A stylized, colorful illustration of a landscape. The background features wavy, layered bands of light blue and white, suggesting a sky or water. In the foreground, there are rolling green hills with a brown path winding through them. On the left, there are several stylized trees and plants: a tall green tree, a purple and pink flower, and a cluster of orange and red flowers. A small red bird is flying in the upper left area.

Happiness

**Applying the Science and Holism of
Happiness to Transform
Your Clinical Practice**

**Lise Alschuler, N.D., F.A.B.N.O.
NANP 2018**

Topics

- Why Happiness?
- The tenets of happiness
 - A primer the ins and outs of happiness
- Part I: Being a Happy Practitioner
 - Implications of happiness to patient care and wellness
- Part II: A New Model for Clinical Practice
 - Creating happy patients



We are practitioners, why bother with happiness?

- While relieving symptoms in our clients is a significant step towards wellness, assisting them even further along the wellness pathway towards joy and contentment is ultimate healing.

The happier we are as practitioners, the more fulfillment, joy, contentment and pride we will experience in our lives.



Today's Practice of Healthcare – the opportunity

- Oriented around complaint, unwellness and disease
- Good at alleviating the symptom – either by masking it (allopathic) or by addressing the cause (nutrition, lifestyle, etc.)
- However, this approach reinforces weakness and neglects rejuvenation
- There is an opportunity to transform the practice of healthcare to one that includes the alleviation of suffering and extends beyond this to establishing deeply exuberant living.
- Plus, many healthcare practitioners are burned out 😞

Is this what your practice feels like?



National Geographic, Nov 2017

How about this?



National Geographic, Nov 2017

If not, why not?

- *Maybe it's not important to you to make your practice a wellspring of joy and happiness.*
- *Maybe you are not doing what you want to do.*
- *Maybe you are too hard on yourself to be happy, never mind cultivate joy in your clients.*
- *Maybe you feel unworthy of being happy.*
- *All of the above??*

Positive Psychology: the study of Happiness

- Positive psychology is the scientific study of:
 - = ordinary human strengths and virtues
 - = what enables individuals and communities to thrive
 - = the positive, adaptive, creative and emotionally fulfilling aspects of human behavior
- Positive Psychology assesses the factors that most contribute to a well-lived and fulfilling life; “the good life”
- Focuses on what is right, rather than what is wrong



The
GOOD LIFE

Compton W. and E. Hoffman. *Positive Psychology*, 2nd ed. 2013 (Belmont CA: Wadsworth, Cengage Learning): 1-3.

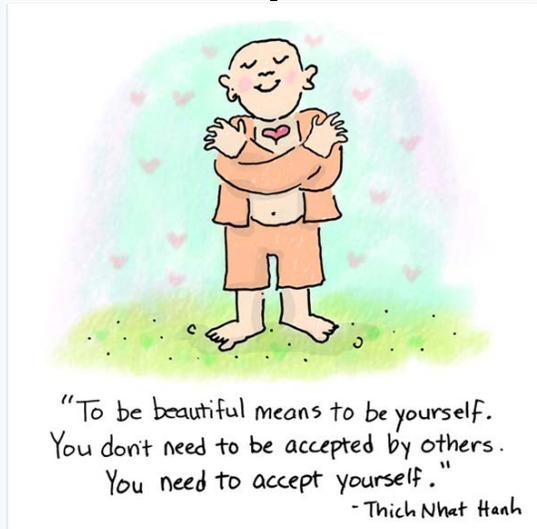
Happiness is a set of practices (basic needs are met)

- *Positive Subjective States: positive emotions such as joy, happiness, satisfaction, love, contentment*
 - *Positive emotions are independent of negative emotions (i.e. they don't substitute each other out)*
 - *Thus, freedom from anxiety or depression doesn't automatically result in happiness.*
 - *In fact, negative emotions are vital for self-understanding and personal growth, and challenges can be deeply enriching experiences.*
- *Self-acceptance*
- *Trust in others and feeling trustworthy*
- *Personal growth*
- *Freedom to live the life that's right for you*
- *Positive relationships and sense of connection (Love and Be Loved)*
- *Generosity*
- *Hope: A sense of agency, or having sufficient drive to reach important goals, and believing that there are pathways available to reach those goals.*

Lambert M and D Erekson. *J Psychother Integration*. 2008;18(2):222.
Woolfolk R. *J Theoretical Philosoph Psychol*. 2002;22(1):19.

A Happiness Formula

Self-love and
self-acceptance



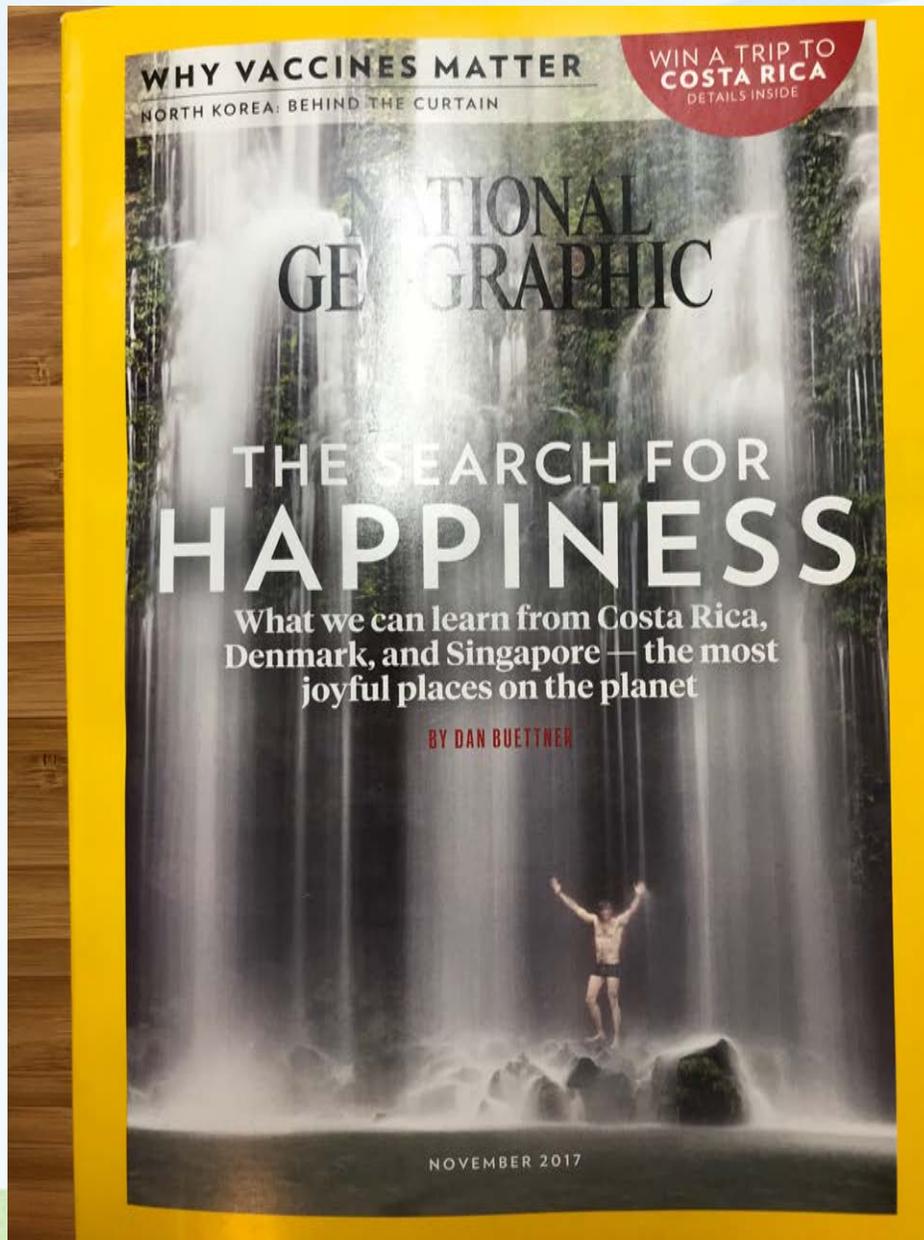
+ Courage (to feel
loved/to love) =



Happiness



The Search for Happiness



- “Three different strands of happiness that braid together in complementary ways to create lasting joy [are] pleasure, purpose, and pride.”
- – Dan Buettner, author of *The Blue Zones of Happiness* (2017)

Types of Happiness

- **Experienced Happiness: Positive Affect**
 - Measured by how often you have smiled, laughed or felt joy during the past 24 hours.
- **Eudaimonic Happiness: Pursuing your Passions**
 - Measured by whether you learned or did something interesting yesterday
- **Evaluative Happiness: Life Satisfaction**
 - Measured by rating your satisfaction with your life on a scale of 0-10.

Maybe we could ask our patients these questions...

Buettner D, The World's Happiest Places, National Geographic Nov 2017.

One kind of happiness

- “Breathing a sense of wonder, sacredness, and true understanding into one’s perception of the world, into one’s relationships, and into one’s actions.”



