# Advanced Mindfulness Toolbox for Rewiring the Brain

Rewiring Anxiety, Depression, Pain, PTSD, and Stress

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Welcome!

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Mindful Living Newsletter MindfulPractices.com

# Mindfulness Training Consultation Speaking

#### Session 1/6 Today's Roadmap

#### Intro to Mindfulness

• Core Mindfulness; Affect Labeling and Prefrontal Cortex

Research & Useful (& Free) Web Resources

- Mindfulness Resources
- Brain Resources
- Mindfulness Apps & Compassionate Presence

The Truth About Stress

- Stress Research; Stress and Epi-Genetics
- Assessing with Stress Instruments
- Anxiety and Stress Practice: Palm the Present Moment
- Visual Brain Model for Patients

# Intro to Mindfulness & Research

- Core Mindfulness Practice
  - Noticing the Body, Breath, and Mind
- Website Resources
- Compassionate Presence

# Core Mindfulness Practice WHERE ARE YOU RIGHT NOW? *3-Part Breathing Practice*

#### **BODY** as it is

(Rooted, Posture)

#### BREATH as it is

(Physical Contact Point)

### MIND as it is

(Non-judging Labeling)

From: The Mindfulness Toolbox for Relationships by Donald Altman

Questions and Hypotheticals...

#### Affect Labeling and the Brain

Dispositional mindfulness is associated with greater widespread PFC activation and attenuated amygdala responses during affect labeling.

Affect labeling encourages participants to treat affective states as "objects" of attention, promoting a detachment from these negative states.

Neural Correlates of Dispositional Mindfulness During Affect Labeling J. David Creswell, et. al., Psychosomatic Medicine 69:560–565 (2007)

### Emotional Regulation Produces Long-Lasting Effects on Amygdala

Study showed "evidence that cognitive regulation can create long-lasting changes in the ability of stimuli to elicit affective responses.

Amygdala response remained low during a follow-up after initial training.

Long-Lasting Effects of Emotion Regulation on Amygdala Response. Brian T. Denney, et. al., Psychological Science, July 2015) doi: 10.1177/0956797615578863

# Useful (& Free) Web Resources

- Brain Resources
- Mindfulness Websites

# As Effective as Anti-depressants for Relapse of Depression

 Depression patients in remission who underwent mindfulness therapy did as well as those who took an anti-depressant.

 Up to 40% of people who come out of depression do not take their prescribed antidepressants to prevent relapse \*

\* Archives of Gen. Psychiatry, Segal, Zindel, and Bieling, Peter, et. al.; Vol. 67 (No.12) Dec. 2010 http://archpsyc.ama-assn.org/cgi/reprint/67/12/1256 (accessed January 18, 2012).

### Meta-analysis of Mindfulness Interventions

- Mindfulness meditation led to significant lessening of:
- Symptoms of depression and anxiety after therapy and for up to 3 months after the treatment \*

The Effect of Mindfulness-Based Therapy on Anxiety and Depression: A Meta-Analytic Review; *Hoffman, et. al,* J Consult Clin Psychol., April 2010 Mindfulness Slows Progression of Mild Cognitive Impairment (MCI) in Adults

- Subjects 55-90 yrs. with (MCI) meditated 15-30 min. daily for 8 weeks.
- MRI showed increase in functional brain connectivity in areas affected by MCI and Alzheimers Disease.
- Mindfulness Meditation reduced hippocampal atrophy and increased networks related to past memories and associations.

J Am Geriatr Soc. 2013 Apr. (6) 14, 642-645 doi: 10.1111/jgs 12179; Meditation for Adults with Mild Cognitive Impairment: A Pilot Randomized Trial; Rebecca Wells, Catherine Kerr, et. al.

### Alters Physical Brain Structure

 Meditation alters brain structures in 8 weeks, in brain regions associated with memory, sense of self, empathy and stress.\*

 4-Day Meditation Training Improves Cognition and Reduces Anxiety and Stress\*\*

\*Massachusetts General Hospital, "Mindfulness Meditation Training Changes Brain Structure in 8 Weeks," http://www.massgeneral.org/about/pressrelease.aspx?id=1329 (accessed January 30, 2011).

\*\*Mindfulness meditation improves cognition: evidence of brief mental training. Journal Consciousness and Cognition, June 2010; 19(2):597-605

# Mindful Breathing Awareness

 Ability to stay in contact with the breath decreases mind wandering

 Watching breath reduced rumination, repetitive negative thinking, and depression

• Less fearfulness related to bodily sensations

The Healthy Quality of Mindful Breathing: Associations With Rumination and Depression, Jan M. Burg and Johannes Michalak; *Cognitive Therapy and Research Journal*, 2011, April, Volume 35, Number 2, 179-185

# Pausing for Mindful Metacognition

- Taking a pause to reflect improves learning.\*
- 2-Week Mindfulness Meditation Training increased the accuracy of perception and memory.\*\*

#### **Benefits of Metacognition:**

- Helps us develop more accurate judgment about our abilities and insight about ourselves
- Is a skill that can be developed by pausing to reflect.
- Pausing in session helps clients to integrate what they have learned from therapy.

\* Improving learning through enhanced metacognition: a classroom study; J. R. Baird, European Journal of Science Education 1986

\*\* **Domain-specific enhancement of metacognitive ability following meditation training**; Journal of Experimental Psychology: General, 2014 May 12.

### The Mindful Therapist

- How Does a Clinician's Mindfulness Affect Therapy?
- Positive correlation between clinician's mindfulness and the therapeutic alliance
- Non-judgmental acceptance and openness to experiences were predictors of a strong therapeutic relationship

*Mindfulness in Clinician Therapeutic Relationships,* Mindfulness, August 2013, Russell Razzaque, Emmanuel Okoro, Lisa Wood

# Mindfulness Resources/Research

➢National Telecenter for Health and Technology

www.t2health.dcoe.mil/apps/breathe2relax

Greater Good; The Science of a Meaningful Life
<u>www.GreaterGood.berkeley.edu</u>

Center for Investigating Healthy Minds:

http://www.investigatinghealthyminds.org

MARC, The Mindful Awareness Research Center <u>www.marc.ucla.edu/body.cfm?id=38&oTopID=38</u>

Mindfulness Research Monthly for new mindfulness research that is being published. goamra.org

➢DANA.Org Dana Foundation Brain Research <u>Dana Foundation</u>

MindGains.Org Global Assoc. Interpersonal Neurobiology

➤TCME.Org <u>The Center for Mindful Eating</u>

Questions and Hypotheticals...

## Mindful Compassionate Presence

Three Questions

-by Leo Tolstoy

What is the best time to do each thing?

Who are the most important people to work with?

What is the most important thing to do at all times?

Questions and Hypotheticals...

### The Truth About Stress

- Stress Research; Stress and Epi-Genetics
- Identifying Stress & Assessing with Stress Instruments
- Practice: Be a Smart Stress Avoider

### Why Worry About Stress?

Stress– a biological, psychological, social reaction to fear, anxiety, chaos, and demands of the environment.

- What music ripples through your brain
- and body during times of stress and transition?
   How can you reduce and replace ripples of stress with a tune of peace, harmony, and joy?

### Effects of Daily Stress

- Handling stress poorly each day puts you at a greater risk for mental health issues 10 years from now
- Significant increase in clinically diagnosed anxiety and depression in those who reacted negatively to stress.
- Research suggests the importance of view stress as a challenge, rather than as a threat.
- Your attitude can make all the difference in your mental health.

*The Wear and Tear of Daily Stressors on Mental Health,* Psychological Science. 2013 24: 733 Charles, Piazza, et. al

#### Stress Survey in America

- 80% said their stress either stayed the same or increased over the past 2 years.
- PHYSICAL SYMPTOMS: 69% experienced upset stomach, headaches, muscle tension, insomnia, lack of appetite.
- PSYCHOLOGICAL SYMPTOMS: 67% experienced irritability, anger, sadness, and tearfulness
- UNHEALTHY BEHAVIORS: 36% reported eating unhealthy foods or eating excessively in response to job stress; Many reported treated family and others poorly.

APA (2013). Stress in America. From: http://www.APApractice.org

# Stress-Related Illness

- 25 Million Americans suffer from a stress-related illness, including:
  - Chronic Fatigue Syndrome
  - Back Pain
  - Auto-Immune Disease
- 8 of 10 commonly used drugs treat symptoms of stress
- Cost is 30% of total US mental health services Journal of Clinical Psychology, 1999

# Stress Effects: Amygdala Activity Related to Cardiac Events

First study to link over active amygdala with arterial inflammation and heart disease heart attacks and strokes in a longitudinal study

"amygdalar activity independently and robustly predicted cardiovascular disease events" in 293 persons, median age 55

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31714-7/fulltext published Jan 11, 2017

# The New Science of Epi-genetics

Nova and Epigenetics

 Meditation altered gene expression changes to more than 2200 genes, including those responsible for inflammation, handling of free radicals, and programmed cell death

> \* Dusek JA, Otu HH, Wohlhueter AL, Bhasin M, Benson, H, et al. 2008 Genomic Counter-Stress Changes Induced by the Relaxation Response. PLoS ONE 3(7): e2576.

Questions and Hypotheticals...

Stress Scale Instruments

• The Perceived Stress Scale (PSS)

10-question inventory developed by psychologist Sheldon Cohen (mindgarden.com).

