Avoiding Burnout and Managing Stress for Healthcare Professionals

TEXAS HEALTHCARE SAFETY CONFERENCE

AUGUST 23, 2023

Objectives

- 1. Define Burnout
- 2. List 3 Questions That Help Address Burnout
- 3. Define Cumulative Stress
- 4. List 3 Evidence Based Practices to Reduce Stress
- 5. Demonstrate
  - a) Diaphragmatic Breathing
  - b) Emotional Freedom Techniques Tapping

Agenda

- What is Burnout and How Do I Avoid It?
- Why Do I Need Stress Management?
  - Types of Stress
  - Cumulative Stress Model
  - Bad Things
- Evidence-Based Practices for Stress Management

Agenda

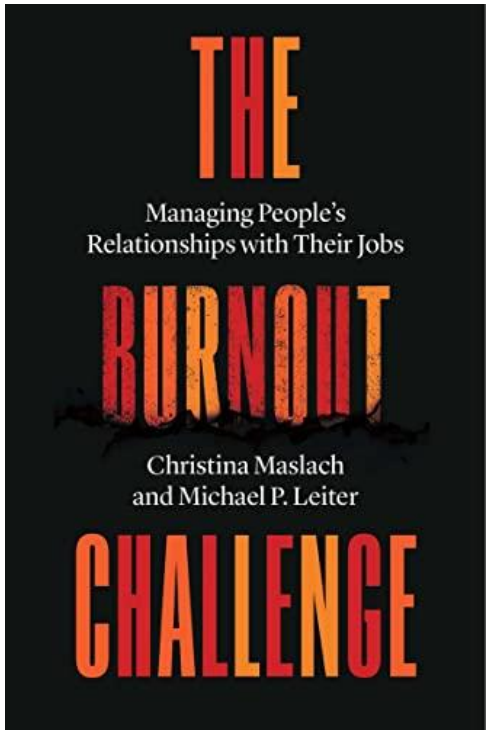
- Skills Practice
  - Diaphragmatic Breathing (DB) – Research
  - Diaphragmatic Breathing - Practice
  - Emotional Freedom Techniques (EFT) Tapping – Research
  - Emotional Freedom Techniques - Practice
  - Guided Visualization and Progressive Muscle Relaxation - Practice
- References

“Experts estimate that more than $500 billion and 550 million workhours are lost annually to on-the-job stress, much of it caused by dysfunctional work environments.”

Christina Maslach and Michael P. Leiter

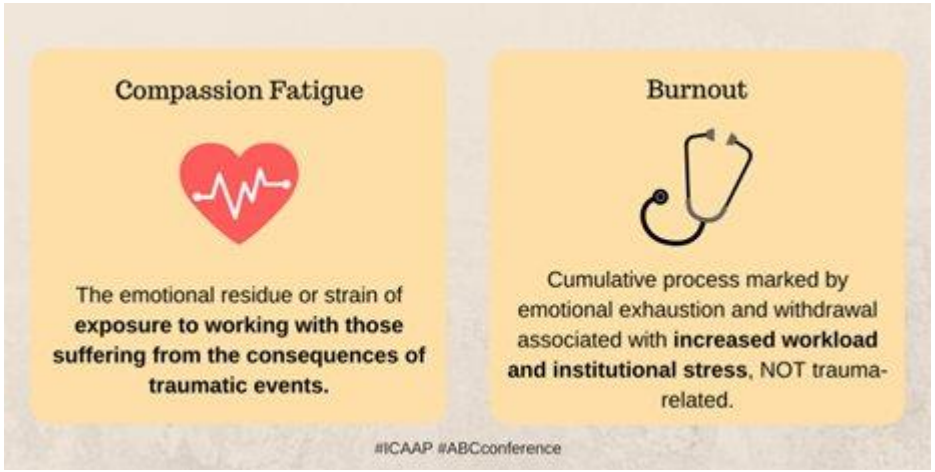
What is Burnout?

- Burnout is characterized by ICE:
  - 1. Inefficacy
  - 2. Cynicism
  - 3. Exhaustion
- The opposite of this is:
  - 1. Absorption
  - 2. Engagement
  - 3. Vigor



Burnout vs. Compassion Fatigue

- Burnout deals with WHERE you work.
  - While there are some things you can do to reduce stress, burnout tends to be an institutional issue. It deals with systems and cultures.
- Compassion fatigue deals with WHAT you do for a living.



3 Questions to Help with Burnout

- 1. What did you learn this week?
- 2. What do you want to learn next week?
- 3. How did you helped somebody this week?

“It’s not stress that kills us, it’s our reaction to it.”

Hans Selye

Why Do I Need Stress Management?

Stress vs. Anxiety

- Stress is physiological (allostatis), occurs in the presence of a stressor, and is usually short-term. (adrenocorticotropic hormone, ACTH)
- Anxiety is psychological, occurs without the presence of a stressor, and is usually long-term.