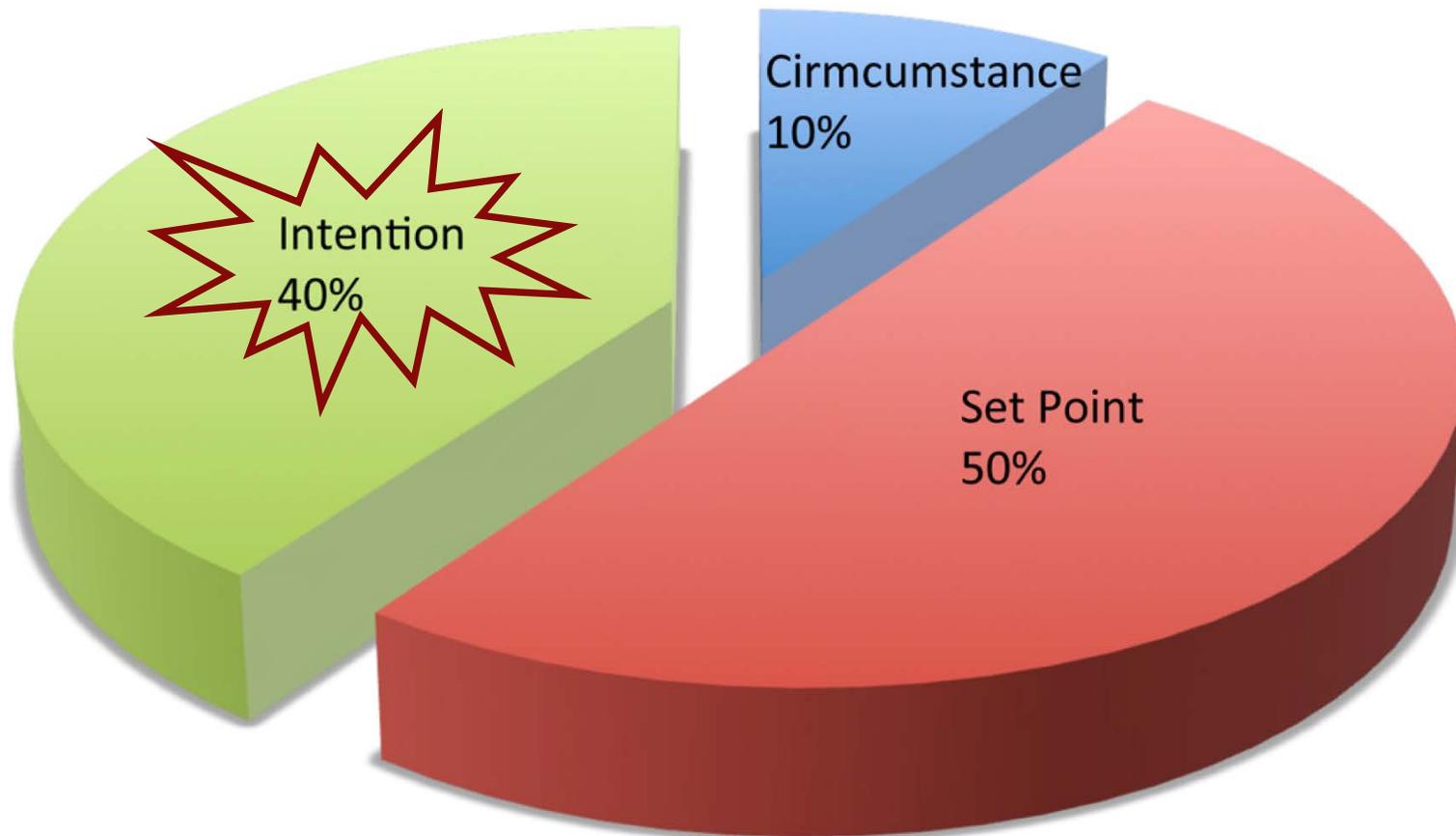
Biswas-Diener R. *Practicing Positive Psychology Coaching*, 2010 (John Wiley & Sons: New Jersey):78.

Fine, fine, fine...

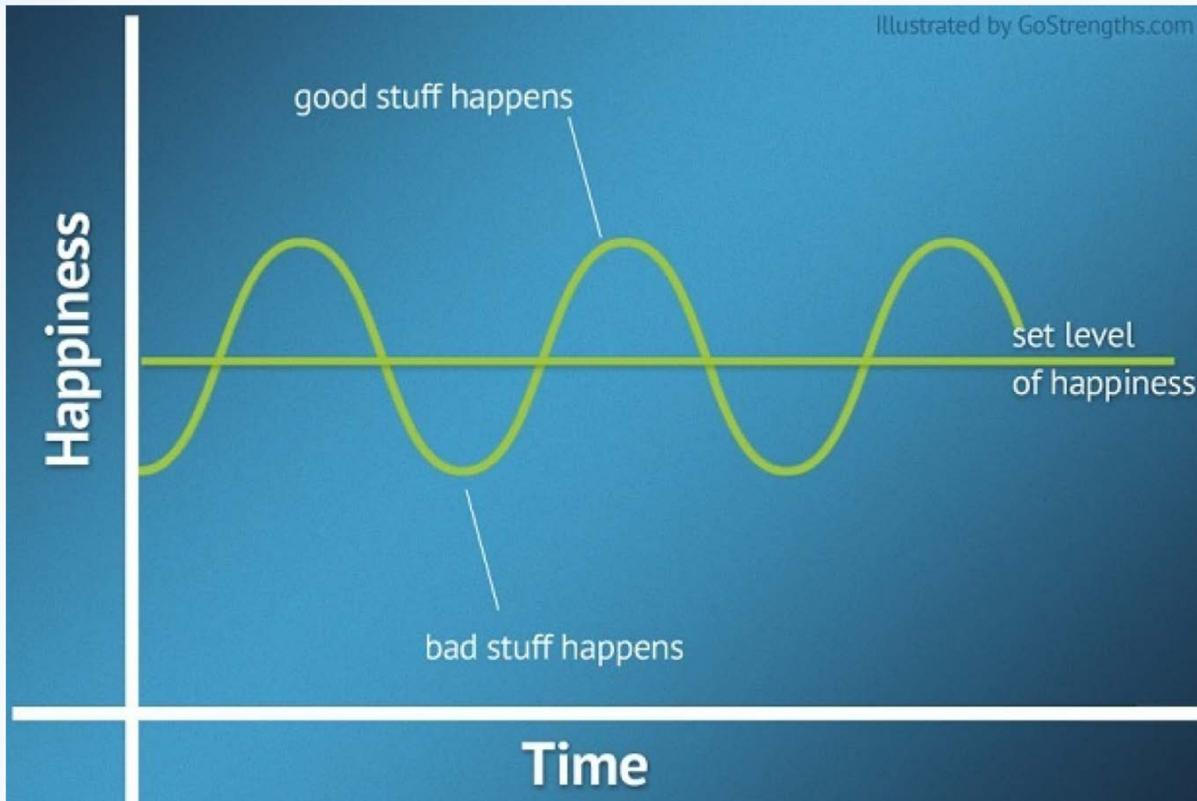
But, can we really be happier?

Determinants of Happiness

Sources of our Happiness



Happiness Set Point



- Set point is genetically determined.
- People with higher set points tend to be cheerful most of the time
- People with lower set points tend to be pessimistic and anxious.
- However, humans can increase their set point over time.

Lucas R. Personality and subjective well-being. In M. Eid and R. Larsen (eds) *The science of subjective well-being*. 2008:171.
Headley B. *Social Indicators Res.* 2008;86(2):312.

Moving targets of Happiness

- Positive emotions broaden our awareness thereby facilitating our ability to learn from these experiences and to build our personal resources in order to have continued positive emotions.
- You know you are happy when...
 - Mindfulness: paying attention, awareness, openness, flexibility
 - Flow: unified flowing from one moment to the next without worry and with effortless concentration
 - Playfulness: emotional, humorous, social and creative engagement
 - Savoring: an awareness of pleasure and delighting in it
 - Peak performance: moments of performance beyond our normal level of functioning
 - Compassion: observing and practicing kindness, altruism and care of others
 - Loving relationships with at least 2 of 3: Passion, Intimacy, Commitment
 - Resilience: Self-love and ability to forget about what others think



Part I.

Being a Happy Practitioner

Heal thyself first...

- *Happy practitioner = Happy practice*
- *How happy are you?*
 - *Not happy enough?*
- *Step one: Prioritize happiness!*
 - *Yes, you deserve it.*
 - *Yes, you are worthy of it.*
 - *Yes, you will still be a good, productive person – you will just be a happy, good, productive person.*



Ask the hard questions

- Are you content with who you are, what you have and what you do?
- Do you feel challenged, but not overwhelmed?
- Do you love?
- Are you loved?
- Are you trustworthy and kind?
- Are you present?

*“Tell me, what is it you plan to do
with your one wild and precious life?”
- Mary Oliver*

Some things that can get in the way

- Self-judgement/being hard on yourself... Perfectionism
- Feeling shame: “The intensely painful feeling or experience of believing we are flawed and therefore unworthy of love and belonging.”
 - Brene Brown
- Lack of authenticity; caring a lot more about what others think
- Exhaustion
- All work, no play
- Being too busy to pay attention



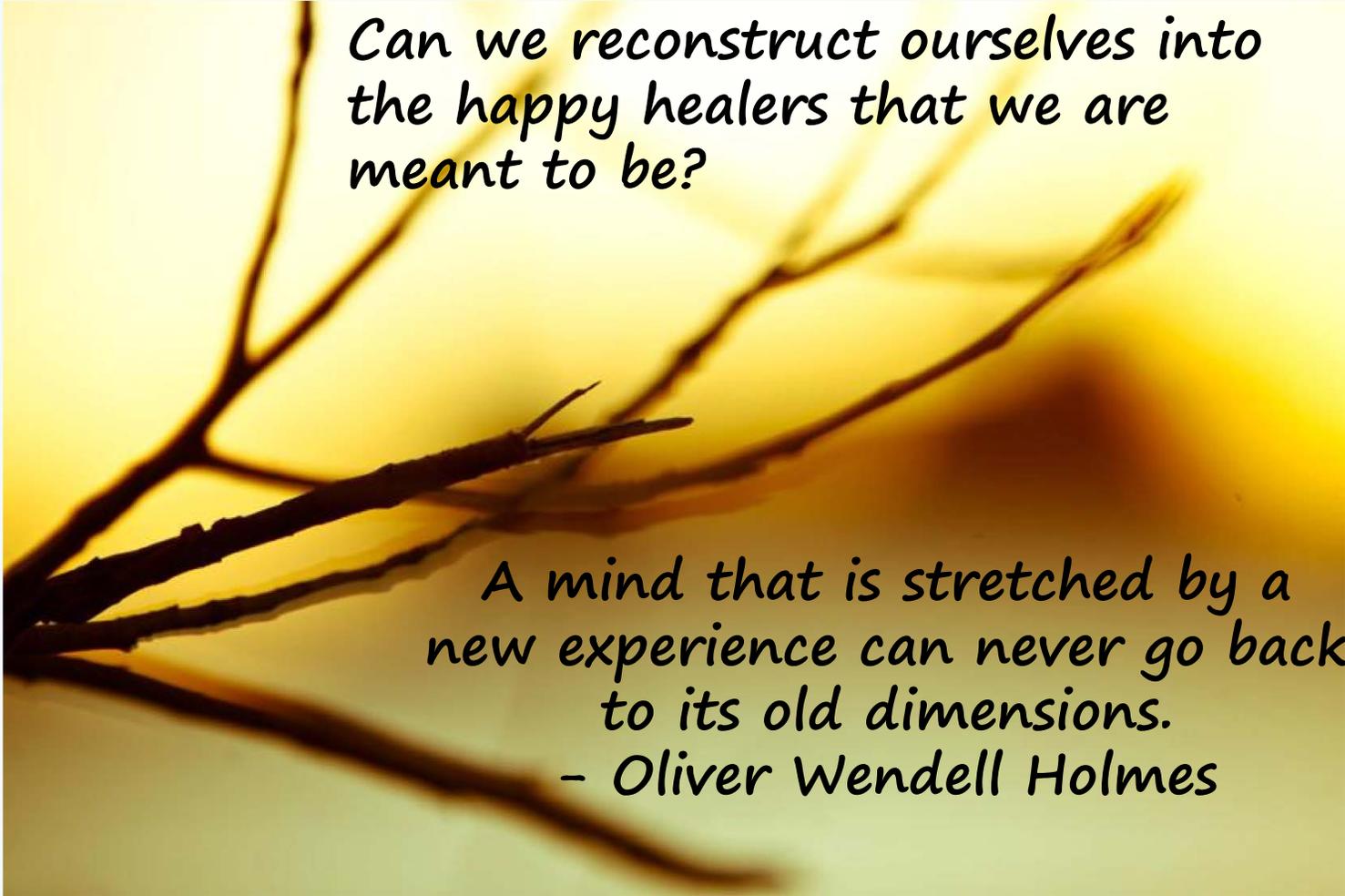
Take some time to ponder on these things

- So that you can bring your Fullest and Most Happy Self to your Practice



- In the meantime, let's take a quick tour through being a happy practitioner....

