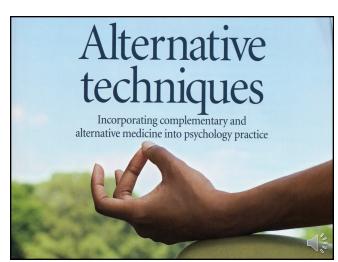
John Preston, Psy.D., ABPP • Professor emeritus Alliant International University Sacramento, CA, USA • Website: www.psyd-fx.com

Building Resilience and Enhancing Treatment Outcomes







Not Covered Today

- Chiropractic
- Massage
- Prayer
- Yoga * Recreation Tx
- Tai Ch
- · Music; dance
- Art * Homeopathy
- Occupational Therapy
- Psychopharmacology

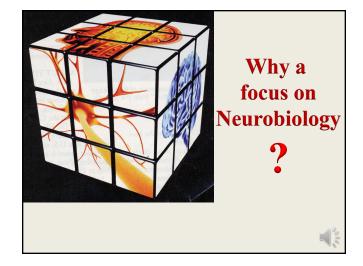
- Energy therapies
- Grounding
- Equine therapy
- · Pet therapy
- Dietary supplements
- Hypnosis
- Nutrition (a bit)
- Spirituality
- Meditation

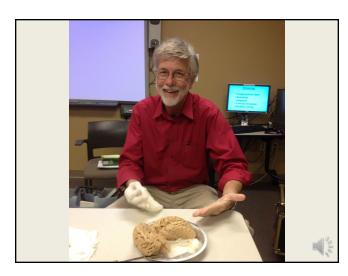
And a lot more

Integrated Models

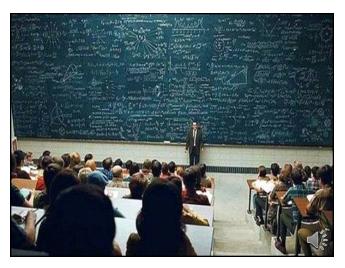
- Psychotherapy
- Neurosciences
- Buddhism (models of the mind)











"The great tragedy of science: the slaying of a beautiful theory by an ugly fact"

Thomas Huxley (1870)

Limitations of Treatment

A need for Integrative Approaches and Humility



Psychotherapy Outcome Studies

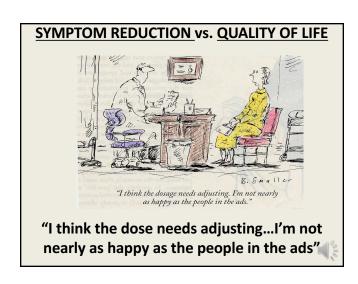
Focus on Symptom Disorders



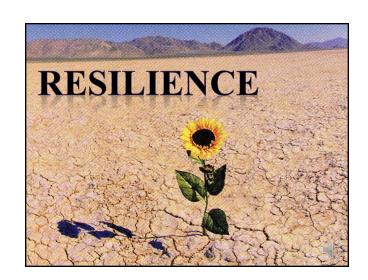
Outcome Studies in Psychopharmacology

Samples used





Medication Treatment Outcomes "Best Practices"



Resilience

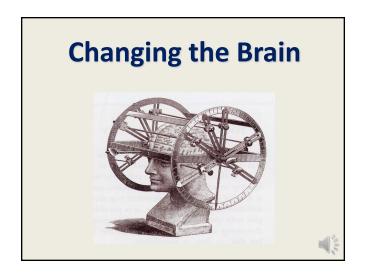
- Psychological sturdiness
- Successful coping
- Recover, adjust, and GROW following misfortune and change

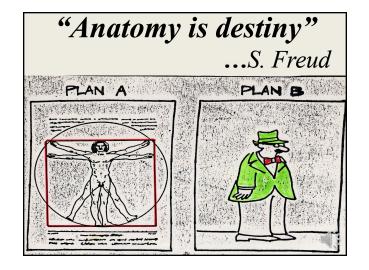
"The world breaks
everyone and afterward
many are strong at the
broken places"