- The Epstein Stress-Management Inventory (ESMI-i) is a 28-question inventory for individuals (mystressmanagementskills.com)
  - 1. Manage Sources of Stress
  - 2. Prevent or Avoid Stress
  - 3. Practice Relaxation Techniques
  - 4. Manage Thoughts

#### **Perceived Stress Scale (PSS)**

(*Circle*): 0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often

- 3. In the last month, how often have you felt nervous and "stressed"? .....01234

- 7. In the last month, how often have you been able to control irritations in your life?

- 8. In the last month, how often have you felt that you were on top of things? 0 1 2 3 4

PSS created by Sheldon Cohn, et. al, Carnegie Mellon University

#### **Perceived Stress Scale Scoring**

- 1. Add up the numbers for questions 1, 2, 3, 6, 9, 10. Write the total here \_\_\_\_\_
- For items 4, 5, 7, and 8 reverse the numbers (0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) and add these up. Write the total here \_\_\_\_\_
- 3. Add the two totals from steps 1 and 2. Write total here for Overall Score: \_\_\_\_\_

#### Perceived Stress Level Rating: WOMEN:

0-7	Low
8-20	Average
21-26	High
27-40	Very High

#### MEN:

0-6	Low
7-17	Average
18-23	High
24-40	Very High

# Palm the Present Practice

Drop into the body... and rest the weary mind.

Intervention for clearing out and managing the **RATS**:

**R**-umination**A**-nxiety**T**-ransitions**S**-tress

From: The Mindfulness Toolbox by Donald Altman

# Palm the Present Metacognitive Reflection

What was your experience with Palm the Present?

How could you use this practice with groups or individuals?

# Session 2/6 Today's Roadmap

#### Brain Basics and Visual Model of Brain

- Emotional Regulation
- Mindfulness Module of Brain

Train the Brain for Calm and Cognition

- Turning on the Parasympathetic Nervous System
- Navy SEALs method for arousal control
- Practice: Diaphragmatic Breath & the 3 Min. Question for Clients

#### Mindful Eating

- Research
- Practice: 4-Step Mindful Bites Technique

#### Session 2/6 Today's Roadmap

**Connecting Clients to Mindfulness** 

- Notice and Normalize Mind Wandering
- Using Awareness Styles to Access Mindfulness
- Practice: Learning Style Detective

#### Brain Basics & Emotional Regulation

- Visual Brain Model for Patients
- Mindfulness Module of Brain

#### At the Movies... *Neuroscience of Mindfulness*

## Your Brain on Stress

A message sent to the hypothalamus signals the pituitary, which then activates the adrenal glands to release cortisol and adrenaline into the bloodstream and prepare the body for flight or fight.

## Your Brain on Stress

The stress response actually shunts blood flow away from the brain's "thinking" cortex. This more ancient brain system constantly scans the environment and can be "turned on" chronically through repeated stress or memory provoking events.

Prefontal Cortex Functions Equal Mindful Awareness **Regulate the Body and Stress Response** Attune with Others (attachment/connection) Emotional Balance (neither rigidity nor chaos) Impulse Control (pause, respond not react) Ability to Calm Fears (inhibitory GABA fibers) Insight (self-knowing awareness) Empathy (looking within at one's inner state) Morality (ethics, larger social good) Intuition Selective Attention Emotional Style (Approach or Avoidance)

Questions and Hypotheticals...

Mindfulness Intervention Reduces Cortisol and Abdominal Fat in Obese Women\*

Psychological stress and elevated cortisol secretion promote abdominal fat. 4-month mindfulness program for stress eating at UCSF

Reduced anxiety, improved mindfulness, and reduced stress eating

Significant reduction in CAR (cortisol awakening response)

Reduced CAR associated with reduction in abdominal fat

Journal of Obesity, 2011, Daubenmier, Kristeller, et. al.

## Mindfulness-Based Eating Study

- 3-Key Elements of Establishing a Mindful Eating Practice
  - General mindfulness meditation (breath awareness)
    - Patients meditated 16 hours over the 7-week study
  - Eating meditation
  - Mini-meditations
- Results of a 10-week Mindful Eating study (with Duke University)
  - Overall index combining general mindfulness meditation, eating meditation, and mini-meditations were the "best predictor of improvement in relation to binge eating and to weight loss."--Kristeller
- Increases level of personal control and comfort with food

- This method is known as the S-T-O-P method. Think of it as <u>STOP</u>PING for mindfulness. A good start is to use <u>the first</u> <u>four bites</u> of any meal to devote your attention to food. Yes, it *is* possible to be mindful of every bite of every meal, but it takes practice.
- For the next few minutes you will eat a raisin. If that seems like a long time, consider that you will eat this raisin as you have (possibly) never eaten a raisin before.

\* This handout is copyrighted by DayOne Publishing in *Discover Mindful Eating* and was modified with authors' permission.

• S is the first bite and S stands for SELECT. Be purposeful in gathering this bite. You might imagine this is a food you have never tasted before. Select this bite, notice all of the colors, texture, and shapes. Choose a bite that is able to fit in your mouth easily. It is not too small or too big to chew, but just the size to savor the bite.

• T is the second bite and T stands for TASTE. Your mind is fully on the sensation of eating. With this bite, you notice all the tastes that develop during the bite. Your mind is fully on the sensation of eating. You chew slowly, deliberately, and fully, swallowing with intention only when the food is completely chewed up.

 • o is the third bite and O stands for OBSERVE. With this bite, allow your mind to travel with this food around your mouth, down your throat and into your stomach. Notice your hunger without anxiety or fear. It is simply hunger. Observe yourself placing the fork down. Become aware of the movement of your hand, arm, and mouth. You are eating with purpose, full of poise and grace.

• **P** is the fourth bite and P stands for PAUSE. With this bite, add an extra pause just before you put the food in your mouth. Then, during the bite, you pause in the middle of your chewing, just for a short moment. And when you're done with the bite, you add yet one more pause before taking the next morsel of food.

### Metacognitive Reflection

- Questions to consider:
  - How was this experience different from eating raisins in the past? How was the flavor different? How many raisins would you typically eat during this length of time? What has this experience taught you?
  - How could you use the S-T-O-P method with clients? What are ways that you could "frame" this...such as "mindfully slowing down," "paying attention to food," "being curious," etc.

Questions and Hypotheticals...

### Lunch (or daily meal) Practice

- For Today's Lunch (Optional):
- Rate hunger level (1-10) before, during and after the meal. What food that will satisfy this hunger?
- Give yourself permission to order (and eat) as much food as you think will satisfy the body's hunger (as opposed to ordering by your appetite)
- Intentionally leave some food on the plate.
- Take three diaphragmatic breaths before eating.
- Spend the first 5-minutes of your lunch in silence.

### Lunch (or daily meal) Practice

#### Moment by Moment Awareness

- Awareness of Body (posture, body movement, chewing, hunger, satiety, etc.)
- Awareness of sensations (tastes, textures, smells, sights, sounds, likes, dislikes, neutral)
- Awareness of mind (thoughts, desire, perceptions, judgments, opinions, memories, etc.)

### Train the Brain for Calm and Cognition

- Turning on the Parasympathetic Nervous System
- Navy SEALs method for arousal control
- Practice: Diaphragmatic Breath & the 3 Min. Question for Clients

## **Breathing Awareness**

## Mindful Breathing Awareness

#### **20-minutes of diaphragmatic breathing produced:**

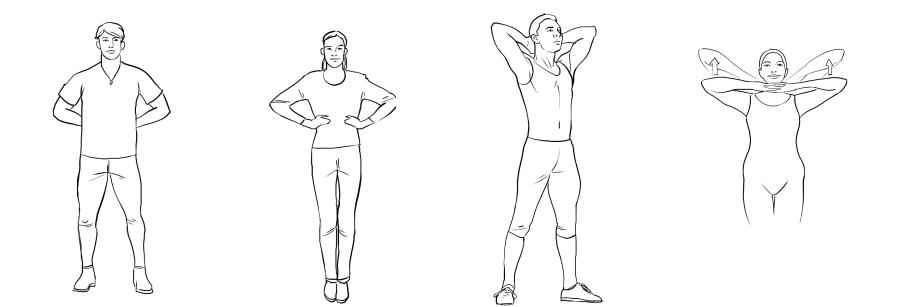
- A reduction of negative feelings
- An increase in neurotransmitter serotonin for improved mood
- A higher concentration of oxygen in the pre-frontal cortex (mindful attention and higher level processing)

International Journal of Psychophysiology 2011, May, Activation of the anterior prefrontal cortex and serotonergic system is associated with improvements in mood and EEG changes induced by Zen meditation practice in novices; Toho University School of Medicine

# Mindful Breathing

- Rewiring the Stress Response with Breath
  - 20-30 sec. to turn down stress volume
  - 10x increase in oxygen
  - Lower B.P., respiration
  - Increase alpha waves
  - Increase serotonin

## **5 Regulating Breathing Postures**



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#### Teaching Belly Breathing

- 1) Explain the physiology of breathing, and how it turns on the body's relaxation system
- 2) Check where they are breathing by having them put one palm on the chest, one on the belly.
- 3) Demonstrate how to get a fuller belly breath by placing the hands behind the back or behind the neck/head.
- 4) Problem solve how clients can use this each day.

#### Pair Belly Breathing with Other Pleasant Activities

- 1) Music
- 2) Walking
- 3) Swimming
- 4) Biking
- 5) Reading
- 6) Eating

Questions and Hypotheticals...