Believe in Your Ability to Change



Can we reconstruct ourselves into the happy healers that we are meant to be?

A mind that is stretched by a new experience can never go back to its old dimensions.
- Oliver Wendell Holmes

What flows through the mind sculpts the brain; immaterial experiences leave material traces

- The brain:
 - 100 billion neurons
 - A trillion glial cells
 - Half a quadrillion synapses
- With all of this, the brain demonstrates experience-dependent neuroplasticity
- The mind:
 - The brain processes sensory information in neuronal networks that are shaped by experience, particularly during early life, but not exclusively, to optimally represent the internal and external milieu.
 - With conscious awareness and repetition of mental states, neural networks are established that facilitate these mental states into becoming neural traits
 - Neurons that fire together wire together; = neural networks



Passion



Passiflora incarnata (Passion flower)

Love



*Courage to be
authentic*



“Forgiveness is giving up all hopes of a better past”

Forgiveness



Service



Joy



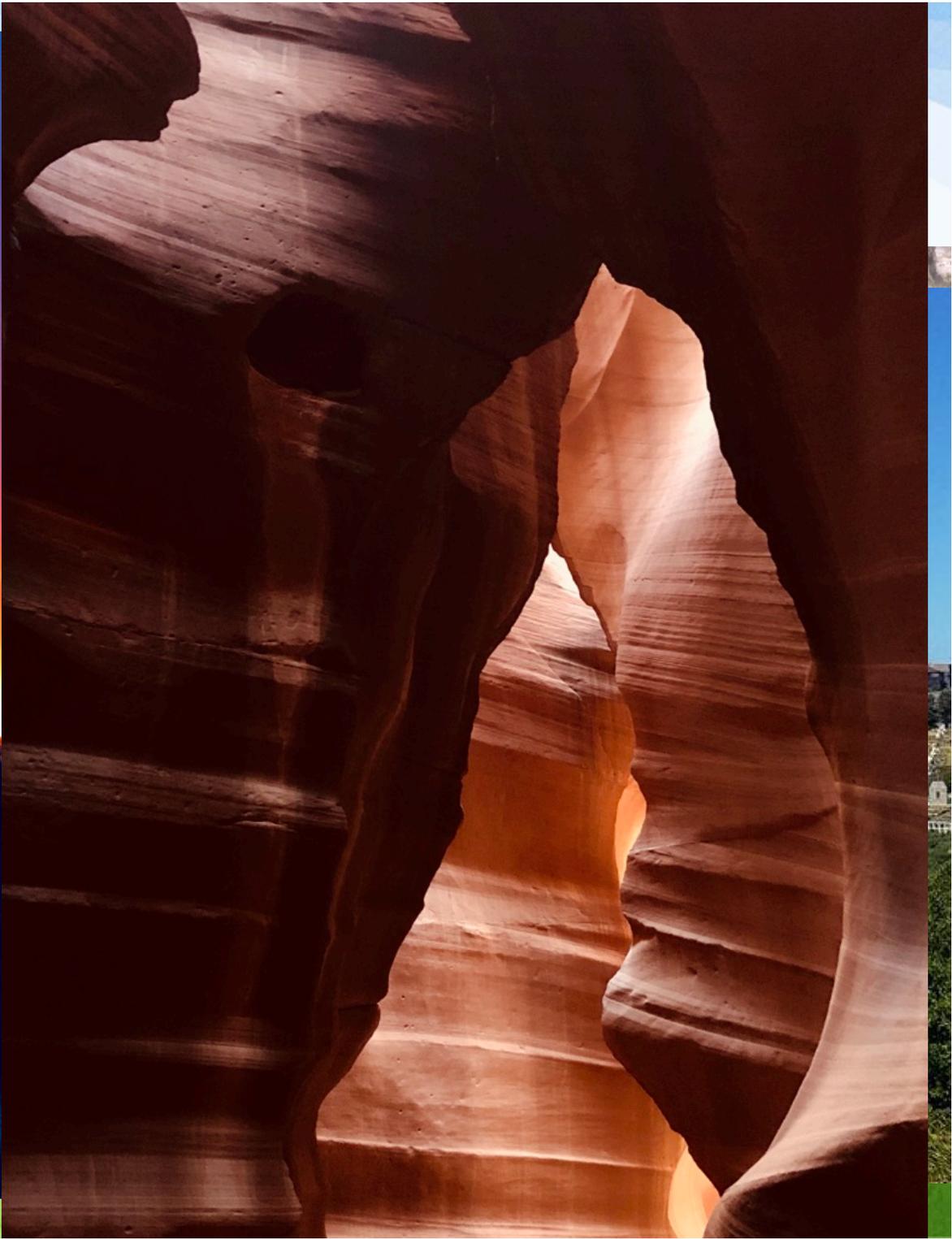
Playfulness



Be An Example

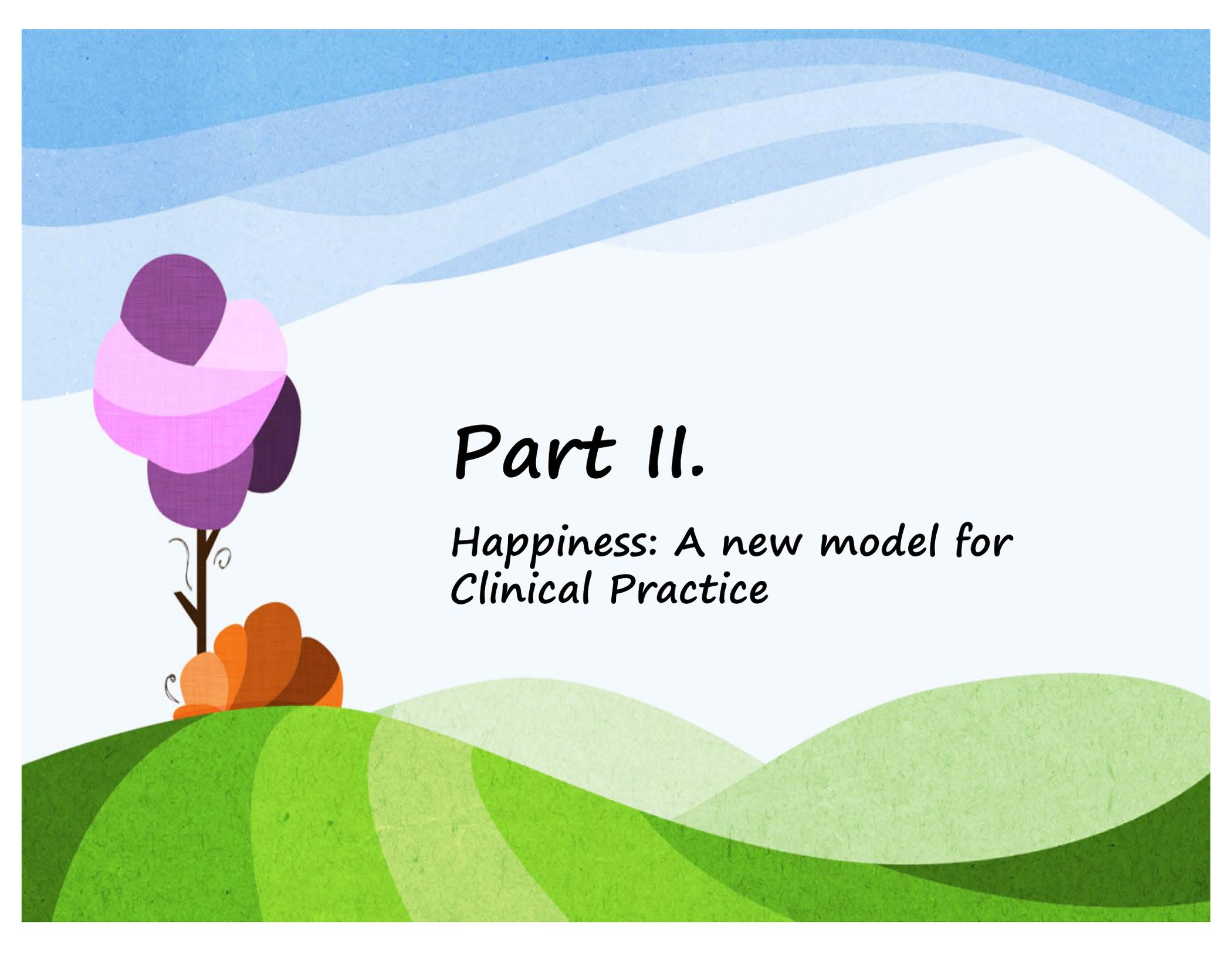


Hope, a poets perspective



Healed Healer



A stylized landscape illustration. The foreground features rolling green hills in various shades of green. On the left, a small brown stem with two orange flowers at its base supports a large, multi-layered flower with shades of purple and pink. The background consists of light blue, wavy bands representing a sky or distant hills.

Part II.

