# Advanced Mindfulness Techniques

Rewire Depression, Anxiety and Toxic Lifestyle Habits

Welcome!

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# Mindful Living Newsletter MindfulPractices.com

Simply Mindful: A 7-Week Course and Personal Handbook for Mindful Living

The Mindfulness Toolbox

101 Mindful Ways to Build Resilience

Clearing Emotional Clutter



### Today's Roadmap

#### **Breath Awareness for Emotional Regulation**

- Core Mindfulness; Affect Labeling and Prefrontal Cortex
- Practice: 3-Dimensional Breathing
- Practice: The 3-Minute Stress Detox

#### Research & Useful (& Free) Web Resources

- Mindfulness Research, Affect Labeling
- Brain Resources
- Mindfulness Apps

### Today's Roadmap

#### **Stress and Epigenetics**

- Stress Instruments
- Brain Basics and Pre-frontal Cortex Functions

Overcoming Cravings, Negativity and Toxic Habits

- Practice: S-T-O-P Stress Grounding Technique
- Be the Pebble Practice

### Today's Roadmap

#### Lifestyle Self-Care and Balance

• 5-Steps of G-R-E-A-T Mindful Self-Care

Mindfulness for Pain and Anxiety

Practice: Body Scan

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.

# **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 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

#### Brief Mindfulness Reduces Stress & Blood Pressure

### Pilot Study with 13 Priests at University of Portland\*

- Priests a vulnerable population to stress and high blood pressure
- Program consisted of two 1-hour training sessions on "contemplative breathing" and 3-minute practice sessions three times a day.
- Results: Significant reduction in Blood pressure and Percived Stress Scale

<sup>\*</sup> Joy Mocieri, RN, BSN, CEN, TNCC, The Unique Power of Mindfulness on Blood Pressure and Stress Reduction on a Priest Community; University of Portland School of Nursing, June 24, 2018

### The Power of Breath

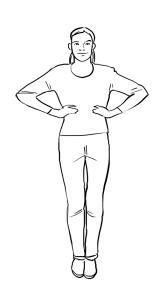
- Shallow Breath
  - 40-50 cubic inches air
- Full Breath
  - 400-500 cubic inches air
- Bio-feedback Method to Observe Your Breath

# 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

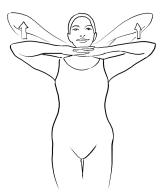
# 5 Regulating Breathing Postures











### 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.

### 3-Minute Stress Detox with Affirmation

Rewire Fear and Anxiety with Breath and Loving Kindness Affirmation

- Diaphragmatic Breathing to Turn on Parasympathetic Nervous System
- Integrate the 3 Min. Stress Detox with Loving Kindness Affirmation

#### Stress Detox Practice

- 1-minute focus on body
- 1-minute focus on breath
- 1-minute guided breath to release stress, tension, worry
- OPTIONAL: Use a single word, such as "safe" "connected" "secure" "peaceful" "energized" "compassion" with each in and out breath.

### Part 1: The 3-Minute Stress Detox

Find a quiet place. Then focus on the following things:

**Minute: #1:** Notice your body and posture. Sit up in a posture that allows for easy breathing. Notice your feet on the floor, the position of your legs, knees, arms, hands. Erect but relaxed.

### Part 2: The 3-Minute Stress Detox

Find a quiet place. Then focus on the following things:

Minute: #2: Place your attention on the breath. Observe each in-breath and out-breath. Find a normal rhythm... it's perfect just as it is! Imagine each breath rising and then ebbing... like a wave on the ocean. Exhale slowly, noticing how nice it is to let go.

### Part 3: The 3-Minute Stress Detox

Find a quiet place. Then focus on the following things:

Minute: #3: For this last 60 seconds, watch for any tightness, tension, worry or negativity in the body. We're going to use guided visualization to notice the next breath coming in from the crown center in the head.

Picture this as a white or golden light of harmony and balance. Let it to to any part of the body where there's tension or anxiety, and with your exhale, let the breath carry this down, down the body and out through the bottom of your feet into the earth for recycling. With each exhale feel the body grow more relaxed and at peace.

# OPTIONAL: The 3-Minute Stress Detox with Priming Word

- Minute: #3: Use a safe priming word, such as "May I be safe....
   "May I be peaceful" "May I be happy," etc., as you breathe in.
- With each exhale, send the affirmation to others, such as "May others be safe... May others be peaceful... May others be happy....