### Access Mindfulness through Awareness Styles

- Help Clients Use Mindful Coping Skills through 9 Unique Learning Styles
- Discover Learning Styles through Hobbies and Favorite Activities
  - 7 Kinds of Smart by Thomas Armstrong
    - Includes Quick Assessment of Learning Styles
  - Multiple Intelligences by Howard Gardner

• Language/Verbal and Thinking Oriented

- Language/Verbal and Thinking Oriented likes analyzing, reflecting, meditating, reading, writing, keeping a journal, crosswords, word games, puns, word jokes, speaking, listening or telling stories.
  - **Mindfulness Practices:** Be the Pebble Practice, Prayer, Affirmations, Mindful Study Group, Gratitude Practice, Noticing Strengths, G.L.A.D. Practice, S-T-O-P Stress Grounding Practice.

Visual/Spatial Oriented

- Visual/Spatial Oriented likes museums, art fairs, looking at sunsets, photography, painting, doodling, quilting, knitting, astronomy, motorcycling, bird watching, watching sports, fashion, looking at nature.
- Learns by visualizing, drawing pictures, coding with color, and avoiding multitasking.
  - Mindfulness Practices: Meditate on Image or Object; Sky Gazing, Calming with Nature, Mindful Eating, Mindful Walking, Palm the Present; Notice Pleasantness; G.L.A.D. Practice,

S-T-O-P Stress practice.

Hearing/Music/Sound Oriented

- Hearing/Music/Sound Oriented— likes music, concerts, sensitive to sounds, dancing, singing, chanting, playing an instrument, sounds of the ocean waves and nature.
- Learns by listening or reading aloud.
  - **Mindfulness Practices**: Chant; Loving-Kindness Meditation, Affirmations, Singing; Hymns, Playing and sharing meaningful music, nature sounds, S-T-O-P Stress practice.

• Bodily/Kinesthetic/Tactile Oriented

- **Bodily/Kinesthetic/Tactile Oriented** likes dancing, swimming, walking, yoga, stretching, hot baths, jogging, hiking, biking, knitting, weight lifting painting, sculpting, jewelry making, scrap-booking, competitive and non-competitive sports
- Learns through movement and touch, hands on, acting out stories, and doing (not just hearing or seeing).
  - **Mindfulness Practice**: Palm the Present Moment (Sense Grounding) Mindful Walking, Mindful Eating, Tai Chi, Dancing, Yoga, Breathing practice, Running, Jogging, S-T-O-P Stress practice.

Mathematical/Science/Logical Oriented

- Mathematical/Science/Logical Oriented likes sudoku, good with numbers, reading, computer programming, analyzing, going to museums, understanding how things work, science, learning, chess, games of strategy.
  - **Mindfulness Practice**: Be a Smart Stress Avoider, Gratitude, G.L.A.D. Practice, S-T-O-P practice, Noticing Favorite Things Grounding Practice, Bear Meditation.

Social/Interpersonal/Relationship Oriented

- Social/Interpersonal/Relationship Oriented likes friends, committed relationships, volunteering, book clubs, social gatherings, church activities, planning or going to parties, empathizing, teaching, public spaces, team sports.
  - **Mindfulness Practice**: Religious or spiritual groups, Dialogue with others, Prayer, Singing, Support Groups, Sharing Gratitude and G.L.A.D., Volunteering.

Reflective/Intrapersonal/Spirituality Oriented

- Reflective/Intrapersonal/Spirituality Oriented likes learning about one self, praying, meditating, reading and reflecting, thinking about purpose and gratitude, going to lectures, spiritual/religious rituals, solitude, seeking out silence, nature, and wisdom.
  - **Mindfulness Practice:** Meditation, Journaling and writing, mindfulness with self and others, Reading, Prayer, Affirmations, Gratitude, Solitude with Nature, Silence, G.L.A.D. practice; B.L.I.S.S. practice.

Natural World Oriented

- Natural World Oriented likes hiking, hunting, fishing, boating, the beach, camping, sailing, archaeology, natural shapes and objects, sitting in the park, farmers markets, and good at finding way around new locations.
  - **Mindfulness Practice**: Sky Gazing Practice, Noticing Nature, Mindful Walking or Hiking, Gratitude, G.L.A.D. Practices, Gardening, S-T-O-P practice.

• Existential-Meaning Oriented

- Existential-Meaning Oriented likes learning, introspection, expressing ideas rather than rote learning, philosophy, dialogue, reading, prayer, meditation, rituals and ceremonies, transcendent thinking and deeper meaning.
  - **Mindfulness Practice**: Sky Gazing, Noticing Nature, Mindful Walking or Hiking, Gratitude, G.L.A.D. Practices, Loving-Kindness Affirmation, S-T-O-P practice, meditation.

- Learning style online assessments:
- The Rogers Indicator of Multiple Intelligence
- <u>http://www.personal.psu.edu/bxb11/MI/rimi2.ht</u>
   <u>m</u>
- Literacynet.org
- <u>https://www.literacynet.org/mi/assessment/inde</u>
   <u>x.html</u>

Armstrong, Thomas, 7 Kinds of Smart: Identifying and Developing Your Multiple Intelligences, Plume, 1999

Gardner, Howard, Multiple Intelligences, Basic Books, 2006

# Metacognitive Reflection

#### BE AN AWARENESS STYLE DETECTIVE

- Each person dialogue with a partner identify your partner's awareness style.
- What style or blend of styles are present?
- Share a case study: How have you used awareness styles with a client in the past, or how you might in the future?

Armstrong, Thomas, 7 Kinds of Smart, Plume, 1999

Questions and Hypotheticals...

# Core Mindfulness Practice WHERE ARE YOU RIGHT **NOW**? *3-Part Mindful Breathing Practice*

## **BODY** as it is

(Rooted, Posture)

### BREATH as it is

(Physical Contact Point)

### MIND as it is

(Non-judging Labeling)

From: The Mindfulness Toolbox for Relationships by Donald Altman

#### Session 3/6 Today's Roadmap

#### 5 Steps of Mindful Self-Care: Eating & Sleeping

- Sleep Hygiene and the Glymphatic System
- Developing Healthy Sleep Rituals
- Nutrition for the Brain

#### **Exercise and Pleasantness**

- Exercise, learning, and the brain
- Strategies for inviting exercise
- Importance of Factor P

#### Gratitude and Attitude

- Cultivating connections with gratitude
- Developing and deepening acceptance

#### Session 3/6 Today's Roadmap

5-Steps to Mindful Self-Care (cont.) Relationships

- Identify changes in the social network
- Address building the network

Technology and Tune-Ups

- Setting Technology Boundaries and Slowing Down
- Face-to-Face Contact Wires Brain
- Experience: Exploration of Time Spent

# Session 3/6 Today's Roadmap

#### Mind Wandering & the Mindfulness Vocabulary

- Telomeres and Mind Wandering
- Meeting the client where they are at
- Exercise: The power of metaphor to expand the vocabulary

#### Embracing B.L.I.S.S. in this Moment

- Recognizing Ordinary Good and Decent Things
- Practice: Savoring the Ordinary
- Practice: B.L.I.S.S. Meditation

## G.R.E.A.T. 5-Steps to Mindful Self-Care

- 5 Mindful Self-Care Strategies
  - G-ratitude & Attitude
  - R-elationships
  - E-ating & Sleeping
  - > A-ctivity
  - > T-une-Up with Mindfulness Practices

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#### G.R.E.A.T. Self-Care Strategy #1: Gratitude and Attitude

 Brain wires up by what is in the field of focused attention

# Focus on the good things Savor the ordinary Attitude of kindness

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#### Gratitude for Depression

#### **Depression Intervention:**

2003 study\* had participants write down five things they were grateful for during the week for a period of 10 weeks. Results showed these people were:

- 25% happier than persons who wrote down their day's frustrations or simply listed the day's events.
- More optimistic about the future.
- Felt better about their lives.
- Participated in one and a half hours more exercise per week than those in the control groups.

\*Counting Blessings Versus Burdens: An Experimental Investigation of Gratitude and Subjective Well-Being in Daily Life—Robert Emmons and M. McCullough, Journal of Personality and Social Psychology, 2003, Vol. 84, No. 2, 377–389

# Savoring the Ordinary Study

- Participants chronicled both an "Ordinary" daily event and "Extraordinary" Event
  - Photos and writing about the day
- Subjects predicted which they would most interesting to review in the future
- Majority predicted the Extraordinary Event
- 3 Months Later, Subjects Reviewed Both Events:
  - Individuals greatly underestimated the ordinary day and what they could gain from it.
  - Subjects found the Ordinary Event more meaningful and interesting than the Extraordinary one.

A "Present for the Future: The unexpected value of rediscovery; Psychological Science, published online, August 29, 2014; Zhang, et. al.

# Practice: Savoring the Ordinary

Using the categories below, choose 1-3 "small things," as Mother Teresa referred to them—to savor for the next 5 minutes.

- 1) Identify One Small Thing from This Week
  - Things cherished or appreciated, like reading the paper, sipping coffee, giving a hug or kiss to someone special, feeling of water in the shower, etc.
- 2) Observe One Ordinary Good Thing in Your Surroundings
  - Take a mental snapshot of how you're sitting in a nice chair, watching your kids play, interacting with a friendly person, or seeing the sunlight coming in through a window.
- 3) Remember One Kindness from Today
  - Did you help someone today? Did someone help you? Bring to mind that ordinary (yet special) word of encouragement you shared with another or vice versa. Remember even the smallest act of kindness—a pat on the back, a smile, etc.

#### G.R.E.A.T. Self-Care Strategy #2: Relationships

Relationships enrich and give meaning to life

 Help us to learn and grow
 Sharing stories broadens understanding and coping skills
 Resources increase resilience and give hope

> From: Simply Mindful: A 7-Week Course and Personal Handbook for Mindful Living by Donald Altman

### Relationships

- Research shows influence of a social network is as much a mortality risk factor as the following behaviors:
- Smoking
- Alcoholism
- Obesity.