*Happiness: A new model for
Clinical Practice*

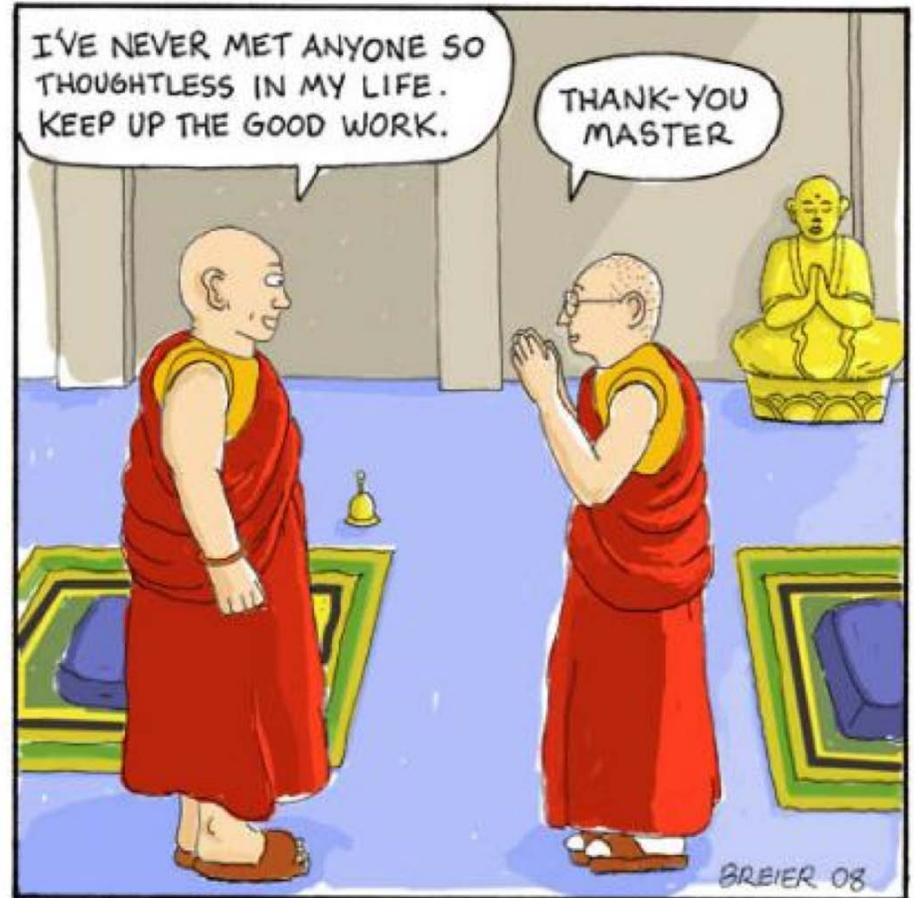
Building Happiness: A new model for the clinical encounter



- Create a Culture based on Strengths
 - Acknowledge weaknesses
(chief complaints)
- Engage your patients' brains
 - Grease the Skids
 - Take in the Good
 - Create goals
 - Set the agenda
 - Walk our Talk

Why establish strengths?

- Associated with higher happiness and less depression and anxiety
- Establishing strengths is associated with faster and more complete recovery from illness
- And, quite simply, most people just don't get enough authentic and relevant positive feedback in their lives.



Buddhist Compliment

Seligman M, et al. American Psychologist. 2005;60(5):410-12
Peterson C, et al. J Positive Psychology. 2006;1(1):17-26

Identify strengths: Finding the inner Superman in all of us

- All of us have pre-existing capacities (thoughts, feelings, behaviors) which are energizing and lead to authentic happiness.
- Many of us neglect our strengths
- Client Exercise:
 - Ask your client to focus on a time when they worked on improving their health (specific to chief complaint, if possible)
 - Have the client describe this effort
 - Listen and identify the underlying capacities – identify those to the client
- Take note of these strengths in your client record and utilize them ongoingly.
- A story...



Reframing a Chief Complaint into an Awesome Attribute

- Another way to reinforce patients' innate strengths is to accentuate the positive aspects of their current health issue.
- Ex. A patient with long-standing IBS might say, "My intestines are my weakest organ – all my stress goes there."
- Reframe: "Perhaps your intestines are your strongest system as they are both a barometer of stress and contain its effects. Your intestines appear to be, not your weakest organ, but your warrior organ."
- Story



2. Immediately follow weaknesses / chief complaints with strengths

- Acknowledges the importance of addressing their complaints while emphasizing their co-existence with the client's strengths
- Client with cancer: "My immune system is weak."
- Practitioner response: "We do need to recalibrate your immunity, and I am excited that you have no markers of inflammation and no signs of insulin resistance. These pathways are healthy and are helping you to control cancer growth."
- Focusing on both strengths and weaknesses is essential to create and maintain health.



Weakness



Strength

Extracting Strengths

Extracted Strengths

- What are some things about your health that you are proud about?
 - I hardly ever get sick.
- What are a few of your best, most healthy habits?
 - I sleep at least 8 hours every night and I sleep well.
- What are you looking forward to experiencing with regards to your health in the (near) future?
 - Eating meals without experiencing gas and bloating

Good barriers
Powerful
Strong

Trusting
Serene

Willing to be
nourished

When strengths are established

- *Result: client should visibly demonstrate a boost in energy, alertness, engagement and, ultimately, motivation.*
- *Signs to look for:*
 - *Quicker and higher pitched speech*
 - *Straighter posture*
 - *Increased use of metaphors in their descriptions*
 - *Smiling*
 - *Greater eye contact*
 - *Increased use of hand gestures*
- *Create a safe environment to acknowledge strengths*
 - *This is not the same thing as bragging*
 - *This will not create a false sense of invulnerability or superiority*
 - *Goal is to balance challenges and issues with strengths and capacities*



3. Engage our Brains - Capturing Positivity



What just happened?

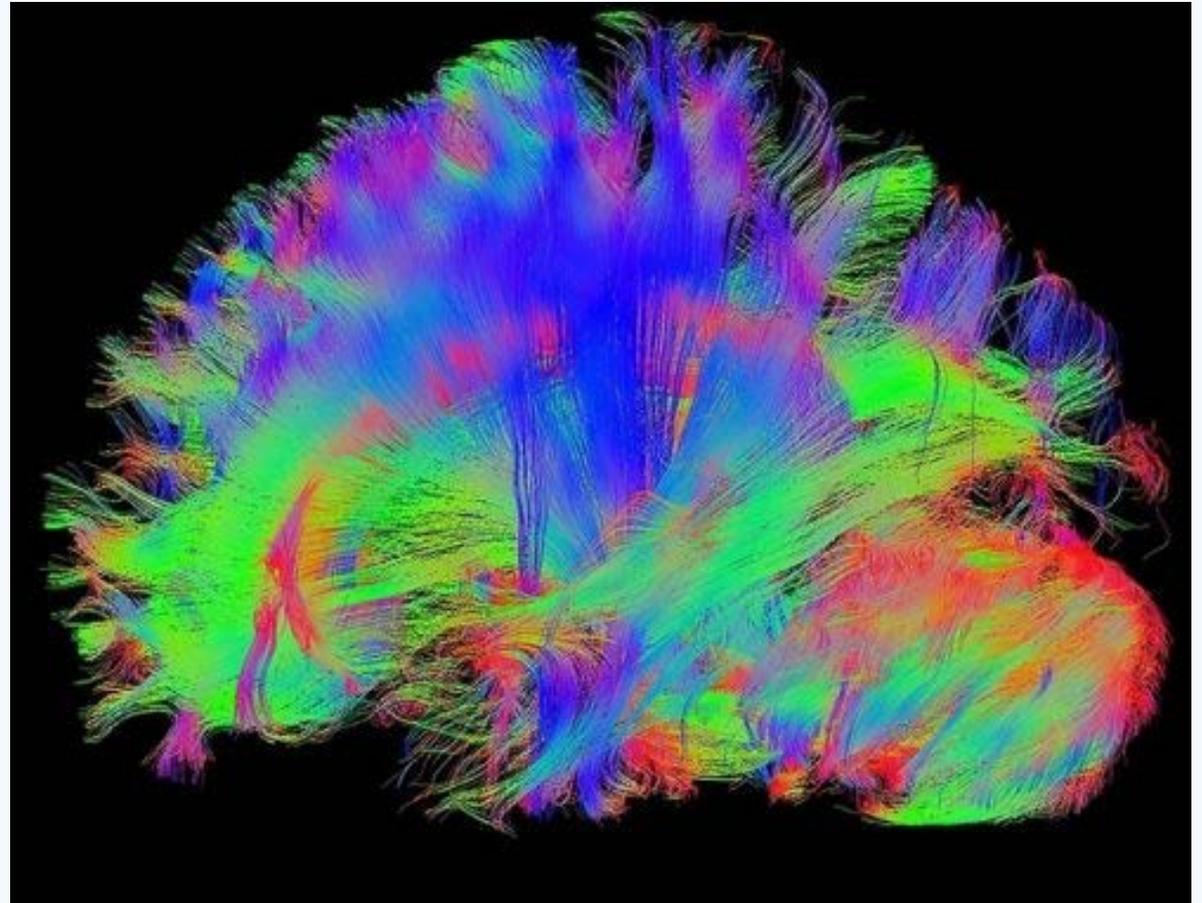
- *Story created happiness*
- *And with that, feelings of interest, optimism, enthusiasm, warmth, generosity...*
- *That is all happening in your brain right now!*



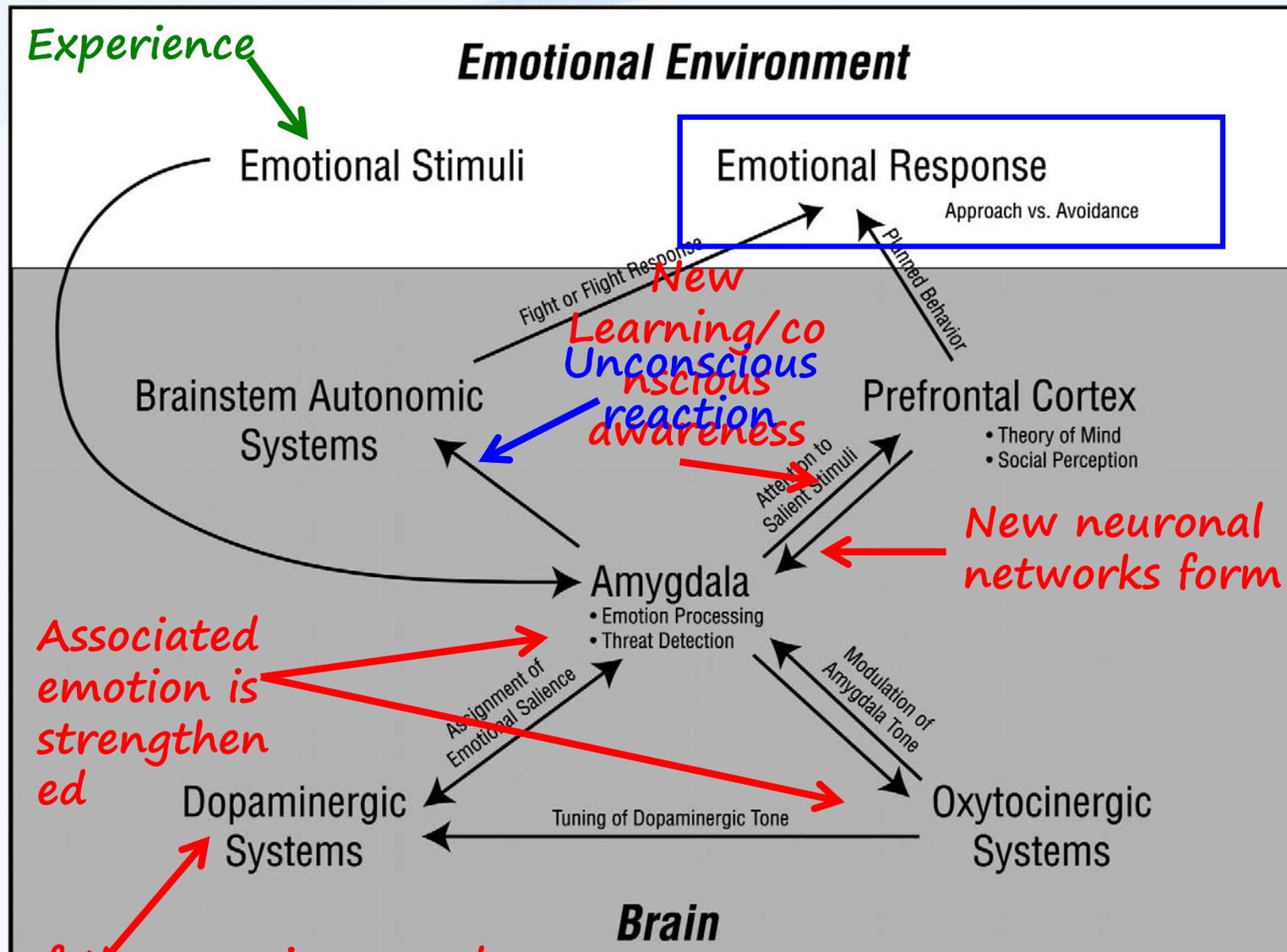
- *Don't be afraid to tell stories and to give inspirational examples during clinic visits*