### The 3 Minute Question

# ARE YOU WORTH THREE MINUTES A DAY TO CLEANSE YOUR MIND OF EMOTIONAL CLUTTER?

# Pair Belly Breathing with Other Pleasant Activities

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

## Intro to Mindfulness & Research

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

### 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

# 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 \*

<sup>\*</sup> 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 Based Exposure Therapy for PTSD

- Combat veterans with PTSD used body scan, breathing, and self-compassion practices.
- MRI showed increased connections between brain areas related to less negative mind wandering and more present focused attention
- Over time, subjects showed increased capacity to volitionally shift attention from anxious states to present state attention.

King, A. P., Block, S. R., et. al. (2016), ALTERED DEFAULT MODE NETWORK (DMN) RESTING STATE FUNCTIONAL CONNECTIVITY FOLLOWING A MINDFULNESS-BASED EXPOSURE THERAPY FOR POSTTRAUMATIC STRESS DISORDER (PTSD) IN COMBAT VETERANS OF AFGHANISTAN AND IRAQ. Depress. Anxiety, 33: 289–299. doi: 10.1002/da.22481

# 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\*\*

<sup>\*</sup>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).

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

# Pausing for Mindful Metacognition mproves 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.

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

<sup>\*\*</sup> 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

# Useful (& Free) Web Resources

- Brain Resources
- Mindfulness Websites

## Mindfulness Resources/Research

➤ National Telecenter for Health and Technology

www.t2health.dcoe.mil/apps/breathe2relax

- ➤ Greater Good; The Science of a Meaningful Life www.GreaterGood.berkeley.edu
- Center for Investigating Healthy Minds:

http://www.investigatinghealthyminds.org

- ➤ MARC, The Mindful Awareness Research Center <a href="https://www.marc.ucla.edu/body.cfm?id=38&oTopID=38">www.marc.ucla.edu/body.cfm?id=38&oTopID=38</a>
- ➤ 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 The Center for Mindful Eating

# 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?

# 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

<sup>\*</sup> 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.

### 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

#### 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):  $0 = Never\ 1 = Almost\ Never\ 2 = Sometimes\ 3 = Fairly\ Often\ 4 = Very\ Often$ 

1. In the last month, how often have you been upset because of something that happened unexpectedly? ...... 0 1 2 3 4 2. In the last month, how often have you felt that you were unable to control the important things in your life? ...... 0 1 2 3 4 3. In the last month, how often have you felt nervous and "stressed"? .....0 1 2 3 4 In the last month, how often have you felt confident about your ability to handle your personal problems? ...... 0 1 2 3 4 5. In the last month, how often have you felt that things were going your way?...... 0 1 2 3 4 6. In the last month, how often have you found that you could not cope with all the things that you had to do? ...... 0 1 2 3 4 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 In the last month, how often have you been angered because of things that were outside of your control? ...... 0 1 2 3 4 10. In the last month, how often have you felt difficulties were piling up so high that you could *not overcome them?* ..... 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 \_\_\_\_\_
- 1. 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
<i>8</i> -20	Average
21-26	High
27-40	Very High

#### MEN:

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

## Brain Basics & Emotional Regulation

- Visual Brain Model for Patients
- Mindfulness Module of Brain

#### 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.

## Reflect Module of Brain: Highly Integrative Pre-frontal Cortex

Regulate the Body
Attune and Empathize
Emotional Balance
Impulse Control
Self-Soothing
Inner Appraisal (ethics and wisdom)
Selective Attention
Emotional Style (approach or avoid)

## 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.

## Mindfulness-Based Relapse Prevention (MBRP)

- More effective than AA 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.

Browse: Urge Surfing Alan Marlatt

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

# Interrupt Craving, Triggers and Negativity 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

**The Mindfulness Toolbox** by Donald Altman

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.

 Journal Your Experience of the S-T-O-P Stress Pause Practice.
 What did you notice?

2) How could this be useful for you or others?

How could you use this with clients?

### 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

# 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).

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

#### 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. \*

<sup>\*</sup> 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.

#### 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.

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

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

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

# 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

### 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.

<sup>\*</sup>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

# Saint Teresa's Mindfulness Prescription

My daughters, what are these drops of oil in our lamps?

They are the small things of daily life:
faithfulness,
punctuality,
small words of kindness,
a thought for others,
our way of being silent, of looking,
of speaking, and of acting.

These are the true drops of love.

Be faithful in small things because it is in them that your strength lies.

# 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

### 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 Meta-analytic Review*; PLOS Medicine, July 27, 2010 <a href="https://doi.org/10.1371/journal.pmed.1000316">https://doi.org/10.1371/journal.pmed.1000316</a>

### **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

## 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?"

http://www.caffeineinformer.com

# 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

#### 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.

#### 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

# 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.

# 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?

#### Mindful Exploration of Time Spent Copyright © 2014 by Donald Altman

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-			and	organizing	thought,		
	relaxation	family	mail,			shopping	and	personal		
		· J	games, etc.				transitions	growth		
15 min.			-							
or less										
15 min.										
to ½ hr.										
½ hour										
to 1 hour										
1-2										
hours										
2-3										
hours										
3-4										
hours										
4-5										
hours										
6+ hrs.										
7 + hrs										
8+ hrs.										
9+ hrs.										
) · III.										
10 +hrs.										