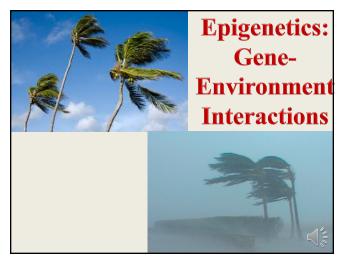
- Ernest Hemingway

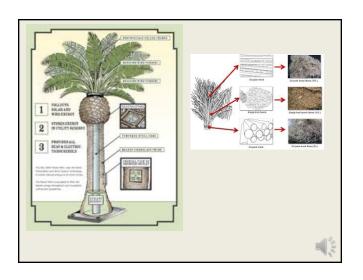


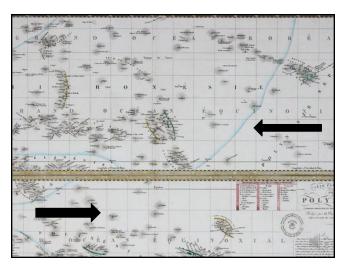
" What doesn't kill you makes you stronger"
-Nietzsche









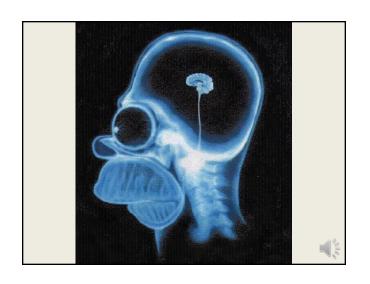


Resiliency

"Those who have not avoided stress, but rather have found ways to face it, learn to regulate emotions and choose to take on challenges: this is the way to **Build Resiliency**."

The capacity for significant brain change shows enormous individual variability

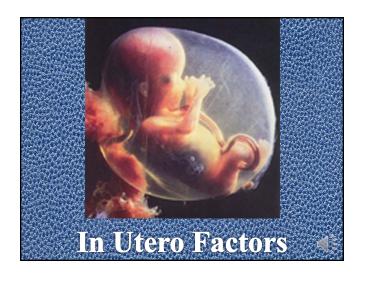




Sources of Resiliency

Let's take a closer look

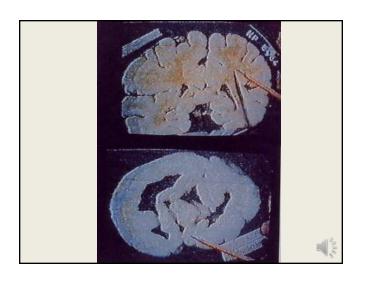
Nature, Nurture and Luck

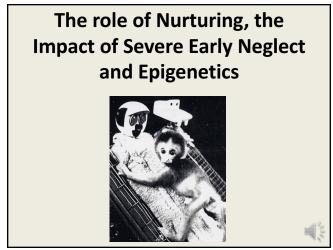


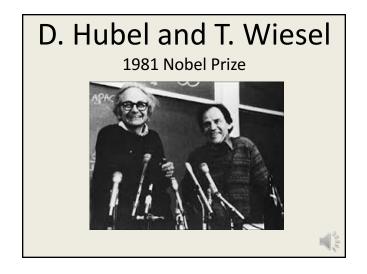
In Utero Exposure: Brain Damage

- Maternal stresshormones (cortisol)
- Toxic exposure











SEVERE NEGLECT: NEUROBIOLOGY



- **▶**↑ CRF (corticotropin releasing factor)
 - (anxiety; hyper-reactivity; **↓deep sleep**)
- > \ Serotonin (irritability; impulsivity)
- > U Oxytocin (attachment problems;

impaired ability to inhibit anxiety)



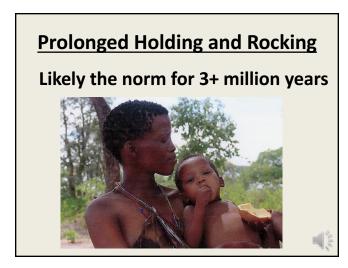


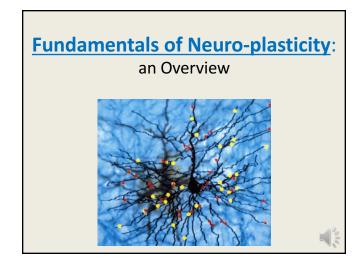
Is more better?