\* Holt-Lunstad, Smith, and Layton, *Social Relationships and Mortality Risk: A Metaanalytic Review*; PLOS Medicine, July 27, 2010 <u>https://doi.org/10.1371/journal.pmed.1000316</u>

#### **Building Relationships**

- Identify different segments of one's social network:
  - Work, family, friends, caregivers, church/spiritual, hobbies
- Address how to build one's network
- Address how to identify and utilize one's network of resources and mentors, etc.
- Visualize or mentally rehearse social interactions

#### G.R.E.A.T. Self-Care Strategy #3: Eating/Sleeping

Required for optimal cognition and learning

 Thinking brain needs protein
 Brain's glymphatic system cleanses brain during sleep
 Sleep enhances learning

> From: Simply Mindful: A 7-Week Course and Personal Handbook for Mindful Living by Donald Altman

# Healthy Eating & Nutrition

Identify eating patterns and strategies

- Identify meal skipping or mindless eating
- Protein to help with mood, attention and motivation
- Drugs and alcohol patterns
- Role of caffeine with depression/anxiety
- Identify: simple, realistic and achievable goals
  - "What is one small change you can make today?"

## Healthy Eating & Nutrition

- Foods for attention and motivation
  - Neurotransmitters Norepinephrine and Dopamine: synthesized from tyrosine; sources include almonds, lima beans avocados, bananas, dairy, pumpkin and sesame seeds
- Foods for calm, mood regulation, thought flexibility
  - Neurotransmitter **Serotonin**: synthesized from tryptophan; sources include brown rice, cottage cheese, meat, turkey peanuts, and sesame seeds
- Foods for thought and memory
  - Acetylcholine (not made from amino acids): Choline belongs to the B family of vitamins is found in lecithin. Foods include salmon, egg yolks, wheat germ, soybeans, organ meats, and whole wheat products.

# Sleep Hygiene

- Brain and Sleep: The Glymphatic System
- How much sleep do you need? How much sleep do you get? What is your daily sleep deficit?
- Factors of life style affecting sleep
  - Technology, time, etc.
- Medical factors affecting sleep
- Problem solving sleep issues, even bad mattresses
- Developing a healthy sleep ritual
- \* 2011 Study shows that chronic sleep problems commonly found in anxiety and depression can produce more negative thoughts and memories.
  - \* Sleep and Emotional Memory Processing, Matthew Walker; Els van der Helm, Sleep Medicine Clinics, Vol. 6, No.1, pages 31-43; March 2011

## G.R.E.A.T. Self-Care Strategy #4: Activity

- Physical Exercise and Pleasant Activities boost mood and reduce anxiety
  - Exercise produces brain-derived neurotrophic factor (BDNF) good for brain and learning
  - Movement stimulates the production of a host of neurotransmitters and hormones that safeguard against anxiety, depression, ADHD, dementia, aging, and obesity.\*

\* Spark: The Revolutionary New Science of Exercise and the Brain—James Ratey and Eric Hagerman New York: Little, Brown and Co., 2008

From: Simply Mindful: A 7-Week Course and Personal Handbook for Mindful Living by Donald Altman

## Exercise and Movement

- Identify medically appropriate exercise: type and amount
- Set start date/start time
- Start small
- Utilize Factor "P" William Morgan and Purposeful Physical Activity
  - Adding Factor P produced 100% adherence to an exercise program
  - Walking the dog; walking or biking to work; creating a garden or path
- Exercise produces a substance known as "brain-derived neurotrophic factor," or BDNF, which encourages neurons to grow and make connections and is associated with learning and emotional control.\*
- Exercise stimulates the production of a host of neurotransmitters and hormones that safeguard against anxiety, depression, ADHD, dementia, aging, and obesity.\*

\* Spark: The Revolutionary New Science of Exercise and the Brain— James Ratey and Eric Hagerman New York: Little, Brown and Co., 2008

#### **Pleasant Activities**

- Identify simple, realistic and achievable pleasant activity to implement.
- Don't reinvent the wheel; use activities that have worked in the past
- Select date and time to do activity.
- Have backup time to set the pleasant activity if it does not get completed.
- Noticing Pleasantness is also a pleasant activity
  - a favorite color, a favorite sound, a favorite object, etc.

Control Your Depression by Peter Lewinsohn

#### G.R.E.A.T. Self-Care Strategy #5: Technology Boundaries and Tune-Up with Mindfulness Practices

- What mindfulness practice do you like?
  - Calming Breath
  - > Physical Grounding
  - Gratitude Practice
  - Yoga, Tai chi, prayer, or other focused attention practice

From: Simply Mindful: A 7-Week Course and Personal Handbook for Mindful Living by Donald Altman

# Weapons of Mass Distraction

- Setting Technology Boundaries and Slowing Down
- Face-to-Face Contact Wires Brain
- Practice: Exploration of Time Spent with Technology

## Is Technology Rewiring Our Brains?

- Less Time in Nature
- Loss of Face-to-Face Communication
- Expectation of Speed and Instant Response Time
- Working Across Time-Zones
- Sleep Deficits

#### Drop in Empathy in College Students

Study by U. of Michigan Institute, Association for Psychological Science, Annual Mtg, 2010
14,000 students analyzed over 30 years
Biggest drop in empathy occurred after year 2000
Today's college students display 40% less empathy than students of 20 or 30 years ago. (measured by standard tests of personality traits and combined results of 72 different studies)

Potential Causes: Increase in media exposure; violent media; social media; rewiring of empathic brain; quicker response time and less reflective time for pausing.

#### Effects of Hyper-Networking in Teens

*Hyper-networking in Teens* defined as: more than 3 hours a day on social networking sites (11.5% of students)

This group has higher chance of stress, depression, suicide, poor sleep, poor academics, TV watching and parental permissiveness.
62% more likely to have tried cigarettes
79% more likely to have tried alcohol
69% more likely to binge drink
84% more likely to use illicit drugs
94% more likely to have been in a physical fight
69% more likely to have had sex and 60% were more likely to have had 4 or more sexual partners.

Causes: Increase in media exposure; violent media; social media; rewiring of empathic brain; quicker response time and less reflective time for pausing. Technology Intake Questions

- On average, how much time each day do you...
  - ...use technology (at work and at home)?
  - ...engage in uninterrupted face-to-face time with significant others?
  - ...bring work home?
  - ...spend around nature or noticing nature?
  - ...exercise, walk or do a favorite activity?
- If problems sleeping, do you...

...look at TV, phone, or a computer before sleep?

...stay awake worrying about pressures and deadlines?

...have few nighttime boundaries with technology?

Time	Self-	Face-to-Face	Technology	Exercise:	Appetite	Craving	Travel	Reflection	Sleep	Work
Spent	Care:	without	Not at work	and other	Food and	and	and	Contem-	-	
Daily	Pleasant	interruption:	TV, CD,	physical	meals	Desire	Scheduling	plation:		
(average)	activity,	partner and	Cel, DVDs,	activity		Browsing	Planning,	Exploration		
	hobby, or	friends &	Internet, e-	5		and	organizing	thought,		
	relaxation	family	mail,			shopping	and	personal		
	relaxation	ianniy	games, etc.			snopping	transitions	growth		
15 min.			<b>Baille</b> 5, <b>etc</b> .				transitions	giowiii		
or less										
15 min.										
to $\frac{1}{2}$ hr.										
<sup>1</sup> / <sub>2</sub> hour										
to 1 hour										
1-2										
hours										
2-3										
hours										
3-4										
hours										
4-5										
hours										
6+ hrs.										
7 + hrs										
8+ hrs.										
0 + 1										
9+ hrs.										
10 +hrs.										

Metacognitive Reflection

- Sociologist William Ogburn coined the term "culture lag"—the length of time it takes us to adapt to new technology in our family, society, and culture.
- Reflect on the following questions:
  - What happens when we accept technology without question?
  - How can clients be made more aware of how technology might be affecting their family and social interactions?
  - What kinds of healthy boundaries can be a starting point when working with clients?

### **Tune-Up with Mindfulness Practices**

• What calming practices do you like?

Calming Breath Physical Grounding Gratitude Practice > Yoga, Tai chi, prayer, or other focused attention practice

#### The 3 Minute Question

## ARE YOU WORTH THREE MINUTES A DAY TO DO A MENTAL FLOSSING?

### G.R.E.A.T. Self-Care Strategies: Exploration with a Partner or Journal

- What one small change could you make in one of these areas?
- How might this improve your work or personal life?
  - G-ratitude & Attitude
  - R-elationships
  - E-ating & Sleeping
  - > A-ctivity

T-ech Boundaries and Tune-Up with Mindfulness Practices Questions and Hypotheticals...

### Expanding the Mindfulness Vocabulary

- Mind Wandering
- Practice: Expanding the Mindfulness Vocabulary

The secret of health for both mind and body is not to mourn for the past, worry about the future, or anticipate troubles but to live in the present moment wisely and earnestly. -The Buddha

## William James

"...The power of voluntarily bringing back a wandering attention, over and over again, is the very root of judgment, character, and will...But it is easier to define this idea than to give practical directions for bringing it about."

-The Principles of Psychology, 1890

#### A Wandering Mind Is an Unhappy Mind

- People's minds wander an average of 47% of the time
- Mind wandering (state of not being present) is ubiquitous across all activities. Mind wandering is a predictor of feelings of unhappiness.
- It's not the activity, but how present one is that increases happiness

*A Wandering Mind Is an Unhappy Mind*, Matthew A. Killingsworth and Daniel T. Gilbert; Science 12 November 2010: 330 (6006), 932.