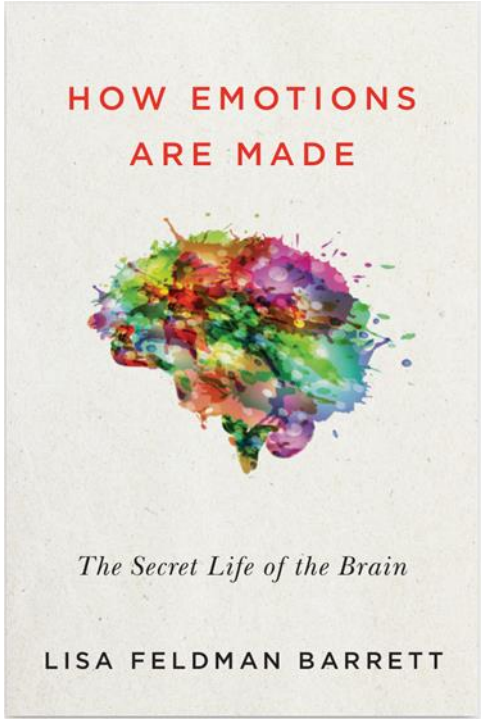
Stress vs. Anxiety

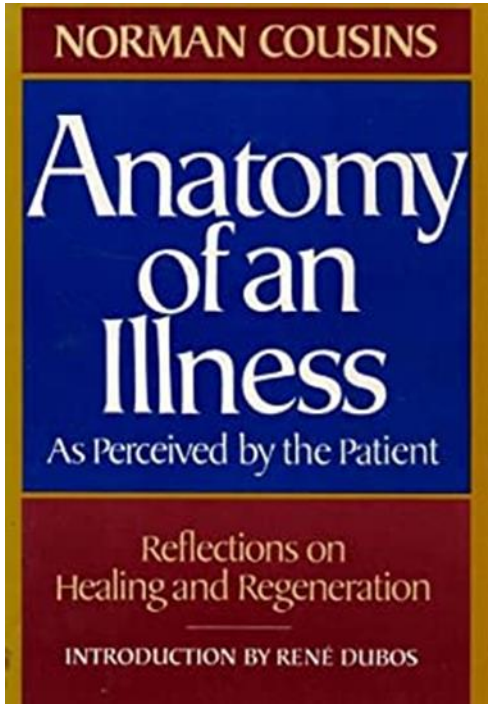
- These definitions fail to recognize that cognition (thinking) influences how we feel both emotionally and physiologically.
- Our emotions and, to a great extent, our physiology is determined by our thinking.

Lisa Feldman Barrett - You Aren't at the Mercy of Your Emotions: Your Brain Creates Them.

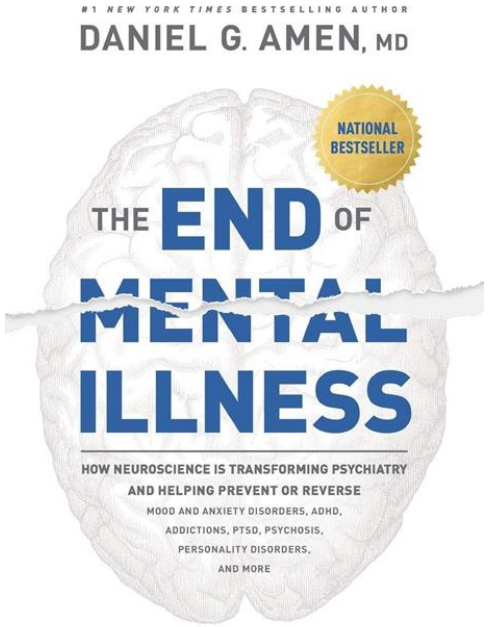
https://www.ted.com/talks/lisa_feldman_barrett_you_aren_t_at_the_mercy_of_your_emotions_your_brain_creates_them

Stress vs. Anxiety





Stress vs. Anxiety



Stress vs. Anxiety

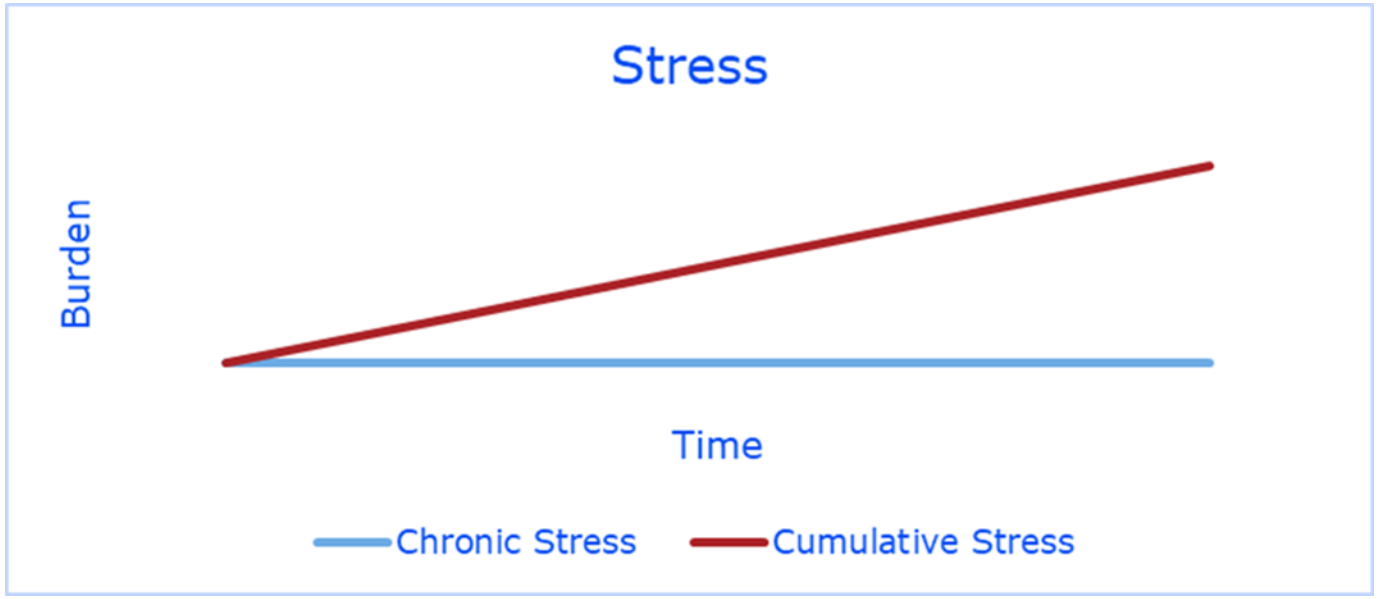
"The difference between stress and anxiety exists only in the minds of those who want there to be a difference."