*Remember, what flows through the mind
sculpts the brain; immaterial experiences
leave material traces*

The brain is always changing



Self-Directed Neuroplasticity



Memory of the experience and assoc. emotion is made (NGF seals the connections)

SDN requires that we overcome the built-in Brain Negativity Bias

- Amygdala = Alarm bell: reacts to a perceived threat and activates the sympathetic nervous system and the hypothalamus
 - 65% of the amygdala reacts to threats, or negative stimuli
- Hypothalamus activates the stress response via HPA axis
 - Cortisol stimulates and sensitizes the amygdala
- The hippocampus makes visual-spatial short term memories and imbeds a neural trace of the experience into cortical memory networks so we can learn from the experience later
- Our brains have a built-in negativity bias as a survival mechanism
 - Ready for full response to perceived threats
- Therefore, as happiness and resilience come from positive experiences, to override this negative bias, we need to pay sustained attention to these positive experiences in order to transform momentary happiness into a more permanent neuronal pathways.
- This, in turn, changes the world from being a scary, threatening place to being out HOME.

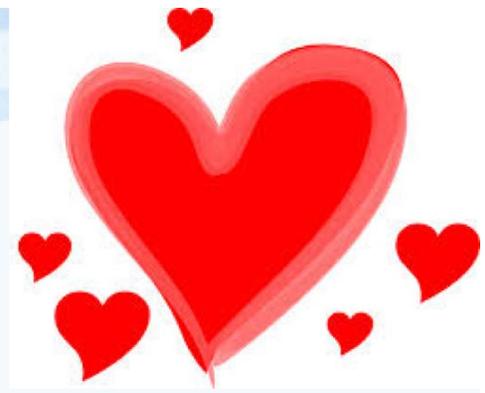
Neurochemistry of Happiness

- Fresh positive experiences stimulate the release of dopamine
- Dopamine signals the hypothalamus to produce oxytocin which is stored and released by the posterior pituitary gland.
 - Oxytocin creates feelings of comfort, safety, attraction and attenuates the fear response of the amygdala
 - This is supported by sufficient serotonin
- Sustained release of dopamine helps the amygdala to more consistently respond without eliciting fear or aggression and also signals the hippocampus and prefrontal cortex
- The hippocampus essentially hard wires this response, resetting the proclivity towards happiness of the individual.
 - Serotonin supports hippocampal activity
- The left prefrontal cortex overlays reasoning and recall to the emotional experience while suppressing negative emotions
- This focus on promoting “the good” increases stimulation of the nucleus accumbens (a collection of neurons in the midbrain)
 - Rich in dopamine receptors
 - This initiates a sense of agency (ownership and control), motivation and spurs action towards a person’s goals

Kienast T. Pharmacopsychiatry. 2013 Jun;46(4):130-6.

Asan E. Histochem Cell Biol. 2013 Jun;139(6):785-813.

Oxytocin – the love hormone



- Oxytocin is synthesized in hypothalamus, stored and released into the peripheral venous bloodstream by the posterior pituitary and to the amygdala where it attenuates amygdalar hyperactivity.
- OXT decreases anxiety, decreases stress and facilitates social encounters
- Caveat: when social cues in the environment are interpreted as "safe" oxytocin promotes prosociality but when the social cues are interpreted as "unsafe" oxytocin may promote more defensive and, in effect, "anti-social" emotions and behaviors.
- OXT influences:
 - Social emotions such as trust, generosity, altruism and empathy
 - Strength of social bonds, especially mother-child and romantic relationships

Labuschagne I, et al. *Neuropsychopharmacology*. 2010;35:2403-13.
Olf M, et al. *Psychoneuroendocrinology*. 2013 Sep;38(9):1883-94.

Molecules of happiness

- **Oxytocin**
 - Synthesized by hypothalamus, released by the posterior pituitary and is implicated in social bonding, trust and love
- **Serotonin**
 - Receptors exist throughout the brain and especially in the hippocampus where serotonin influences positive mood and reduces depression
 - High levels are associated with serenity, optimism and spiritual experiences
- **Norepinephrine**
 - Excitatory and induces physical and mental arousal and heightens mood; involved in flight or fight response
- **Dopamine**
 - Controls arousal and is vital for motivation, pleasure and reward
 - Stimulates hypothalamus to produce oxytocin and increases amygdalar sensitivity to oxytocin & signaling to prefrontal cortex
- **Opiates/Endorphins**
 - Modulate pain, reduce stress and promote a sensation of bliss

Ashby F. et al. Psychol. Rev. 1999;106:529.

Farrell P. et al. Medicine Sci Sports Exercise. 1987;19(4):347.

Urry H. et al. Psychological Sci. 2004;15(6):367.

4. Greasing the skids

- As people implement positive lifestyle and attitudinal changes, integrative therapies can alter brain chemistry and facilitate positive emotions.
- Good mood food
- Mood enhancing nutrients include:
 - Vitamins and Minerals
 - L-theanine
 - Phosphatidylserine
 - SAMe
- Botanicals, such as:
 - Holy basil
 - Lavender
 - Lemon balm



GOOD

...boost vitality...

MOOD

...beat the blues...

FOOD

...stay healthy...

Diet

- Cross-sectional RCT x 2 weeks
- N=39 adults
- Primary outcome measures: Depression Anxiety Stress Scales (DASS) and Profile of Mood States (POMS) questionnaires
- 3 diet groups:
 - Omnivore (consumed meat and/or poultry at least once daily)
 - Fish (no meat or poultry and consumed 3-4 servings seafood weekly)
 - Vegetarian (no animal products except for dairy)
- Mood scores were unchanged for OMN or FISH participants, but several mood scores for VEG participants improved after two weeks



Diet results

| | Omnivorous diet | | Fish diet | | Vegetarian diet | | P |
|-----------------------------|-----------------|---------|-----------|---------|-----------------|-----------------------|------|
| | Baseline | Week 2 | Baseline | Week 2 | Baseline | Week 2 | |
| DASS-global | 7 (13) | 6 (13) | 13 (16) | 6 (12) | 11 (12) | 4.59 (9) | .559 |
| DASS-D <i>depression</i> | 1 (2) | 1 (2) | 2 (17) | 1 (4) | 1 (4) | 1 (2) | .984 |
| DASS-A <i>anxiety</i> | 25 (60) | 10 (19) | 27 (37) | 13 (15) | 55 (66) | 15 (32) | .502 |
| DASS-S <i>stress</i> | 20 (28) | 14 (16) | 18 (18) | 8 (13) | 21.5 (25) | 8.5 (14) ^b | .045 |
| POMS-Total | 8 (26) | 3 (22) | 18 (18) | 8 (13) | 21.5 (25) | 5 (23) | .087 |
| POMS-T <i>tension</i> | 6 (4) | 5 (5) | 7 (5) | 7 (4) | 8 (8) | 4(4) | .061 |
| POMS-D <i>depression</i> | 3 (5) | 3 (4) | 5 (6) | 2 (7) | 3 (10) | 2 (2) | .448 |
| POMS-A <i>anxiety</i> | 3 (16) | 3 (5) | 5 (10) | 4 (4) | 6 (11) | 2 (5) | .713 |
| POMS-F <i>fatigue</i> | 5 (5) | 4 (6) | 7 (5) | 4 (5) | 8 (7) | 3 (9) | .936 |
| POMS-C <i>confusion</i> | 3 (5) | 4 (5) | 5 (5) | 4 (5) | 9 (8) | 3 (6) ^b | .003 |
| POMS-V <i>vigor</i> | 17 (9) | 18 (9) | 19 (10) | 14 (9) | 14 (14) | 19 (13) | .729 |

Healthy diet pattern correlates with improved mood/lower anxiety

- Based on a questionnaire of diet and a psychological assessment tool (n=1,046 women ages 20-93):
 - Traditional diet (vegetables, fruit, meat, fish, whole grains) was associated with lower odds for depression, dysthymia and anxiety disorders.
 - Western diet (processed and fried foods, refined grains, sugar, beer) was associated with higher psychological distress.

Jacka FN et al. Am J Psychiatry. 2010;167(3):305-11

Serotonin-rich foods

Poor maligned banana



- Banana!
- Pineapple
- Kiwi
- Tomato
- Walnuts

The banana is back, baby!



