Know what you are talking about. Your knowledge of mindfulness comes most powerfully from your own, personal practice!
- Speak in everyday language, illustrate with interesting examples, and link your examples to your listener’s motivation for change.
- When talking to others, be yourself!

Readings and Resources

- *Mindfulness and Psychotherapy*, edited by Germer, Siegel, and Fulton
- *The Art and Science of Mindfulness: Integrating Mindfulness Into Psychology and the Helping Professions*, by Shapiro and Carlson
- *Mindfulness Meditation in Psychotherapy: An Integrated Model for Counselors & Clinicians*, by Steven A. Alper (in press, New Harbinger Publications)
- *Real Happiness at Work: Meditations for Accomplishment, Achievement, and Peace*, by Sharon Salzberg

Internet Resources

- www.mindfulexperience.org a comprehensive research guide compiled by David S. Black, MPH, PhD.
- www.scholar.google.com
- www.marc.ucla.edu the website of the UCLA Mindful Awareness Research Center
- www.mindfulschools.org offers information and resources on mindfulness in schools
- www.mindful.org online magazine offers interesting articles about mindfulness in modern society
- www.MindandLifeInstitute.org institution that promotes research in mindfulness and dialogue between His Holiness the Dalai Lama, mindfulness scholars and practitioners, and scientists



Takes practice!

Mindfulness practice reduces stress and promotes health...

one step at a time.

Suggestions for Guiding Mindfulness Meditations

- Lead from your own practice of mindfulness, giving “voice” to the unfolding experience you are noticing as you are guiding the meditation.
- Remind folks to relax, to rest in awareness, and to trust that they already have all they need to practice mindfulness.
- Point gently and often to “this moment,” to “awareness,” and to “allowing things to be as they are.”

Suggestions for Guiding Mindfulness Meditations (cont.)

- ▶ Be suggestive and permissive in your instructions, for example: use the “-ing” form of the verb as in “listening to the sounds” instead of “listen to the sounds.” Or, encouraging others by inviting, such as “perhaps noticing the sensation of your out-breath,” or resting in awareness, “allowing yourself to notice more carefully the thoughts in your mind.”
- ▶ Point to qualities of kindness and patience as supporting the practice of paying attention without judgment in each moment.

“Why is mindfulness so sought after in this moment, and so necessary?”

We long for some degree of effective balance and wisdom that supports meaningful, embodied, and significant work—the work of making a difference in the world, of adding value and beauty, of individually and collectively waking up to the full range of human intelligences and capacities we share for wisdom, ease of being, and kindness.”

--Jon Kabat-Zinn