Types of Stress

- Good Stress – This type of stress is often called eustress, e.g., promotion at work, riding a roller coaster, etc.
- Tolerable Stress – This stress is the normal stress of life with which we are able to cope using skills, and are often known as growth experiences.
- Toxic Stress – This is distress with which, for whatever reason, we are unable to cope with in an adaptive manner.

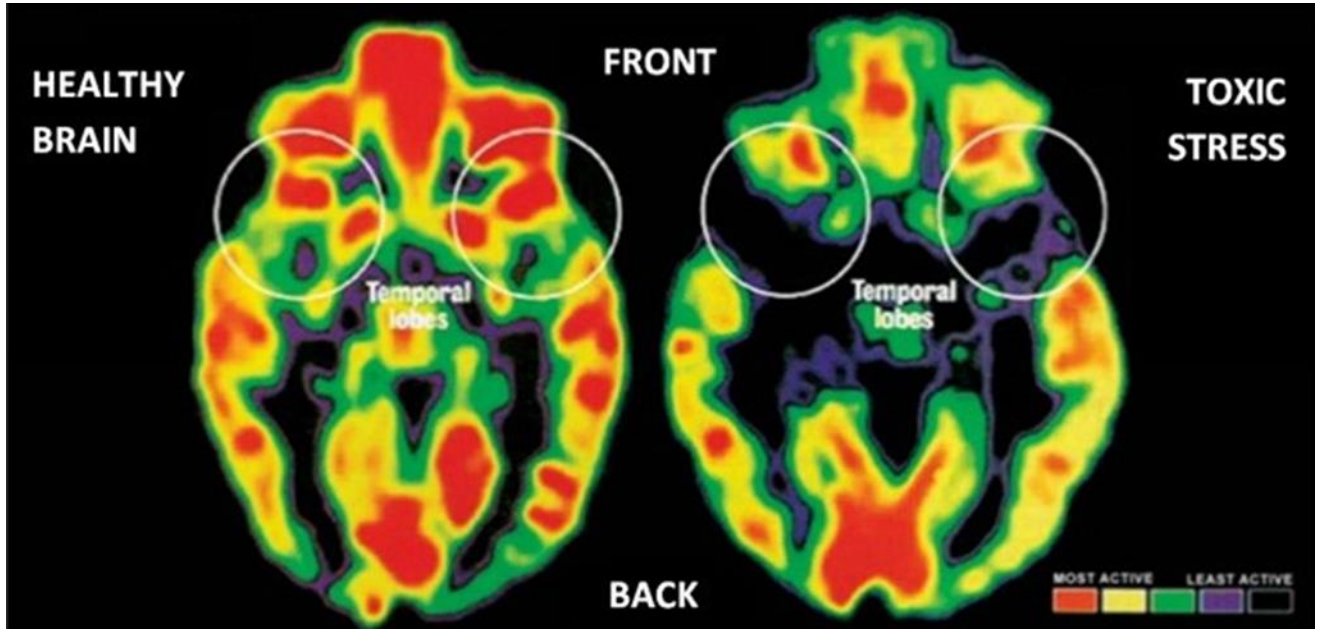
Cumulative Stress Model

- Cumulative Stress



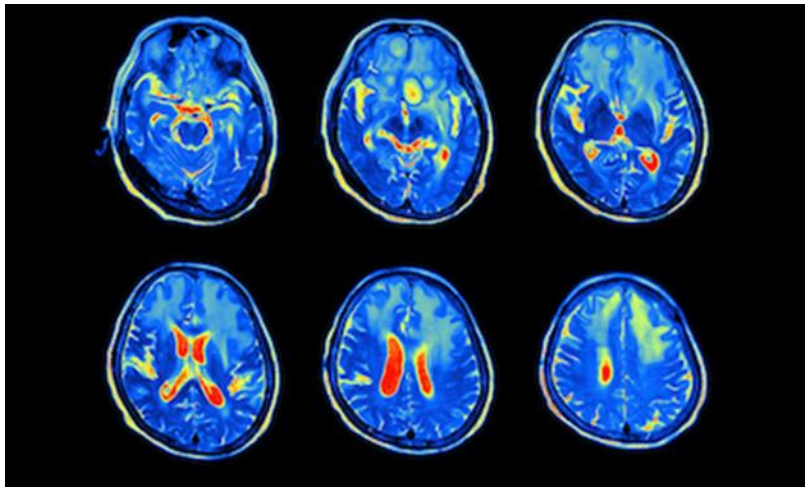
Bad Things

- Stress atrophies existing brain structures and prevents neurogenesis - the development of new brain structures (Fava, et al., 2019; McEwen, 2017).