Diet

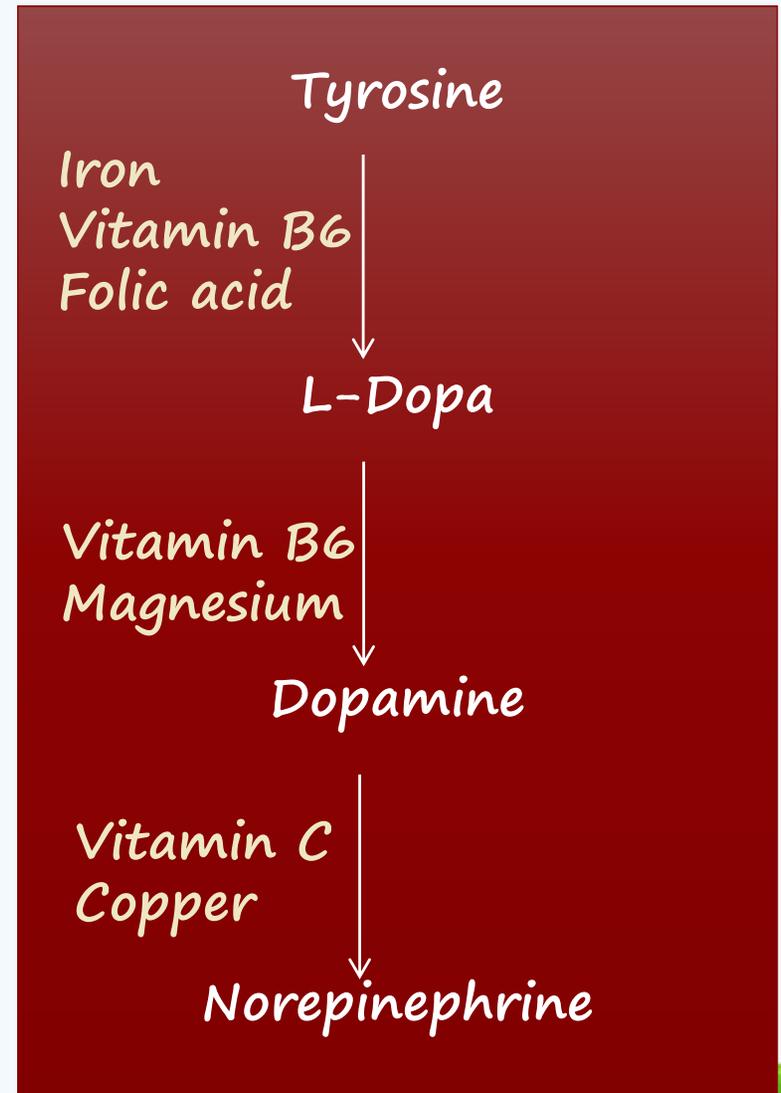
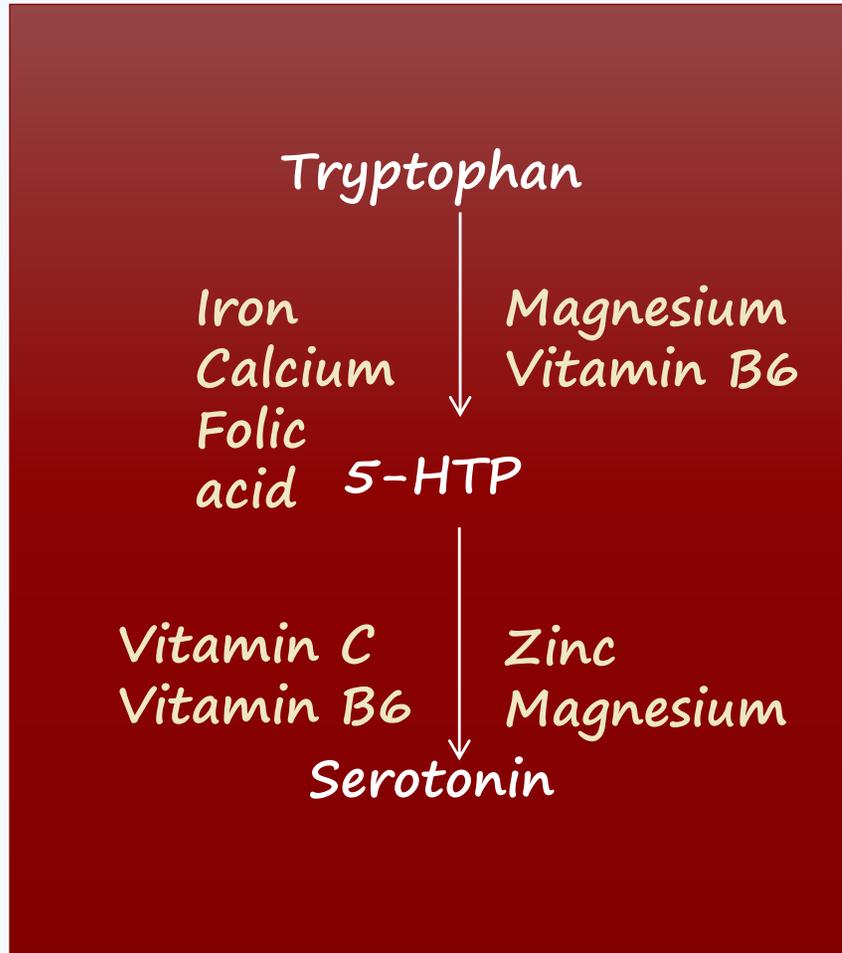


**“The red blobs are your red blood cells.
The white blobs are your white blood cells.
The brown blobs are coffee. We need to talk.”**

Caffeine and anxiety

- DBRPCT
- $N = 24$
- Each participant attended 4 sessions and consumed multiple small doses (4 x 65mg caffeine as coffee) over a 5 h period.
 - These repeated doses were selected to equal the amount of caffeine present in the body 5h after a single high dose of 200mg used in many caffeine studies.
 - 12 oz (Tall) brewed coffee has 260mg caffeine
 - 12 oz (Tall) decaf brewed coffee has 20mg caffeine
- Caffeine consumption was associated with increased alertness, anxiety and improved task performance

Neurotransmitter support with vitamins and minerals



L-theanine

- L-theanine (γ -glutamyl-ethylamide) is a unique amino acid present almost exclusively in the tea plant (*Camellia sinensis*) (1-2% of dry weight of tea leaves) ⁽ⁱ⁾
- L-theanine increases dopamine and serotonin production and GABA activity and generates alpha waves in the central nervous system resulting in reduced blood pressure and anxiety (causing a relaxed yet alert state). ⁽ⁱⁱ⁾
- 100mg TID

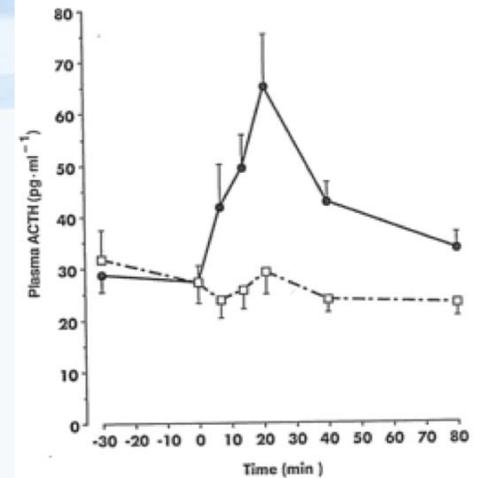


(i) L-theanine Monograph. Altern Med Rev. 2005 Jun;10(2):136-8.

(ii) Ito K, et al. Effects of Ltheanine on the release of alpha-brain waves in human volunteers. *Nippon Nogeikagaku Kaishi* 1998;72:153-157.

Phosphatidylserine

- Derived from soy or sunflower lecithin
- Supplemental phosphatidylserine reduces ACTH, CRH and cortisol levels
 - Also reduces epinephrine and norepinephrine
 - Donates choline and supports dopamine production
- RPCT: 4 groups of 20 subjects x 3 weeks and then exposed to a mental and emotional stressor (standardized stress test):
 - 400mg, 600mg, 800mg soy-derived PS or placebo
 - Primary Outcome measure: Spielberger State Anxiety Inventory stress subscale
- 400mg blunted serum ACTH and cortisol and exerted a positive effect on emotional responses to the stress test.
 - Larger doses did not result in the same effects.



S-adenosyl-L-methionine (SAME)

- *Donates methyl groups to:*
 - *Dopamine (from Tyrosine)*
 - *Serotonin (from Tryptophan)*
- *Relieves depression*
- *Take with B-vitamin complex to reduce build-up of homocysteine*
- *SAME dosing: 800mg – 1600mg daily*

Papakostas GI, Can J Psychiatry. 2012 Jul;57(7):406-13.

Bottiglieri T. Psychiatr Clin North Am. 2013 Mar;36(1):1-13

Holy basil

- *Ocimum sanctum* (syn. *O. tenuiflorum*)
- Also known as Tulsi
 - Considered a sacred plant by Hindus
- Lamiaceae (mint) family
- Native to Asia
- Actives: eugenol, caryophyllene, triterpenoic acids (ursolic and oleanolic acids)
- Medicinal uses: common cold, bronchitis, malaria, skin diseases, insect bites, reduces anxiety and stress, improves mental clarity



Holy basil: anxiolytic

- 35 adults, average age 38.4 years (21 male, 14 female) took 500mg Holy Basil twice daily after meals
- Holy Basil resulted in a significant decrease in generalized anxiety and reduced feelings of stress and depression ($p < 0.001$)
- Holy Basil also increased motivation to make lifestyle changes and facilitated the ability to change perception of current circumstances.

Bhattacharyya D. Nepal Med Coll J.
2008;10(3):176-9



Holy Basil as a Happiness herb

- *Mentally clarifying*
- *Increases mental clarity and focus*
- *Facilitates a shift in perspective*
- *Reduces mental inertia and even depression*
- *Restores hope and optimism*

Holy Basil: Dosing

- Tincture 1:5. 3ml-5ml TID
- Tea 1 tsp./8 oz hot water; steep x 10m covered TID
- Capsules: Extracts standardized to total eugenols and rosmarinic acid.
 - 150mg capsule (equivalent to 1.5g crude herb)
 - 1 capsule BID
- CI: Use with caution during pregnancy (conflicting information on toxicity to fetus)