#### Mind Wandering and Telomeres

Mind Wandering and Aging Cells

-- Telomere length is a measure of biological aging and a correlate of severe stress.

-- Individuals reporting high mind wandering had shorter telomeres.

-- A present attention state may produce cell longevity.

\**Clinical Psychological Science* Jan 2013 vol. 1 no. 1 (75-83) Questions and Hypotheticals...

## Advanced Mindfulness Toolbox for Rewiring the Brain

Rewiring Anxiety, Depression, Pain, PTSD, and Stress

DAY 2 (Videos 4, 5 & 6)

Welcome!

**Donald Altman** 

## Mindfulness Training Consultation Speaking

#### Video 4/6 Today's Roadmap

#### **Re-Mindfulness**

- Breathing Practice
- Palm the Present Moment

Stories for Tapping into and Identifying Strengths

- Strengths Intervention for Depression, Coping Skills
- 24 Core Strengths
- Practice: Identifying Strengths

Focusing the Mind for ADHD and Stress

- Integrate Breath with Focus on Word or Image
- Practice: Be the Pebble

APA Disclosure: Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of mental health professionals. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your professions standards.

#### Session 4/6 Today's Roadmap

Mindfulness for Relapse and Cravings

- Impulse Control Craving Control with Inner-Outer Grounding
- Practice: S-T-O-P Stress Technique

Mindfulness for Chronic Pain

- Introduction to the Body Scan
- Changes Perception of Pain
- Practice Surf the Body (Body Scan)

## Mindfulness Reflection



- After three sessions of mindfulness, what did you notice, if anything different?
- Did you vary from your auto-pilot routine in any way one morning?
- Did you eat food with a different awareness after the mindful eating S-T-O-P Mindful Bites meditation?
- Has mindfulness changed how you related to someone in your life?

## Core Mindfulness Practice WHERE ARE YOU RIGHT NOW?

**3-Part Practice** 

#### **BODY** as it is

(Rooted, Posture)

#### BREATH as it is

(Physical Contact Point)

#### MIND as it is

(Non-judging Labeling)

#### Palm the Present Review

Drop into the body...

to rest the weary mind.

Intervention for clearing out the **RATS**:

R-umination A-nxiety T-ransitions S-tress Questions and Hypotheticals...

Tapping Stories to Identify Strengths for Depression & Building Relationships

- Strengths Intervention for Depression
- 24 Core Strengths
- Practice: Sharing a Story of Strengths

## The Story Brain

History & Story Brain

Relationship & Resources Brain

Environmental Brain (Inner Outer Stress)

Body Brain

ARAS (Archive for Research in Archetypal Symbolism) *The Book of Symbols*, Taschen, 2010

#### Story Attunes and Attaches

- Stories can redefine problems and organize us toward feeling states.
- Stories can stimulate ideas and motivation.
- Find and tell stories that express strengths (even a difficult one).
- What story supports safety and calm?
- Story sharing make sense of our experiences and shapes our memory.

\*Healing the Mind through the Power of Story: The Promise of Narrative Psychiatry by Lewis Mehl-Madrona, Bear and Co., 2010

*The Strengths Book: Be Confident, Be Successful, and Enjoy Better Relationships* by Linley, Willars, and Biswas-Diener, CAPP Press.,2010

## Lewis Carroll

"I can't believe that!" said Alice.

"Can't you?" the Queen said in a pitying tone. "Trying again: Draw a long breath, and shut your eyes."

Alice laughed: "There's no use trying," she said; "one can't believe impossible things."

"I daresay you haven't had much practice," said the Queen. "When I was younger, I always did it for half an hour a day. Why, sometimes, I've believed as many as six impossible things before breakfast."

-from Through the Looking Glass

#### Metacognitive Reflection

- Explore the following questions:
- What stories (books, films, etc/) support safety and calm?
- What stories support hope or resilience that might resonate with clients?
- How can clients become more aware of how they are using their stories?

Online Intervention

- Subjects who used the 3 exercises below for a week, showed significantly reduced depressive symptoms and increased happiness vs. the placebo
  - "Use Your Strengths" exercise
  - Gratitude Visit
  - The Three Blessings Exercise
- Effects lasted for 6 months with the Strengths exercise

Seligman, M.E.P., Rashid, T., & Parks, A.C. (2006). *Positive psychotherapy*. American Psychologist, 61, 774-788.

## Use Your Strengths Exercise

- Subjects take the VIA-IS strengths questionnaire to assess their top 5 strengths, and think of ways to use those strengths more in their daily life.
- http://www.viacharacter.org
- Free strengths survey takes 15 minutes.
- Research:
  - http://www.viacharacter.org/www/Research/Research-Findings#nav

## Finding Strengths through Awareness of One's Daily Story

Share with another or Journal your story of taking this webinar workshop.

Include such things as your *history*, *stressors*, *moods and thoughts*, *body*, *habits*, and *centering rituals*.

# Finding Strengths through Awareness of One's Daily Story

If Sharing the story, the listener listens without interruption, and with empathy

- 1) The listener identifies the strengths they hear in the story and then reflects **these back to the storyteller**.
- 2) After hearing your strengths, tell your partner what it was like for you to hear your strengths. (affirming, rewarding, etc.)
- 3) After both partners share their story and hear their strengths, discuss what it was like to connect through the lens of strengths?

## Finding Strengths through Awareness of One's Daily Story

**If Journaling the story**, assume a neutral role and read the story as if experiencing it for the first time. As you read it, list all the strengths that you identify in that story.

- 1) After identifying your strengths, write down your experience of what it was like for you to know of your strengths. (affirming, rewarding, etc.)
- 2) What would it be like to notice your daily activities through the lens of strengths?

Questions and Hypotheticals...

## Writing "Your Best Possible Self" as a Trauma Intervention

- 2 studies examined the effects of writing down the story of "one's best possible self" as opposed to journaling about a trauma.
- The "best possible self" group showed a significant increase in mood and happiness levels, and health benefits when compared to the trauma writing group.

Personality and Social Psychology Bulletin, 2001, King Lyubomirsky, (2007) The How of Happiness

#### At the Movies... Wizard of Oz...Best Possible Self

Letting Joy Guide You Toward "Your Joyful Future Self"

Part 1: Locate and Connect with Joy

Think of a time you felt joyful or were passionate about something.

Visualize how you looked and felt at that joyful time. Feel the hope and optimism that you felt. What does this feel like in your body?

If negative thoughts creep in, notice these with a sense of acceptance but without identifying with them. Then, let yourself return to experiencing the essence of joy.

If you don't remember what it was like to be joyful, simply imagine that you are joyful by picturing yourself being and acting in a joyful way. Letting Joy Guide You Toward "Your Joyful Future Self"

Part 2: Stay with Your Joy as You Imagine Your Future Maintaining that feeling of joy, imagine what your joyful future self might look like in one, five, or ten years.

Let go of expectations about which direction your joy might lead you. Connect your present experience of joy with your journey toward future joy.

If desired, you can set the intention to imagine how joy could lead you toward reaching a realistic goal, your personal potential, or a life dream. Letting Joy Guide You Toward "Your Joyful Future Self"

#### Part 3: Visualize and then journal

For 10 minutes, visualize and write how your Joy guides you forward.

- For 10 minutes, visualize, then write the story of how joy helped you move toward your future.
- Notice character strengths that accompanied your joyful self. How did these help you on your journey to your future?
- Each week, re-visualize how joy moves your toward being your best future self. Fill in missing steps that help you reach your best potential future.
- Remember- your future self is an expression of the joy you feel *now*. Don't get too attached or worried about a future outcome.

Reflections for Clients on "Your Joyful Future Self"

- How did finding your joy help you to think differently about the future that you create?
- How did this practice help you connect with or think about your strengths?
- How can connecting with joy in the here and now assist you you in the present and the future?

## Focusing the Mind for ADHD & Stress

- Integrate Breath with Focus on Word or Image
- Practice: Be the Pebble

Weapons of Mass Distraction: How Much Screen Time?

- The average adult spends over 5 hours a day watching screens.
- 8-18 year-olds devote an average of 7 hours and 38 minutes to using entertainment media across a typical day\*
  - This equals more than 53 hours a week).

\* Generation M2: Media in the Lives of 8- to 18-Year-Olds; Kaiser Foundation, Jan. 2010 http://kff.org/other/event/generation-m2-media-in-the-lives-of/

### Loss of Emotional and Facial Cues

- Preteens were tested for their ability to recognize nonverbal emotion and facial cues
  - Subjects were low in ability to identify emotions
- Subjects spent five days at a camp with only face-to-face interactions and without screens.
- Recognition of nonverbal emotion cues improved significantly more than that of the control group for both facial expressions and videotaped scenes.

Five days at outdoor education camp without screens improves preteen skills with nonverbal emotion cues; *Computers in Human Behavior, 39, 2014* 

Multi-Tasking and Focus in Students Middle, high school, and college students were asked to "study something important" for 15 minutes. Results found:

- "On task" behavior declined after just 2 minutes.
- Only 65% of the time was spent studying.
- Multi-tasking while learning produced more shallow understanding and poor memory of learned material.
- Student using Facebook had lower GPAs than those who avoided it during the task. \*

\* Facebook and texting made me do it: Media-induced task-switching while studying; Larry Rosen, Computers in Human Behavior, Vol. 29:3, pp. 948-958, May 2013. Be the Pebble Centering Practice

- Meditation and ADHD
  - ADHD symptoms in middle school children with 2x daily practice
  - After three months, researchers found over 50 percent reduction in stress and anxiety and improvements in ADHD symptoms

\*online journal Current Issues in Education, Dec. 2008

#### At the Movies... For the Love of the Game

### Guidelines

- If you need to change position, do so with mindful awareness
- Time yourself for 5, 10, or 15 min.
  1x a day, or 2x daily if desired.
- When finished, stop repeating the word and sit silently for a minute or two before opening your eyes.