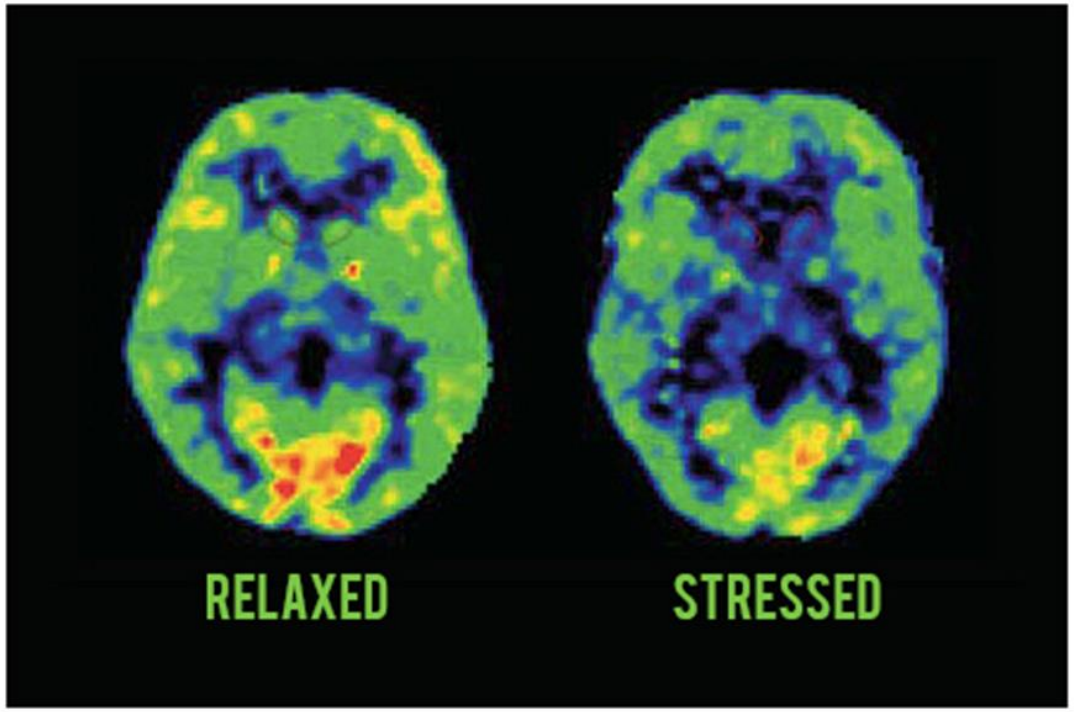


Bad Things

- Stress reduces hippocampal volume and function (McEwen, 1999).
- Hippocampal changes can cause feelings of depression (Lupien, et al., 2009)and PTSD-type symptoms (Mariotti, 2015).



Bad Things



Bad Things

- Stress during pregnancy produces neurological, cognitive, and behavioral setbacks in the child
  - Unsocial behavior
  - Attention Deficit Hyperactivity Disorder
  - Sleep disturbances
  - Psychiatric disorders
  - Depressive symptoms
  - Substance use disorders
  - Mood and anxiety disorders (Lupien, et al. 2009)

Bad Things

- Stress suppresses the immune system and opens individuals with higher CS to various health related diseases (Hu, et al., 2014):
  - Gastric ulcers (Holland & Taylor, 1991; Sun, et al., 2007)
  - Obesity, through the production of cortisol,
    - Cardiovascular disease
      - Ischemic heart disease
      - Peripheral artery disease (Guidid, et al., 2020).

Bad Things

- Stress interferes with cognitive executive functions, decreases self-regulation, and promotes eating and other compulsive behaviors (through the production of cortisol).
- Stress causes us to want high caloric foods, sugar, and fats; decrease physical activity; and it shortens sleep.
- Stress causes the accumulation of fat in unhealthy areas of the body, particularly around the abdomen (Dallman, 2010; Tomiyama, 2019).

Bad Things

- Physiologically, stress affects:
- The autoimmune system (Baes, et al., 2014; Hueston & Deak, 2014; Stojanovich & Marisavljevich, 2008)
- The gut microbiome (Hantsoo & Zemel, 2021, Kelly, et al., 2015)).

“The greatest weapon against stress is our ability to choose one thought over another.”

William James

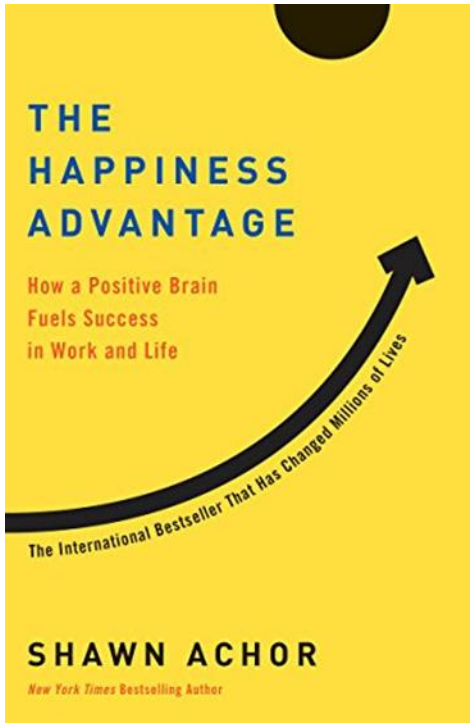
Evidence-Based Practices for Stress Management

Evidence-Based Practices (EBP)

- Stress can be mediated through certain interventions that have positive effects in decreasing allostatic load (=stress) and increasing euthymia (=emotional evenness).
- Key in maintaining euthymia is a healthy diet, getting quality sleep, having positive social interactions, spending time in positive environments that include greenspace, and engaging in regular physical exercise (McEwen, 2020).