Lavender angustifolia



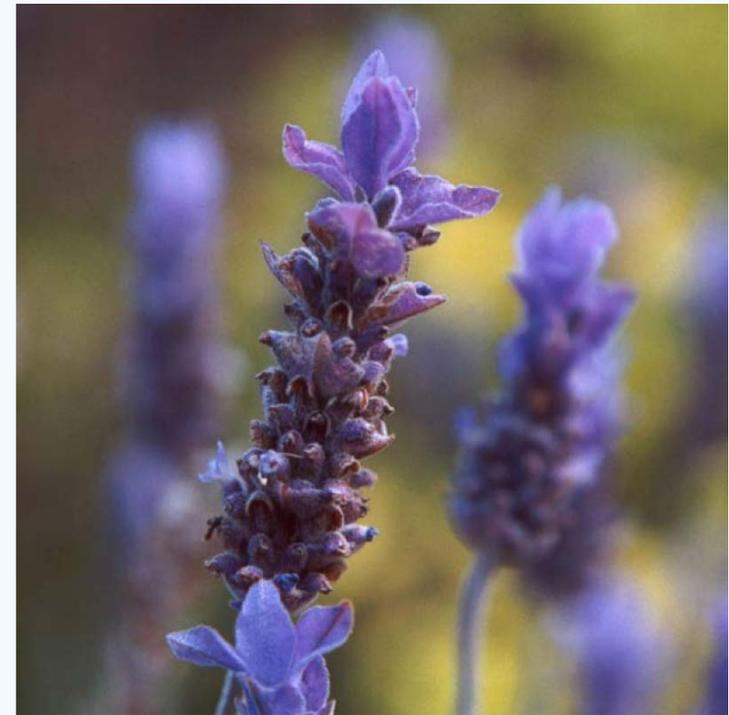
- Contains volatile oil, primary active constituents of which are linalool and linalyl acetate – considered responsible for the anxiolytic effects
- Potentiates GABA_A receptors, inhibits glutamate binding in brain
- Over 440 RCTs on lavender and anxiety
- Recent review included 15 RCTs, involving 1565 participants
 - 8 trials investigated the effects of lavender inhalation, with 4 reporting a significant positive effect for at least one anxiety measure
 - 3 trials assessed oral lavender
- Conclusion: oral lavender supplements may have therapeutic effects
 - methodological issues limit the strength of the conclusions drawn.
- Effective studied dose = 20-80mg per day

Lavender

- Silexan was studied in DBRCT (Jadad = 4)
- N = 221 (212 were evaluated) adults with subclinical anxiety
- 80mg lavender oil (WS 1265) daily or placebo x 10 weeks
- Primary outcome measure: Hamilton Anxiety Rating Scale and Pittsburgh Sleep Quality Index
- Anxiety decreased significantly more in the Silexan group over placebo ($p < 0.01$) and was found to be superior to placebo regarding the percentage of responders (76.9 vs. 49.1%, $P < 0.001$) and remitters (60.6 vs. 42.6%, $P = 0.009$).
 - Silexan had a significant beneficial influence on quality and duration of sleep and improved general mental and physical health without causing any unwanted sedative or other drug specific effects.

Lavender as a Happiness Herb

- *Establishes serenity*
- *Creates calmness and increased resistance to stress*
- *Facilitates peacefulness*



Melissa officinalis

- Lemon balm
- Labiatae
- Native to Europe
- Part used: Herba
- Constituents: Volatile oil (0.02%-0.3%):
 - monoterpenes (>60%)
 - sesquiterpenes (>35%)with over 70 components identified
Flavonoids;
Polyphenolic compounds; Triterpenic acids; Rosmarinic acid; Chlorogenic and caffeic acids



Melissa: medicinal actions

- Potent antioxidant properties
- Affinity for binding to cholinergic (nicotinic and muscarinic) receptors in human brain cortex tissue is present in some extracts thereby improving cognition
- Sedative
- Melissa may be contraindicated in hypothyroidism as it interferes with TSH binding and inhibits iodothyronine deiodinase thus preventing the incorporation of iodine into thyroxine synthesis

Mantle D. et al. J Ethnopharmacol. 2000;72(1-2):47-51
Wake G, et al. J Ethnopharmacol. 2000; 69(2):105-14
Zeraatpishe A, Toxicol Ind Health. 2011;27(3):205-12

Melissa: medicinal actions

- As a sedative, Melissa is most indicated in a someone with symptoms typical of hyperthyroidism: anxiety, restlessness, palpitations, headache, and excitability.
- In addition, Melissa is a mild anti-depressant. The volatile oils act on the limbic system in such a way as to cause a lifting of depression and anxiety.
- Melissa is well indicated in stress-induced migraine headaches, palpitations, and insomnia.
- The carminative effects of Melissa combined with its sedative and anti-depressant actions make Melissa particularly useful in intestinal colic secondary to or associated with anxiety, stress or depression.
- Over all, Melissa is trophorestorative to the nervous system.

Lemon Balm: Pediatric Insomnia

- Open, multicenter 4 week study of 918 children under the age of 12 (average age = 8.3y) with restlessness and impaired sleep (sleep latency, night terrors, etc.)
- Investigators and parents rated core symptoms on scale from moderate/severe to mild or absent.
- Intervention was 4 tablets daily of an 4-5:1 extract from the dried roots of Valerian (160mg) and 4-6:1 extract of dried Melissa leaves (80mg)
- 80.9% of patients experienced an improvement in sleep
- 70.4% of patients experienced improvement of restlessness
- Overall toleration was very good without any adverse events reports.

Muller S and S Klement. *Phytomedicine*. 2006;13(6):383-7

Melissa: adaptogen

- DBPCR cross-over trial of 18 healthy adults.
- Doses: standardized *M. officinalis* extract 300mg, 600mg and placebo separated by 7 day washout.
 - Extract of dried leaves extracted up to exhaustion in a 30:70 methanol:water mixture, evaporated and homogenized to a soft extract
- Modulation of mood was assessed pre-dose and 1 hour post-dose with completion of the 20 minute Defined Intensity Simulation (DISS) battery of concurrent cognitive and psychomotor tasks.
- The 600mg dose of Melissa ameliorated the negative mood effects of the DISS, with increased self-reports of calmness ($p=0.02$) and alertness ($p=0.006$). In addition, cognitive processing speed increased as measured by task performance.

Melissa: agitation in dementia

- 4 week DBPCRT of 72 people with severe dementia and significant agitation.
- Randomized to aromatherapy with Melissa essential oil or placebo (sunflower oil) as an applied oil in a base lotion applied to face and arms twice daily by caregiving staff
- Changes in clinically significant agitation (Cohen-Mansfield Agitation Inventory [CMAI])
 - 60% of tx group vs. 14% of placebo group achieved 30% reduction of CMAI score with an overall improvement in agitation of 35% in Tx group vs. 11% in placebo group.
- Quality of life indices (percentage of time spent socially withdrawn and percentage of time engaged in constructive activities, measured with Dementia Care Mapping) improved significantly in the melissa group ($p < 0.0001$)

Melissa as a happiness herb

- *Melissa brings joy to the heart*
- *Creates a sense of relaxed, calm alertness*



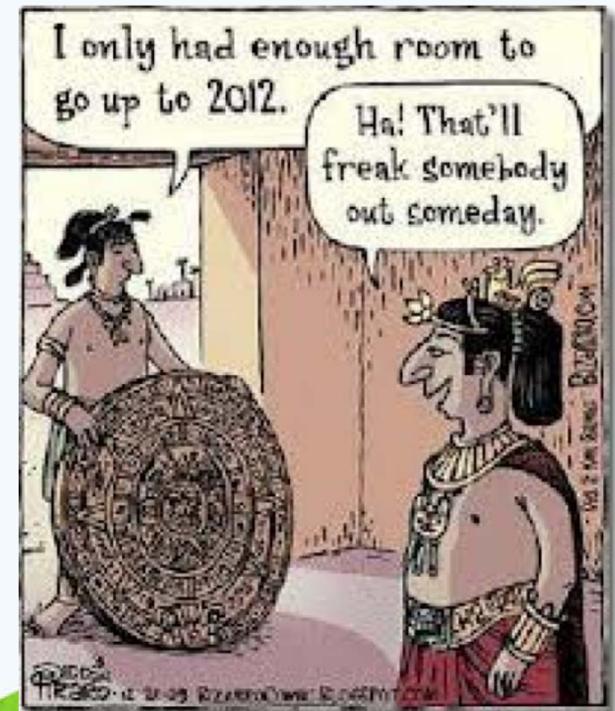
Melissa: dosing



- 2-4 gm herba daily (powdered capsules)
- 2-3 tsp. dried herba or 4-6 fresh leaves covered with just boiled water; drink 1 cup of this tea BID - prn
- 2-6 ml TID of 1:5 tincture
- Topically: poultice, compress

Reinforce Happy Brain Chemistry

- Actively respect your client (lays the framework)
- Express gratitude to and for your client – specific and authentic
- Ask client to express gratitude for 1-3 things that they have experienced today.
- With any improvement in health status, reinforce with the client the things that they did to achieve the greater health. Praise the client!
- Smile!!
- Introduce levity in your appointments
 - Self-deprecating humor
 - Gentle and kindly teasing
- Touch your clients (professionally, of course!)
- Bring random acts of kindness into your daily practice



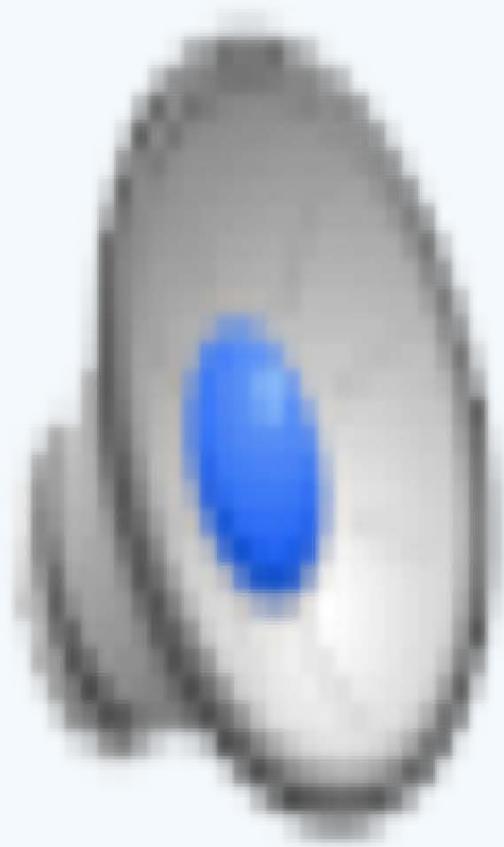
Interpersonal synchronization

- Being in one another's presence, with or without touch, is associated with some brain wave synchronization.
- Reach for the hand of a loved one and your breathing, heart rates and brain waves synchronize even more.
- The more empathy we feel for another, the more our brainwaves synchronize.
- We physiologically mirror one another

5. Taking in the Good

- Create a positive mood by pairing a feeling with an experience, examples:
 - Gratitude when gazing at the mountain view
 - Contentedness with a cat purring in your lap
 - Safety in the quiet splendor of your backyard garden
 - Pleasure at the taste of home-prepared dinner
 - Love while holding a partner's hand, or when gazing in the mirror
 - Enjoyment with discovering new solutions to challenges at work
- Savor the positive experience for 10-30 seconds to better develop the neural networking
- We can encourage this during each client encounter – solicit the virtue in association with an attribute of physical wellness from the client and then take 10 seconds to savor it.
 - “I haven't had a headache in 2 weeks.” “How does that feel?” “Great, so freeing.” “Let's appreciate your pain-free head for a few moments and really savor how free you feel.”