#### Choose a Calming Word or Image

- Find a quiet surrounding
- Sit up, place 15% of attention on the breath, eyes closed
- Gently pay attention to the calming word—don't force it
- When sensations or thoughts come, know that this is normal. Simply favor your word or image over other thoughts or feelings.
- If any emotion or feeling gets so strong that you can't focus on the word, just sit and breathe. Your mind will be drawn to the feeling, and you can wait until it lessens or leaves. Then return to the word/image. If any feeling is too hard to tolerate, open your eyes and rest.

Questions and Hypotheticals...

## Mindfulness for Relapse and Cravings

- Impulse Control Craving Control with Inner-Outer Grounding
- Practice: S-T-O-P Grounding and Emotional Regulation Technique

Mindful Acceptance of Cravings

- Attention that brings mindful acceptance to cravings breaks the maladaptive cycle of desire by helping people mentally disengage from ongoing cravings.
- Acceptance lets people observe ongoing cravings as transient events that will eventually fade, rather than by trying to suppress them.
- Mindful attention acts as a brake between urge and reaction.

Appetite. 2010 Aug;55(1):160-3. Coping with food cravings, Alberts, Mulkens, Smeets, & Thewissen

## Mindfulness-Based Relapse Prevention (MBRP)

- More effective than AAA and Psychoeducational follow-up
- Urges and cravings are precipitated by psychological or environmental stimuli.
- Ongoing cravings may erode the client's commitment to maintain abstinence as desire for immediate gratification increases
- Build mindful awareness of relapse episodes, dreams, or fantasies to identify situations that make coping difficult.
- Urge Surfing Techniques helps to manage urges and cravings. It replaces the desire for the urge to go away with a sense of curiosity and interest in the experience.

http://www.mindfulness.org.au/urge-surfing

Alcohol Research & Health . Relapse Prevention: Mary E. Larimer, Ph.D., Rebekka S. Palmer, and G. Alan Marlatt, Ph.D.

Interrupt Craving with S-T-O-P Stress Grounding Practice

## In the next minute, you could... S-T-O-P *for Awareness*

Transitions Anxious Thoughts Rumination Reactivity Craving and Urges

> \*S-T-O-P Stress Grounding Practice from The Mindfulness Toolbox by Donald Altman

Interrupt Craving with S-T-O-P Stress Grounding

Uses All Kinds of Grounding:

PHYSICAL (Focus on Body)

MENTAL (Observe Emotions or Note things in Environment)

SOOTHING (Use Senses to Focus on Favorite Color, Sound, Texture, etc.)

From: Seeking Safety by Susan Najavits

## S- STAND and SLOW DOWN

Take two or three calming breaths.

PHYSICAL GROUNDING

## S- STAND and SLOW DOWN Take two or three calming breaths.

## T-TUNE IN to the body.

Scan from toes to head. Breathe into into tension, Name Emotion and let it go. Let thoughts go. Breathe it out.

PHYSICAL & MENTAL GROUNDING

- S- STAND and SLOW DOWN Take two or three calming breaths.
- T-TUNE IN to the body.

Scan from toes to head. Breathe into into tension, Name Emotion and let it go. Let thoughts go. Breathe it out.

## **O-** OBSERVE *surroundings*.

Find novel or pleasant things (colors, shapes, sounds, etc.)

SOOTHING GROUNDING

- S- STAND and SLOW DOWN Take two or three calming breaths.
- T-TUNE IN to the body.

Scan from toes to head. Breathe into into tension, Name Emotion and let it go. Let thoughts go. Breathe it out.

**O-** OBSERVE *surroundings*.

Find novel or pleasant things (colors, shapes, sounds, etc.)

P-PREPARATION, POSSIBILITY and POTENTIAL from Pre-frontal Cortex. Look at how to go forward right now—not reactively, but with choice.

1) Journal Your Experience of the S-T-O-P Stress Pause Practice.

What did you notice?

How could this be useful for you or others?

How could you use this with clients?

2) Discuss your findings with others.

Questions and Hypotheticals...

## Mindfulness for Chronic Pain

- Introduction to the Body Scan
- Changes Perception of Pain
- Practice: Surf the Body

## Pain Reduction

• Four 20-min. sessions of mindfulness meditation reduced pain unpleasantness by 57% and pain intensity by 40% \*

• Engages multiple brain mechanisms that alter the subjectively available pain experience.

\* "Brain Mechanisms Supporting the Modulation of Pain by Mindfulness Meditation," The Journal of Neuroscience, 6 April 2011, 31(14): 5540-5548

## Body Scan

- Non-judging awareness and acceptance with the Body Scan
  - Used in Mindfulness Based Stress Reduction (MBSR) and
  - Mindfulness Based Cognitive Therapy for Depression (MBCT)

## Daily Meal Practice

- For Today's Lunch (Optional):
- Entering the meal, notice any emotions or tension. Breathe or use Sense Grounding to let these go.
- Notice the type of food your body is hungry for and order as much as will satisfy this hunger.
- From time to time, put down the utensil and take a breath break between bites.
- Leaving the meal, think about how you are letting go of the meal and transitioning to your next experience.

## **Daily Meal Practice**

#### Moment by Moment Awareness

- Awareness of Body (posture, body movement, chewing, hunger, satiety, etc.)
- Awareness of sensations (tastes, textures, smells, sights, sounds, likes, dislikes, neutral)
- Awareness of mind (thoughts, desire, perceptions, judgments, opinions, memories, etc.)

At the Movies... Big Night

## Video 5/6 Today's Roadmap

Mood Management with Laughter

- Biochemistry of Laughter
- Using Laughter to Shift Moods

Mindfulness as a Safe Anchor

- Types of Anchors: Symbols, Life Stages, Experience
- Practice: Identifying and Calming with an Anchor

#### Mindful Walking

- Present Moment Practice; Reduced Anxiety
- Practice: Ground Surfing or Mindful Walking

### Body Scan Metacognition

How can the Body Scan be part of a daily practice?

What obstacles could get in the way?

What would be the best time and place to incorporate the Body Scan into your day?

How could you adapt this practice?

How will you know if the Body Scan is being effective?

# Mood Management Tools for the Terminally Serious

• Biochemistry of Laughter & Laughter in Therapy

## Mindful Laughter

Humor is tragedy plus time. —Mark Twain

A merry heart doeth good like medicine. —Proverbs 17:22

#### At the Movies... The Chocolate Factory with Lucy

At the Movies... Where by emistine Rabette

## Why Laughter in Therapy?

- Laughter or a joke can help overcome terminal seriousness
- Humor breaks individuals out of negative mindsets in an unthreatening way and helps gain a new perspective.
- •Laughter has been shown to be inconsistent and incompatible with anxiety and fear
- Invokes creates new internal imagery and a more open, flexible, playful and experimental state of mind\*

Steve Andreas, author, *Transforming Your Self* and *Transforming Negative Self-Talk* 

## Mindful Laughter Benefits

• The stress hormones cortisol, dopac, and epinephrine decreased after the volunteers watched funny movies.

• Researchers found an average decrease in these stress hormones of 39%, 38% and 70% respectively.

• Humor significantly boosted the levels of endorphins and human growth hormone in test subjects—two beneficial regulators of the body's immune system.

Berk, L.S., et. al. (1989, December). Neuroendocrine and stress hormone changes during mirthful laughter. *The American Journal of the Medical Sciences. 298(6).* 

## Mindful Laughter Benefits

 Smiling during periods of stress decreases cardiovascular arousal back to baseline levels

Fredrickson & Levenson, (1998) Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition and Emotion*, 12, 191-220.

## • Even perceiving a smile in others releases dopamine in the viewer.

Depue & Morrone-Strupinsky, (2005) A nuerobehavioral model of affiliative bonding. *Behavioral and Brain Sciences*, 28, 313-350.

## **Mindful Laughter Benefits**

## Study Measured Effect of Humor on Anxiety

- The Humor group read comics before a difficult math test; the non-humor group read poems or nothing.
- Humor group had significantly less anxiety before test and scored significantly higher on the math exam.

Ford, T. E., Ford, B. L., Boxer, C. F., & Armstrong, J. (2012). Effect of humor on state anxiety and math performance. Humor, 25, 59–74.

## Mindful Laughter

Journal Studies on Laughter: The American School of Laugher Yoga

LaughterOnlineUniversity.com LaughterYogaAmerica.com Laughter Study for the Elderly:

Laughter therapy is considered to be useful, cost-effective and easily-accessible intervention that has positive effects on depression, insomnia, and sleep quality in the elderly

*Effects of laughter therapy on depression, cognition and sleep among the community-dwelling elderly,* Ko, H.J., and Youn, C.H., Geriatr Gerontol Int. 2011 Jul;11(3):267-74.

#### At the Movies... Laughter Yoga and Dr. Lee Berk

#### Mindful Lightening Up Intervention:

What do you take too seriously?

This practice will help you notice where you are reacting seriously, and help you to lighten

up.