EBP

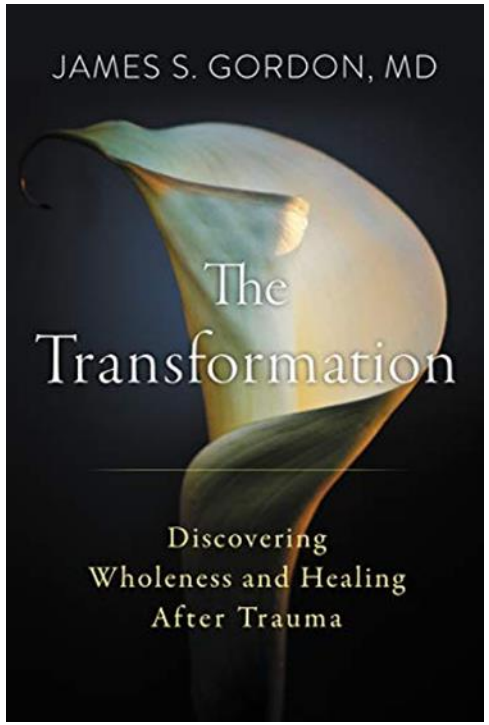
- 2 Minutes A Day:
- Write down 3 things for which you are grateful.
- Journal about 1 positive experience you've had over the last 24 hours.
- Practice mindfulness meditation.
- Write a positive email to someone.
- Exercise for 10 minutes (Achor, 2010).



EBP

- The practice of mind-body skills:
  - Includes meditation, guided imagery, breathing techniques, biofeedback, and self-expression through drawing, words, and movement (including tai chi-type movements), including "shaking and dancing".
  - Decreases PTSD symptoms, including depression and increases hopefulness (Gordon, et al., 2004; Gordon, et al, 2007; Staples, et al. 2011).

EBP


JAMES S. GORDON, MD
The Transformation
Discovering Wholeness and Healing After Trauma

EBP

- Job stress is mediated by decision latitude in the workplace (Sun, et al., 2007).
- Perceived control:
  - Moderates the health effects of traumatic stressors.
  - Meditates the effects of SES (a stressor) and other chronic stressors (Ni, et al., 2020).

EBP

- Having a greater sense of purpose in life also reduces stress (Guidi, 2020).
- Ikigai – "A reason for being"
- https://ikigaitest.com/

EBP

- Skills Exercises (Varvogli & Darviri, 2011).
  - Guided imagery
  - Progressive muscle relaxation
  - Diaphragmatic breathing
  - Relaxation response: https://www.floridamindfulness.org/resources/Documents/The%20Relaxation%20Response.pdf
  - Autogenic training: https://www.va.gov/WHOLEHEALTH/veteran-handouts/docs/AutogenicTraining-508Final-9-5-2018.pdf

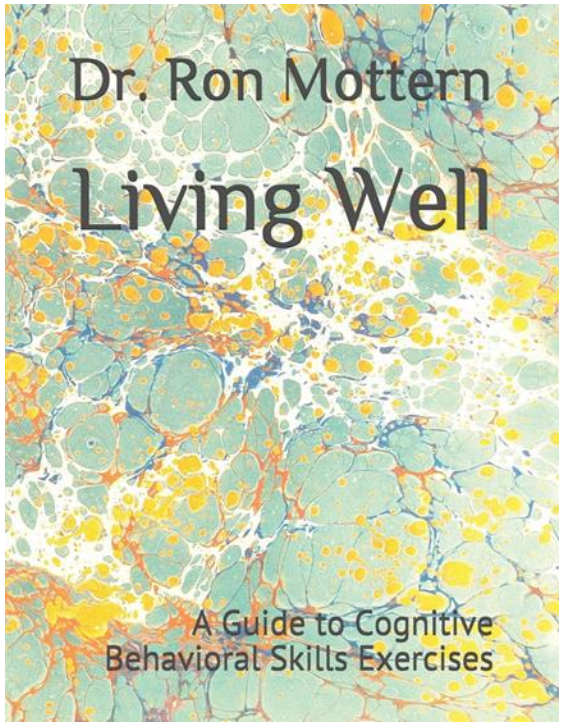
EBP

- Mindfulness Based Stress Reduction (MBSR)
- Transcendental Meditation (TM)
- Cognitive Behavioral Therapy (CBT)
  - Byron Katie: http://thework.com/wp-content/uploads/2019/02/English_LB.pdf
  - The 4 Questions – cognitive restructuring
- Biofeedback
  - HeartMath: https://www.heartmath.com/science/
- Emotional Freedom Techniques

EBP

- Hypnosis/self-hypnosis
- Virtual Reality
  - TRIPP: https://www.tripp.com/

EBP


Dr. Ron Mottern
Living Well
A Guide to Cognitive
Behavioral Skills Exercises

“Practice isn’t the thing you do once you’re good. It’s the thing you do that makes you good”