# 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.

<sup>\* &</sup>quot;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)

# 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?

Altman, Donald, Simply Mindful: A 7-Week Course and Personal Handbook for

Mindful Living,

Moon Lake Media, 2020

Altman, Donald, Reflect: Awaken to the Wisdom of the Here and Now, PESI, 2019

Altman, Donald, The Mindfulness Toolbox for Relationships, PESI, 2018

Altman, Donald, Clearing Emotional Clutter, New World Library, 2016

Altman, Donald, Stay Mindful & Color: Find Calm, Clarity and Happiness, PESI, 2016

Altman, Donald, 101 Mindful Ways to Build Resilience, PESI, 2015

Altman, Donald, The Mindfulness Toolbox for Relationships, PESI, 2018

Altman, Donald, The Mindfulness Toolbox: 50 Practical Tips, Tools and Handouts for

Anxiety, Depression, Stress and Pain, PESI, 2014

Altman, Donald, Mindfulness Code: Keys for Overcoming Stress, Anxiety, Fear and Unhappiness, New World Library, 2010

Altman, Donald, Living Kindness, Moon Lake Media, 2009

Altman, Donald, Art of the Inner Meal, HarperSanFrancisco, 2000 (hardcover) Moon Lake Media, 2002 (paperback)

Arden, John, Brain2Brain: Enacting Client Change through the Persuasive Power of Neuroscience, Wiley, 2015

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

Baer, Ruth, *Mindfulness-Based Treatment Approaches*, Elsevier, Academic Press, University of Kentucky, 2006

Baldoni, John, *Grace: A Leader's Guide to a Better Us*, Indigo River Publishing, 2019

Brantley, Jeffrey. Calming Your Anxious Mind, New Harbinger Publications, 2007

Chödrön, Pema, Start Where You Are: A Guide to Compassionate Living, Shambala, 2001

Daiensai, Richard Kirsten, Smile: 365 Happy Meditations, MQ Pub., Ltd., 2004

Davidson, Richard & Begley, Sharon, The Emotional Life of Your Brain, Avery, 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

Gardner, Howard, Multiple Intelligences, Basic Books, 2006

Gershon, Michael, The Second Brain, Harper Paperbacks, 1999

Gordon, M.D., James, Unstuck: Your Guide to the Seven-Stage Journey Out of Depression,

Penguin Press, 2008

Groopman, Jerome, Anatomy of Hope, Random House, 2005

Hamilton, Allan and Weil, Andrew, The Scalpel and the Soul, Tarcher, 2008

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

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

Kabatt-Zinn, Jon, Wherever You Go There You Are: Mindfulness Meditation in Everyday Life, Hyperion, 1997

Kabatt-Zinn, Jon and Myla Everyday Blessings, Hyperion, 1998

Kornfield, Jack, The Art of Forgiveness, Loving-Kindness, and Peace, Bantam, 2002

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

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

Mikulincer, Mario., and Shaver, Philip, *Attachment in Adulthood*, Guilford Press, 2007

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

Mikulincer, Mario., and Shaver, Philip, *Attachment in Adulthood*, Guilford Press, 2007

Najavits, Lisa, Seeking Safety, Guilford Press, 2001

O'Connor, Richard, Undoing Perpetual Stress, Berkley Trade, 2006

Salzberg, Padesky, C. A., & Greenberger, D., Clinician's Guide to Mind Over Mood. Guilford, 1995

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

Schwartz, Jeffrey, Brain Lock, Harper Perennial, 1996

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

Somov, Pavel, Anger Management Jumpstart: A 4-Part Mindfulness Path to Compassion and Change, PESI, 2013

Somov, Pavel, Present Perfect: A Mindfulness Approach to Letting Go of

Perfectionism and the Need for Control, New Harbinger, 2010

Thich Nhat Hanh, The Miracle of Mindfulness, Beacon, 1976

Willard, Christopher, Raising Resilience, Sounds True, 2017

Willard, Christopher, Growing Up Mindful, Sounds True, 2016

Whybrow, Peter, American Mania, Norton, 2006

#### Websites

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

MindfulPractices.com facebook.com/mndfulness

Dana Foundation, brain and immunology: www.dana.org

Greater Good: 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

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

The Center for Mindful Eating: www.TCME.org