Let's Practice!



6. Create goals

- “We are not pushed by the past so much as we are pulled by the future.”
 - – Martin Seligman, founder of Positive Psychology
- Goals are future-oriented benchmarks that help us to organize our behavior.
- Goals are:
 - short-term achievable landmarks and
 - visions (tapestry of longer term goals)
 - measurable and achievable
 - reinforcements of optimism, engagement and agency (empowerment)

Realistic goals

- Goals should be based upon your and the client's realistic expectations
 - Temper overly-optimistic goals, i.e. false hopes
 - Ex. 50 year old man with metastatic lung cancer
 - "I want cure my metastatic cancer with natural means."
 - Maybe, but what if the therapies don't work? How long will this take? When can we say, I've done everything I can.
 - "I want to have enough energy to walk my son to school every day."
 - Focuses efforts on a meaningful life experience – for the sake of what!
 - Requires active and effective anti-cancer therapies
 - Positions the patient for success in the daily achievement of this goal – every day builds upon his success.
- Make sure that you and the patient have the resources needed to enjoy success



7. Setting the agenda

- Be mindful of allowing the client dictate the agenda of each encounter
 - Limits the emphasis and scope of the visit to the patient's agenda which is influenced by:
 - Recent and long-standing problems
 - Limited self-knowledge
 - Reinforced incapacity
 - Complaints and lacks
 - And, yes, listen to your client: good healing rests upon your ability to know how your patient is faring.
- While the client informs the visit, the practitioner directs the experience on behalf, and for the good, of the client.

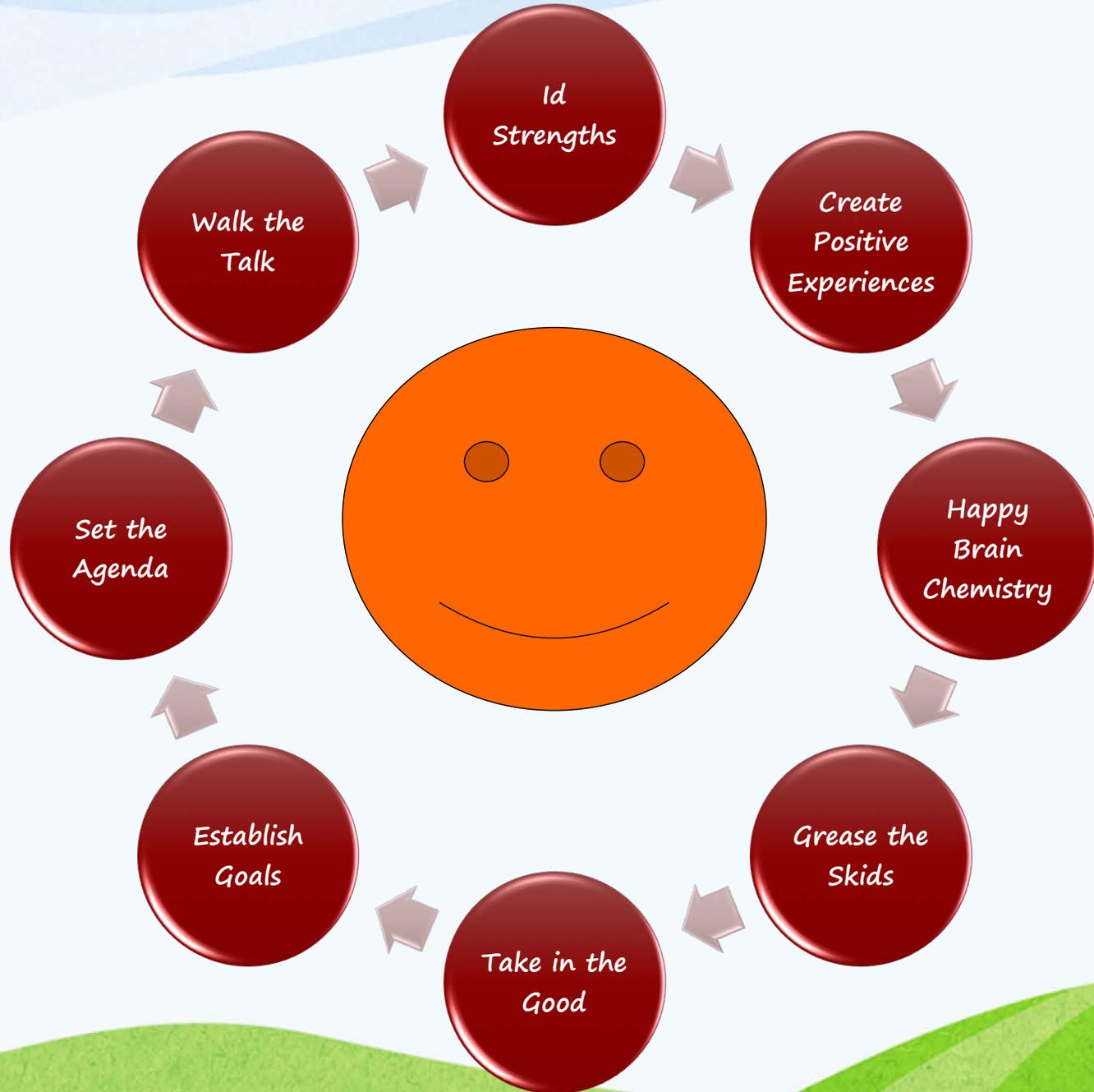
Agenda setting strategies

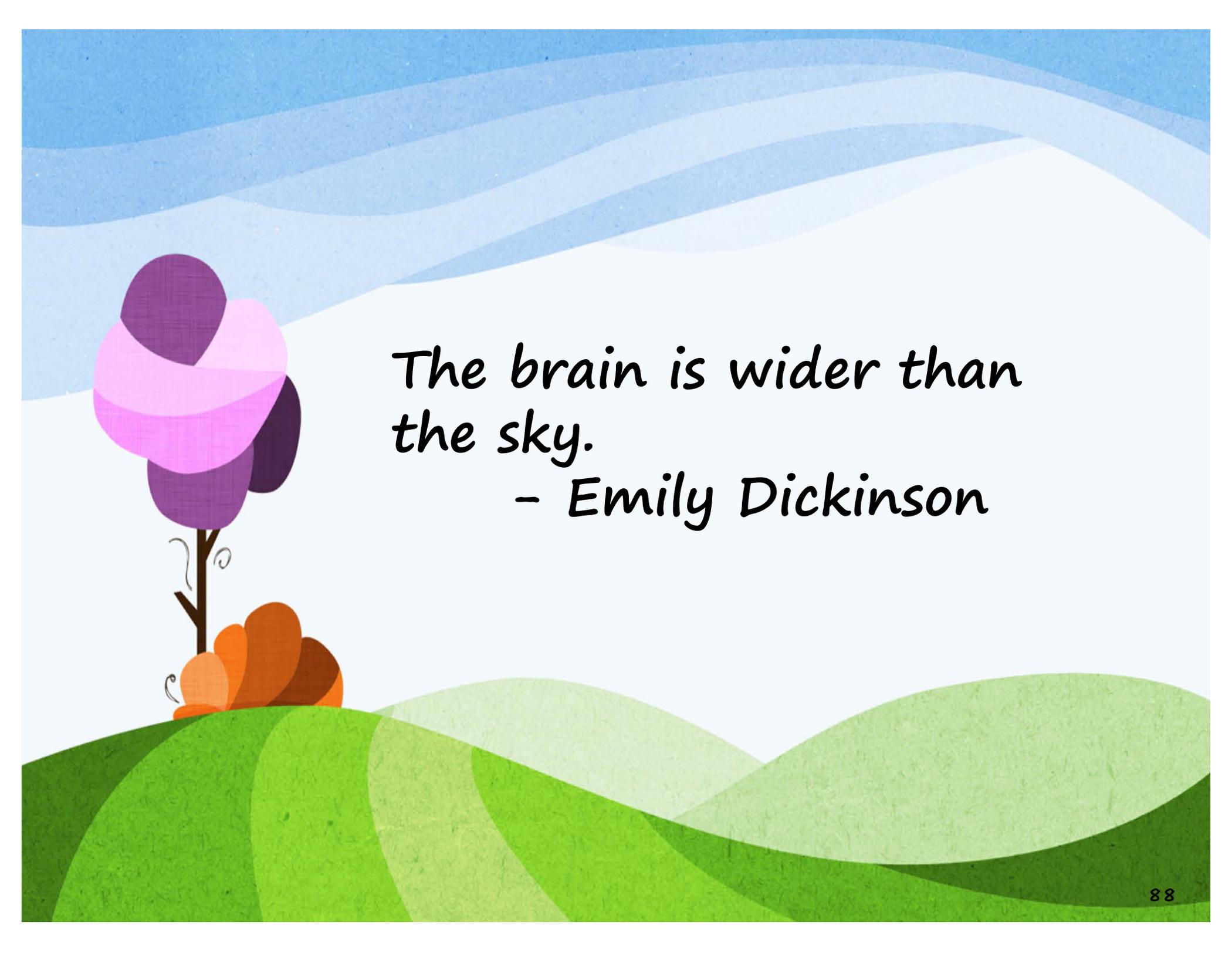
- *“I am so tired of feeling sick and tired.”*
 - *Remind the client of progress made*
 - *“When you first came to see me, you couldn’t go to work without 4 cups of coffee. Now you only drink one cup.”*
 - *Point out what is working right*
 - *“I know you are still feeling tired, but I am so impressed with your improved sleep quality.”*
 - *Reframe complaints*
 - *“Some of your fatigue is now the result of the energy that you are expending on healing.”*
 - *Set appropriate expectations*
 - *“With today’s recommendations, one month from now, I expect you to have 50% more energy that is sustained throughout the day.”*
 - *Go back to established goals*
 - *“You have walked your son to school every day since we started working together and that was your top priority.”*

8. Walk our Talk

- *Just as we encourage our clients to:*
 - *Evaluate their strengths*
 - *Set goals and maintain perspective*
 - *Promote hope and positivity*
 - *Increase joy*
- *So should we for ourselves.*
- *And, establish a pre-visit ritual that helps you to gain presence, joy and compassion*

Happy Clients, Happy Practice



The illustration features a stylized landscape. In the foreground, there are rolling green hills with varying shades of green. A small, dark brown stem with two small, curly lines at its base grows from the left side of the hills. At the top of the stem is a large, multi-layered flower. The flower has several layers of petals in shades of purple and pink. The background consists of a light blue sky with several horizontal, wavy bands of varying shades of blue, creating a sense of depth and movement.

*The brain is wider than
the sky.
- Emily Dickinson*