Malcolm Gladwell

Skills Practice

Diaphragmatic Breathing (DB) - Research

- Chen, Y. F., Huang, X. Y., Chien, C. H., & Cheng, J. F. (2017). The effectiveness of diaphragmatic breathing relaxation training for reducing anxiety. Perspectives in Psychiatric Care, 53(1), 329-336.
- De Jong, K. (2016). The way of the IceMan. Dragon Door.
- Hopper, S. I., Murray, S. L., Ferrara, L. R., & Singleton, J. K. (2019, September). Effectiveness of diaphragmatic breathing for reducing physiological and psychological stress in adults: A quantitative systematic review. JBI Database of Systematic Reviews and Implementation Reports, 17(9), 1855-1876.
- Howe, M. M., & Dwyer, K. K. (2007). The influence of diaphragmatic breathing to reduce situational anxiety for basic course students. Basic Communication Course Annual, 19(1), 104-137.
- Hunt, M. G., Rushton, J., Shenberger, E., & Murayama, S. (2018). Positive effects of diaphragmatic breathing on physiological stress reactivity in varsity athletes. Journal of Clinical Sport Psychology, 12(1), 27-38.

DB - Research

- Kaushik, R., Kaushik, R. M., Mahajan, S. K., & Rajesh, V. (2005, September). Biofeedback assisted diaphragmatic breathing and systematic relaxation versus propranolol in long-term prophylaxis of migraine. Complementary Therapies in Medicine, 13(3), 165-174.
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- Ong, A. M. L., Chua, L. T. T., Khor, C. J. L., Asokkumar, R., Namasivayam, V., & Wang, Y. T. (2018, March). Diaphragmatic breathing reduces belching and proton pump inhibitor refractory gastroesophageal reflux symptoms. Clinical Gastroenterology and Hepatology, 16(3), 407-416.e2.
- Russell, M. E. B., Hoffman, B., Stromberg, S., & Carlson, C. R. (2014). Use of controlled diaphragmatic breathing for the management of motion sickness in a virtual reality environment. Applied Physiology and Biofeedback, 39(1), 269-277.

DB – Research Summation

- Hopper, et al. (2019) did a quantitative systematic review of the effectiveness of diaphragmatic breathing (DB) in reducing physiological and psychological stress in adults. The results suggested that DB may decrease stress as measured in physiological biomarkers.
- Howe and Dwyer (2007) found that DB reduced communication apprehension in students, showing a significant decrease in state anxiety.
- Hunt, et al. (2018) examined the effects of DB against those of progressive muscle relaxation (PMR) and paced breathing (PM) on varsity athletes and found positive effects in stress reactivity. DB resulted in significantly higher tidal volume than both PMR and PB, lower heart rate than PMR, and significantly higher heart rate variability than PMR. The DB group reported a trend toward greater relaxation than the PMR group.
- Martarelli, et al. (2011). Examined the effect of DB on recovery from oxidative stress in athletes and found that DB increased melatonin levels and decreased cortisol levels after exhaustive exercise.

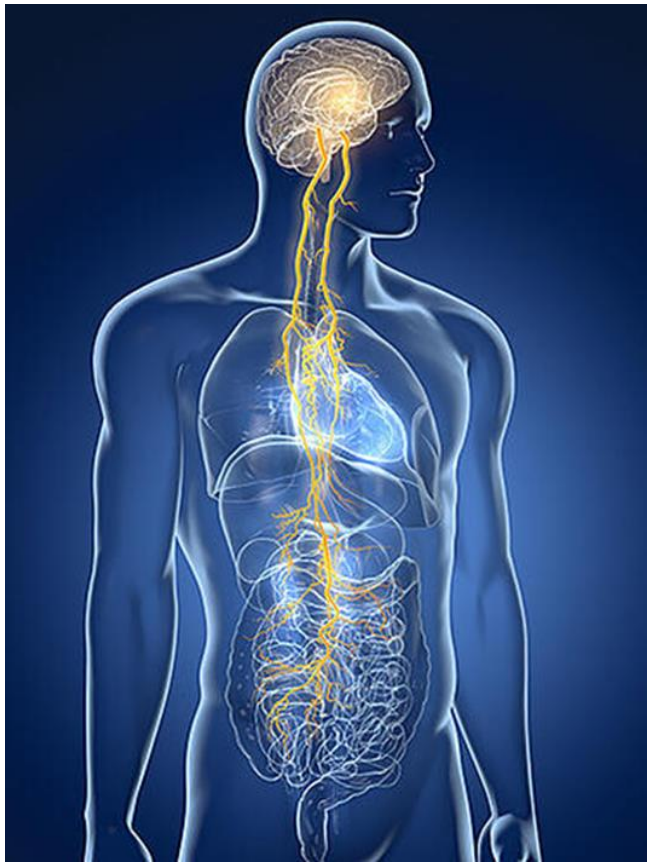
DB – Research Summation

- Kaushik, et al. (2005) used biofeedback assisted DB to work with migraines and found that biofeedback assisted DB and systematic relaxation were beneficial in migraine and had significantly better long-term prophylactic effect than the use of propranolol.
- Chen, et al. (2017) looked at the use of DB for reducing anxiety. They found that over an 8-week training period, the experimental group significantly reduced their scores on the Beck Anxiety Inventory, peripheral temperature, heart rate, and breathing rate.
- Ong, et al. (2018) found that training with DB decreased symptoms in patients suffering from gastroesophageal reflux disease. And Russell, et al. (2014) found that symptoms of motion sickness can be controlled with DB in a virtual reality environment.
- Overall, DB has been found to have many uses, especially in the control of stress reaction and anxiety. Apart from the effects it has on mood, DB can induce changes in the parasympathetic nervous system and the autonomic nervous system (De Jong, 2016). There is some research that indicates that time duration of the skill is important in its effects, so the more we practice the DB skill, the better it is likely to work for us.