**Part 1:** Make a list of "Things I Spend Too Much Time Worrying About" Examples: Things that push your buttons, critical comments, what others think, personal demands and expectations, lack of control over certain situations or aspects of your life.

**Part 2:** Make an executive decision to laugh it off, let it go. Yes, you can decide that!

**Part 3:** Write down a "lighter view" or each of the serious thoughts and evidence that worry has been counterproductive for you.

**Part 4:** Find out what and who makes you laugh (LRP– Laughter Resource Person).

Notice those who do not worry, and use them as role models.

Questions and Hypotheticals...

## Mindfulness of the Body, or Two Ways of Doing Anything

• Being present; Useful for managing anxious feelings during moments of UNCERTAINTY and TRANSITIONS.

At the Movies... Seeing Eye People

#### At the Movies... The Power of Presence

It sometimes happens that I cannot easily shake off the village. The thought of some work will run in my head, and I am not where my body is;

I am out of my senses...

What business have I in the woods if I am thinking of something out of the woods?

## Mindfulness Brings Awareness to Mind-Body Connection

- Meditation strengthens connections between the frontal cortex and the insula \*
- Mindfulness training for 7-8 yr. old anxious children showed clinical improvement, better attention, and included daily mindful walking. \*\*

\*Effects of Meditation Experience on Functional Connectivity of Distributed Brain Networks, Frontiers in Human Neuroscience, March2012|Volume6|Article38| **1**; Wendy Hasenkamp and LawrenceW. Barsalou

\*\* Treating anxiety with mindfulness: an open trial of mindfulness training for anxious children; Journal of Cognitive Psychotherapy, Vol. 19 No. 4, 2005. Semple, Reid, and Miller

## Mindfulness for Balance and Coordination

\* MS patients with 2- weekly 90 min sessions of Tai Chi for 6 months had improved balance & coordination, less fatigue & depression compared with control group.

\*\* Participants induced into a mindful state with their body had significantly improved balance over those who didn't have the treatment.

\* Burshka, Et. al., Mindfulness-based interventions in multiple sclerosis; beneficial effects of Tai Chi on balance, coordination, fatigue, and depression; BMC Neurology, 2014, 14:165

\*\*Mindfulness, movement control, and attentional focus strategies: effects of mindfulness on a postural balance task. Journal of sport & exercise psychology, Vol. 34, Issue 5, pp. 561-579 2012, Yee kee, PhD.

## Intentional Mindful Walking

- 3-Step Process
  - Set mental intention
  - Follow-up with the action
  - Observe body, feelings, thoughts, perceptions. Uses attention to sustain observation.

## Journaling Mindful Walking...

# What was your experience of walking with awareness and connection?

Questions and Hypotheticals...

#### Video 6/6 Today's Roadmap

Selective Attention & The Power of Nature

- Selective Memories for Positive Affect
- Nature for recovery from mental exhaustion
- Attention Restoration Theory and Sky Gazing Practice
- Sky Gazing

#### Harnessing Gratitude

- Gratitude Research: Why Gratitude Is Good
- Four Kinds of Gratitude
- Practice: Interpersonal Gratitude; G.L.A.D. Technique

#### Loving Kindness

- Fredrickson's Broaden and Build Theory
- Compassion Research and Priming for Safety
- Practice: Loving-Kindness

## Mindfulness Warm-Up

- After exploring strengths in an earlier session, how did that resonate with you?
- Which strengths did you notice or put into play after identifying these?
- Did you recognize the strengths of others?
- How did your awareness of strengths change one thingin a relationship, at work, etc?

## Mindfulness Meditation

## WHERE ARE YOU RIGHT NOW?

## **3-Part Practice**

#### **BODY** as it is

(Rooted, Posture)

#### BREATH as it is

(Physical Contact Point)

#### MIND as it is

(Non-judging Labeling)

## Mindful Mood Management with Selective Memory

- Selective Memory of Savoring Past Success
- Selective Memory of Helping Others
- Practice: Savoring; Being a Benefactor

#### Savoring a Past Success

- Recalling past successes or good times can boost feelings of positivity.
- Extending a positive memory for a longer period of time, known as "savoring" can produce feelings of well-being.

Journal of Happiness Studies; *Savoring: A New Model for Positive Experience*, 2007

#### Savoring for Older Adults

- Older adults associate tranquility and contentment with lifesatisfaction.
- Use a Savoring Exercise with Tranquility as the focus.
- Have client make a list of ways they feel content in their life to help them experience a life well-lived.

#### Practice: Savoring a Past Success

During the next five minutes, savor a favorite memory, a past success, or something you are proud of, that makes you feel joyful.

You can either write this down or just savor the memory in great detail.

(Use tranquility and contentment as a focus if you want.)

#### Being a Benefactor

Reflecting on voluntarily giving or being a benefactor produces:

- Increased positive affect and greater pro-social behavior than when reflecting on receiving.
- Stronger self-identity as a capable and caring contributor.

*Psychological Science*, 2012

#### Practice: Being a Benefactor

For the next five minutes, write about a recent experience at work or in your life in which you volunteered or made a contribution that enabled other people to feel grow, flourish, or feel grateful.

Write down your experience of being a benefactor in as great detail as you can.

#### Savoring and Benefactor Metacognitive Reflection

Share your experience with others as you explore:

What was it like to do both of these? Which appealed to you most? Why?

How might this practice have a positive impact on your day, work, or relationships?

How might you use or adapt either of these interventions with clients?

## Nature in Therapy

\*Nature restores energy in the workplace and reduces stress.

\*Reduces aggression and anger May reduce mild depression

\*\*Scenes of nature calmed drivers and reduced frustration

\*A Plasma Display Window, Journal of Environmental Psychology, 28 (2008) 192–199, Kahn, Friedman, et. al. \*\*Natural Scenes Calm Drivers More than City Views, Journal Environment and Behavior, Nov. 2003; Jack Nasar,

## Nature in Healing

Study looked at gall bladder surgery patients who had a natural view vs. a view of a brick wall.

Restorative effects of those with a natural view included:

- Shorter post-operative hospital stays
- Fewer negative evaluative comments from nurses
- Patients required less doses of strong pain relievers, and more frequently using aspirin or acetaminophen.
- Fewer postsurgical complications

*View through a window may influence recovery from surgery;* Science, 1984; Roger Ulrich

## Nature Reflection Exercise

Sit in nature with this poem or another reading for 5-10 minutes.

When despair for the world grows in me and I wake in the night at the least sound in fear of what my life and my children's lives may be,

I go and lie down where the wood drake rests in his beauty on the water, and the great heron feeds.

I come into the peace of wild things who do not tax their lives with forethought of grief.

I come into the presence of still water. And I feel above me the day-blind stars waiting with their light.

For a time I rest in the grace of the world, and am free.

Peace of Wild Things—Wendell Berry

## Gazing At the Sky, Trees, the Stars

Eyes wide open practice

- Settle in to the whole body as it is;
- Rest the mind as it is;
- Cast your gaze outward to the vastness;
- Release your personal pain and suffering to the wisdom of nature without expectation
- Rest in the natural state of interbeing with nature

### Practice: Journaling Nature

- For the next 10 minutes, Journal your nature experience. Consider asking:
- How did penetrating nature help me see or experience things in a fresh way?
- How could I use nature to foster insight and get grounded?
- What is one way that a nature practice could benefit myself and others in my life?

#### Questions and Hypotheticals

## Mindfulness Warm-Up

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## Harnessing Gratitude

- Four Psychological Reasons Why Gratitude Is Good
- Practice: Take G.L.A.D. Snapshots Through the Day

# Things We Sometimes Forget to Have Gratitude For...

## Opposable Thumbs

*image: www.fimage: www.freeimages.co.ukreeimages.co.uk* 

### Cordless Phones

*image: www.fimage: www.freeimages.co.ukreeimages.co.uk* 

## Free Refills!!

## Consistent Gratitude Practice PHYSICAL

- \* Stronger immune system
- \* Less bothered by pain \* Lower blood pressure
- \* Exercise more and take better care of health
- \* Sleep longer and feel more refreshed upon waking

#### PSYCHOLOGICAL

- \* Increased positive emotions \* More alert, alive, and awake
- \* More joy and pleasure \* More optimism & happiness SOCIAL
  - \* More helpful, generous, and compassionate
  - \* More forgiving and more outgoing
  - \* Feel less lonely and isolated

www.GreaterGood.berkeley.edu

\* Lower blood pressure

#### At the Movies...Robert Emmons- Why Gratitude Is Good

#### Gratitude for Depression

- "The gratitude group reported significantly bigger increases in their happiness levels from before to after the intervention." It was only necessary for participants in this study to do the practice once a week, such as on a Sunday night, for the benefits to be felt."
  - ---Sonja Lyubomirsky in her book, The How of Happiness

## Four Kinds of Gratitude...

- 1) Basic Gratitude, Necessities
- 2) Personal Gratitude
- 3) Relational Gratitude
- 4) Paradoxical Gratitude

... AKA Silver Lining Gratitude

**INTERPERSONAL PRACTICE 1**: Write down one thing you were grateful for in the past week and then tell the story behind that gratitude to another.

**INTERPERSONAL PRACTICE 2**: Write a Gratitude Letter about something positive that another person did for you, and present that individual with the letter.

PERSONAL PRACTICE 3: Make a Gratitude Bowl (or teacup) for the day or week, and put a penny in for each time you feel grateful for something. Track how many pennies you accumulate.