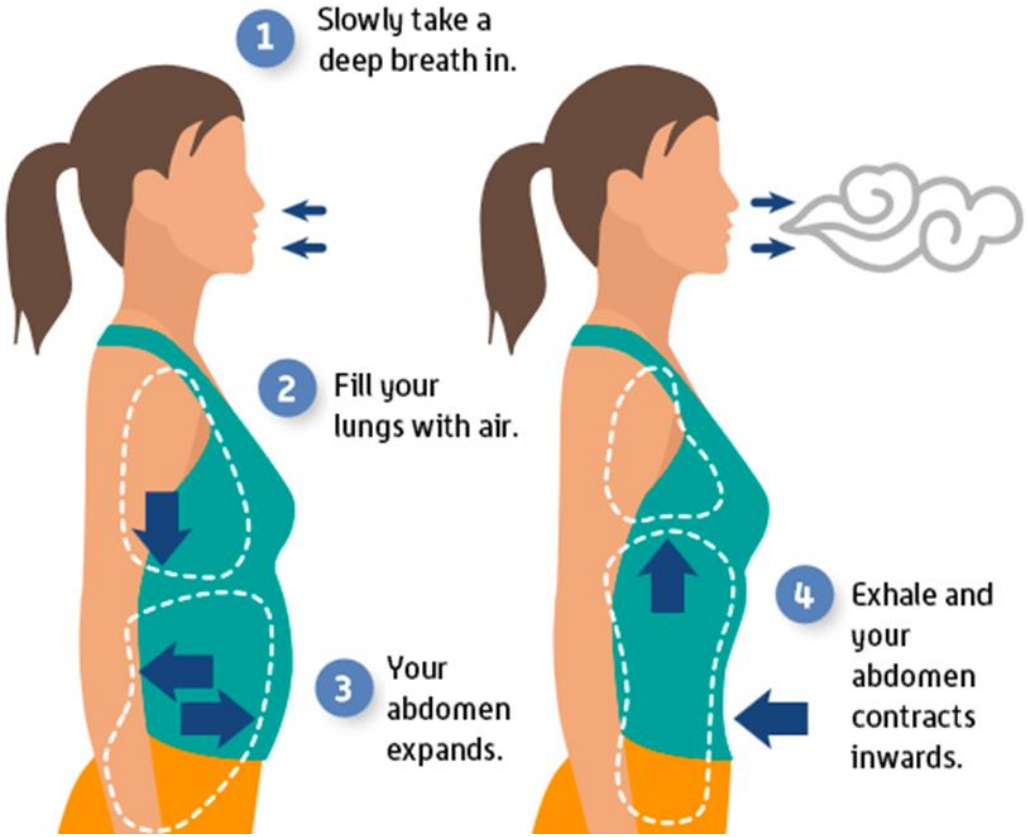
DB - Practice

- Basic breathing
  - Using a tactile trigger with DB
  - Using an auditory trigger with DB

DB - Practice



DB - Practice


1 Slowly take a deep breath in.
2 Fill your lungs with air.
3 Your abdomen expands.
4 Exhale and your abdomen contracts inwards.

Emotional Freedom Techniques (EFT) - Research

- Boath, E., Good, R., Tsaroucha, A., Stewart, T., Pitch, S., & Boughey, A. J. (2017). Tapping your way to success: Using Emotional Freedom Techniques (EFT) to reduce anxiety and improve communication skills in social work students. The International Journal, 36(6), 715-730.
- Church, D., & Nelms, J. (2016). Pain, range of motion, and psychological symptoms in a population with frozen shoulder: A randomized controlled dismantling study of clinical EFT (Emotional Freedom Techniques). Archives of Scientific Psychology, 4(1), 38-48.
- Church, D., Stern, S., Boath, E., Stewart, A, Feinstein, D., & Clond, M. (2017). Emotional Freedom Techniques to treat posttraumatic stress disorder in veterans: Review of the evidence, survey of practitioners, and proposed clinical guidelines. Permanente Journal, 21, 16-100.
- Clond, M. (2016, May). Emotional Freedom Techniques for anxiety. The Journal of Nervous and Mental Disease, 204(5), 388-395.

EFT - Research

- Hajloo, M., Ahadi, H., Rezabakhsh, H., & Mojembari, A. K. (2014). Investigation on Emotional-Freedom Technique effectiveness in diabetic patients' blood sugar control. Mediterranean Journal of Social Sciences, 5(27), 1280-1285
- Nelms, J. A., & Castel, L. (2016). A systematic review and meta-analysis of randomized and nonrandomized trials of clinical Emotional Freedom Techniques (EFT) for the treatment of depression. Explore, 12(6), 416-426.
- Rogers, R., & Sears, S. (2015, November). Emotional Freedom Techniques (EFT) for stress in students: A randomized controlled dismantling study. Energy Psychology, 7(2), 26-32.

EFT – Research Summation

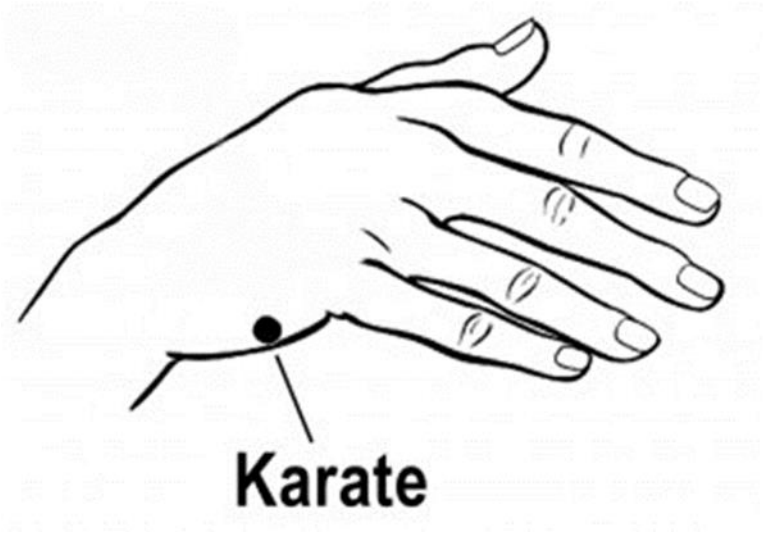
- Nelms and Castel (2016) conducted a systematic review and meta-analysis of the clinical use of EFT in the treatment of depression and found that EFT performed as well or better to TAU and other active treatment controls. The posttest effect size for EFT was larger than that for psychotherapy studies and antidepressant drug trials, regardless of whether it was delivered in groups or individual treatment, and the effects were maintained over time.
- Boath et al. (2017) used EFT to help social work students decrease anxiety and thus improve their communication skills.
- Clond (2016) also conducted a systematic review and meta-analysis of EFT in the treatment of anxiety. EFT groups demonstrated a significant decrease in anxiety scores.
- Church et al. (2017) applied EFT to the treatment of PTSD and found that "most practitioners (63%) reported that even complex PTSD can be remediated in 10 or fewer sessions. Some 65% of practitioners found that more than 60% of PTSD clients are fully rehabilitated, and 89% stated that less than 10% of clients make little or no progress" p.16-100.

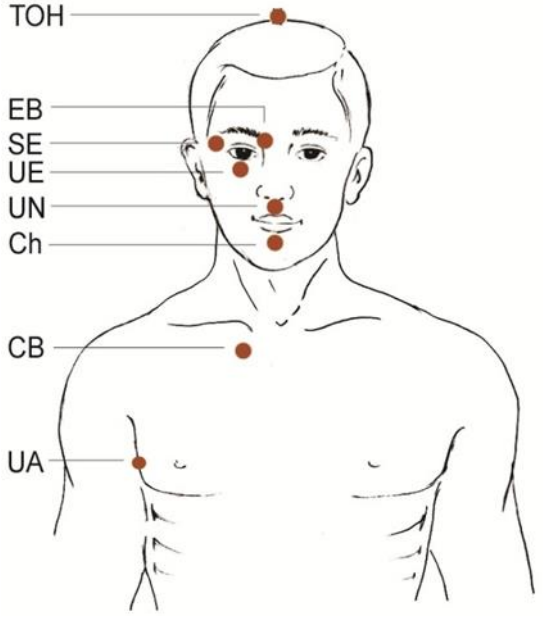
EFT – Research Summation

- Rogers and Sears (2015) found in a randomized controlled dismantling study that EFT reduced stress symptoms by 39.3% when appropriate acupressure were used in the procedure, as opposed to an 8.1% decrease when sham point were used.
- Church and Nelms (2016) EFT for pain, range of motion, and psychological symptoms in patients with frozen shoulder. The results indicated that EFT was an effective intervention that reduced pain and psychological symptoms, including anxiety and depression.
- Hajloo et al. (2014) examined the effect of EFT on diabetic patients' blood sugar control. The results showed that was an effective method for controlling blood glucose level in diabetic patients.
- A quick search for EFT on Google Scholar will show a wide range of applications for EFT and the efficacy of its use as a treatment for anxiety and depression. You will also note that there is a wide range of uses for EFT in both physical and mental health practices. The Rogers and Sears (2015) article suggests that EFT is not just a distraction technique, but has physiological effects.

EFT - Practice

- The Basic Recipe
  - Karate chop point
  - Top of head
  - Eyebrows
  - Side corner of the eye
  - Under the eye
  - Under the nose
  - Point of chin
  - Collar bone
  - Ribs under the arm
  - Top of sternum





EFT - Practice

- The phrase
- Even though I have this problem with _____, I deeply and completely accept myself.
- Measure the problem BEFORE the exercise and AFTER the exercise.

EFT - Practice

- The 3 rounds of EFT
- Round 1 - The basic phrase:
  - Even though I have this problem with _____, I deeply and completely accept myself.
- Round 2 - The problem:
  - This problem I have with _____.
- Round 3 – The affirmation:
  - I deeply and completely accept myself.

Guided Visualization/Progressive Muscle Relaxation - Practice

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