# G.L.A.D. Daily Snapshots\*

G.L.A.D. is an acronym for finding joy and balance using cognitive, behavioral and mindfulness skills

G - find one Gratitude you're thankful for today

- L find one new thing you Learned today
- A find one Accomplishment you did today
- D find one thing of Delight that touched you today Journal or write these on an index card

\*The Mindfulness Toolbox by Donald Altman

#### Questions and Hypotheticals

### Loving Kindness to Heal Trauma

- Fredrickson's *Broaden and Build* Theory for Positive Emotions
- Compassion Research and Safety Primings
- Practice: Loving-Kindness Affirmation

## Broaden and Build Theory of Positive Emotions

- Asserts that positive emotions broaden attention and thinking in response to diverse experiences, not narrowly focused threats.
- Positive emotions increase connection, trust, and openness.
- Positive emotions build relationships and resources.
- Loving-kindness Meditation (LKM) increased daily positive experiences and broadened personal resources and life satisfaction, and altered response to negative, depressioninducing emotions.

#### Loving Kindness to Heal Trauma

Journal of Clinical Psychology, May, 2009, Ann Kring

Loving Kindness Intervention

- May I be safe
- May I be happy
- May I be healthy
- May I be at peace
- Optional to add: "May I be...Secure, Loved, Forgiven, Accepted, etc."

Loving-kindness and compassion meditation: potential for psychological interventions, Hoffman, Grossman, and Hinton, et. al., Clinical Psychological Review, 2011 Nov;31(7):1126-32. Epub 2011 Jul 26.

Loving-Kindness Meditation to Enhance Recovery from Negative Symptoms of Schizophrenia, Johnson, Kring, Brantley, et. al., Journal of Clinical Psychology Vol 65(5) 499-509(2009) Loving Kindness Intervention

After practicing sending these warm feelings to yourself, you can extend these to others:

> Teachers, mentors, guides Family and friends Neutral persons Unfriendly persons To all persons without discrimination

#### At the Movies... Mr. Rogers and Planting a Garden in Your Mind

# Bibliography

Altman, Donald, *Reflect: Awaken to the Wisdom of the Here and Now*, PESI, 2019 Altman, Donald, The Mindfulness Toolbox for Relationships, PESI, 2017 Altman, Donald, The Mindfulness Toolbox, PESI, 2014 Altman, Donald, *Clearing Emotional Clutter*, New World Library, 2016 Altman, Donald, 101 Mindful Ways to Build Resilience, Premier Publishing Media, 2016 Altman, Donald, Stay Mindful and Color, Premier Publishing Media, 2016 Altman, Donald, The Mindfulness Toolbox, Premier Publishing, 2014 Altman, Donald, One-Minute Mindfulness, New World Library, 2011 Arden, John, Mind-Gene-Brain, Norton Series on Interpersonal Neurobiology, 2019 Arden, John, Brain2Brain: Enacting Client Change through the Persuasive Power of Neuroscience, Wiley, 2015

Benson, Herbert, and Proctor, William, *Relaxation Revolution: The Science and Genetics of Mind Body Healing*, Scribner, 2011

Brantley, Jeffrey. Calming Your Anxious Mind, New Harbinger Publications, 2007 Burns, David, Feeling Good, Harper, 1980 Chödrön, Pema, Start Where You Are: A Guide to Compassionate Living, Shambala, 2001 Chozen-Bays, Jan, Mindful Eating, Shambhala, 2017 Davidson, Richard and Begley, Sharon, *The Emotional Life of Your Brain*, Plume, 2012 Diener, Ed; Biswas-Diener, Robert; Happiness: Unlocking the Mysteries of Psychological Wealth, Blackwell Publishing, 2008 Flores, Philip, Addiction as an Attachment Disorder, Aronson, 2003 Fralich, Terry, Cultivating Lasting Happiness, PESI, 2012 Gardner, Howard, Multiple Intelligences, Basic Books, 2006 Gershon, Michael, The Second Brain, Harper Paperbacks, 1999 Goleman, Daniel, Destructive Emotions, Bantam Books, 2003 Gordon, M.D., James, Unstuck: Your Guide to the Seven-Stage Journey Out of Depression, Penguin Press, 2008 Hahn, Thich Nhat, The Art of Living, Harper One, 2017 Hanson, Rick, Hardwiring Happiness, Harmony, 2015 Hayes, Steven; Follette, Victoria; Linehan, Marsha; editors, *Mindfulness and Acceptance*: *Expanding the Cognitive Behavioral Tradition*, Guilford, 2004 Hüther, Gerald, The Compassionate Brain: How Empathy Creates Intelligence, Trumpeter, 2006 Kristeller, Jean, and Bowman, Alisa, The Joy of Half a Cookie, Tarcher Perigee, 2015

Jevne, R.F. and Miller, J.E., *Finding Hope: Ways to See Life in a Brighter Light*, Willowgreen Publishing, 1999

Kabatt-Zinn, Jon; Teasedale, John; Williams, Mark; Zindel Segal; *The Mindful Way Through Depression*, Guilford Press, 2007

Kabatt-Zinn, Jon, Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness, Delacorte Press, 1990

Klein, Allen, *The Healing Power of Humor*, Tarcher, 1989

Levine, Peter, with Frederick, Ann, *Waking the Tiger: Healing Trauma*, North Atlantic Books, 1997

Lawley, James & Tompkins, Penny, *Metaphors in Mind: Transformation through* 

Symbolic Modelling, The Developing Company Press, 2011 Linley, Willars, and Biswas-Diener, The Strengths Book: Be Confident, Be Successful, and Enjoy Better Relationships by, CAPP Press., 2010 Lyubomirsky, Sonja, The How of Happiness, Penguin, 2008 Marra, T, Depressed & Anxious: The Dialectical Behavioral Therapy Workbook for Overcoming Depression and Anxiety, New Harbinger, 2004

McDermott, Diane., and Snyder, C.R., *The Great Big Book of Hope*, New Harbinger, 2000

McDermott, Diane, Making Hope Happen, New Harbinger Publications, 1999

Mehl-Madrona, Lewis, *Healing the Mind through the Power of Story*, Bear and Co., 2010 Merzenich, Michael, Soft-Wired: How the New Science of Brain Plasticity Can Change Your Life, Parnassus Publishing, 2013 Mikulincer, Mario., and Shaver, Philip, Attachment in Adulthood, Second Edition, Guilford, 2017 McDermott, Diane., and Snyder, C.R., *The Great Big Book of Hope*, New Harbinger, 2000 Mehl-Madrona, Lewis, *Healing the Mind through the Power of Story*, Bear and Co., 2010 Mikulincer, Mario., and Shaver, Philip, *Attachment in Adulthood*, Guilford Press, 2007 Najavits, Lisa, Seeking Safety, Guilford Press, 2001 Naperstek, Bellruth, Staying Well with Guided Imagery, Warner Books, 1994 O'Connor, Richard, Undoing Perpetual Stress, Berkley Trade, 2006 Ogden, Pat, Sensorimotor Psychotherapy, Norton, 2015 Salzberg, Sharon, Loving Kindness: The Revolutionary Art of Happiness, Shambala, 1995 Sapolsky, Robert, Why Zebras Don't Get Ulcers, W.H. Freeman and Co., 1994 Segal, Zindel; Williams, Mark; Teasdale, John, *Mindfulness-Based Cognitive* Therapy for Depression, Guilford Press, 2002

Siegel, Dan, *Brainstorm*, TarcherPerigee, 2015 Schwartz, Jeffrey, Brain Lock: Anniversary Edition, Harper Perennial, 2017 Schwartz and Gladding, You Are Not Your Brain, Avery, 2011 Segal, Z.V., Williams, J., Mark, G., & Teasdale, J. D., *Mindfulness-Based* Cognitive *Therapy for depression,* Guilford Press, 2002 Silananda, U., The Four Foundations of Mindfulness, Wisdom Pub., 2003 Snyder, C.R., *The Psychology of Hope*, Free Press, 2003 Snyder, C.R., *The Handbook of Hope*, Academic Press, 2000 Snyder, C.R. and Ford, C., *Coping with Negative Life Events*, Springer, 1987 Snyder, C.R., McDermott, Cook, and Rapoff, *Hope for the Journey: Helping Children* Through Good Times and Bad, Basic Books, 1997 Thich Nhat Hanh, The Miracle of Mindfulness, Beacon, 1976 Weisman, M.M., Markowitz, J.C. & Klerman, G.L., *Comprehensive Guide to Interpersonal* Psychotherapy, Basic Books, 2000 Wehrenberg, Margaraet, The 10 Best-Ever Anxiety Management Techniques, Norton, 2008 Whybrow, Peter, American Mania: When More Is Not Enough, Norton, 2006 van der Kolk, Bessel, The Body Keeps the Score, Penguin, 2015

#### WEB SITE RESOURCES

Donald Altman's mindfulness websites: *Mindfully Speaking Newsletter* at: **MindfulPractices.com** 

Dana Foundation, brain and immunology info and free newsletter: www.dana.org

Greater Good; The Science of a Meaningful Life: www.GreaterGood.berkeley.edu

Hope Foundation, Professional Development for Educators: **www.hopefoundation.org** The Mindful Awareness Research Center: www.**marc.ucla.edu** 

Mindfulness Research Monthly: www.mindfulexperience.org

Center for Investigating Healthy Minds; Richard Davidson, www.investigatinghealthyminds.com

Scientific American Mind magazine: www.SciAmMind.com

Social Cognitive Neuroscience Laboratory, UCLA: www.scn.ucla.edu

Global Assoc. for Interpersonal Neurobiology Studies: www.mindgains.org

The Center for Mindful Eating: www.TCME.org