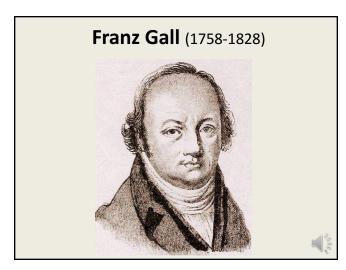
Rat study forced swim →

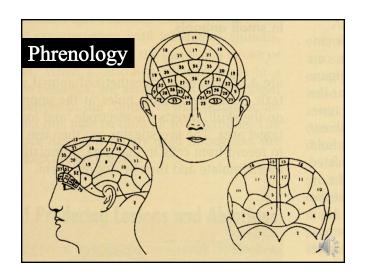






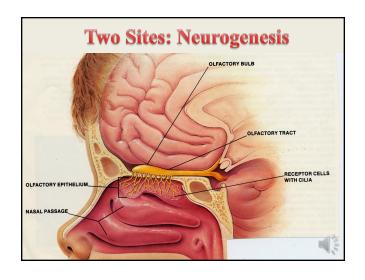


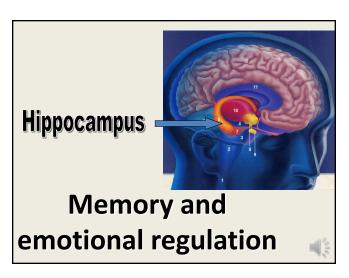




Potentials for Plasticity

- Neurogenesis: birth of new neurons
- Dendrite proliferation
- Synaptogenesis
- Recruiting top-down control





Use it or lose it

Use it a lot...it grows

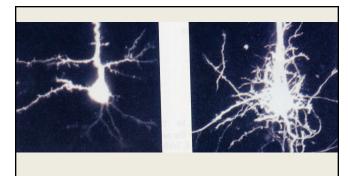
Potentials for Plasticity

- Neurogenesis
- Dendrite proliferation
- Synaptogenesis
- Recruiting top-down control



Nerve Growth Factors

- BDNF: brain-derived neurotrophic factor (and other neuro-protective proteins)
- Can activate growth of dendrites



BDNF: Impact on

Dendrite growth: 24 hours

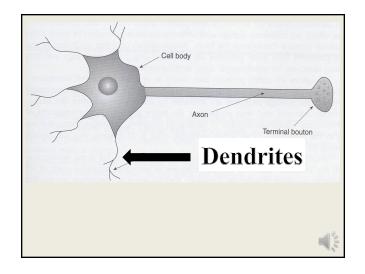
Potentials for Plasticity

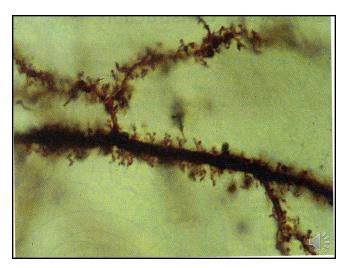
- Neurogenesis
- Dendrite proliferation
- Synaptogenesis
- Recruiting top-down control

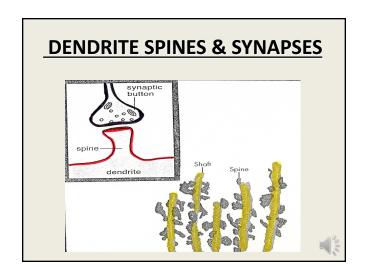
Synaptogenesis

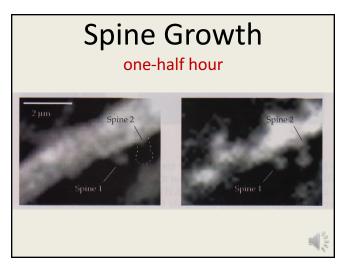
Creating and strengthening synapses



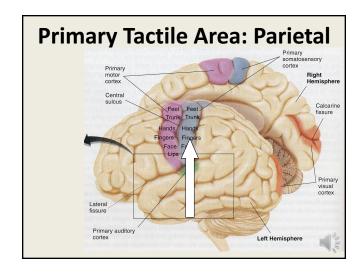








Targeting *specific*Brain Structures
and Circuitry



Increasing Size of Brain Maps

- Most brain areas: increased size via dendrite proliferation
- Learning braille:
 - > 2 hours of class, 5 days a week
 - > by 6 months, noticeable increase tactile area

Pascual-Leone, R., et al. (1999)

Clinical Implications

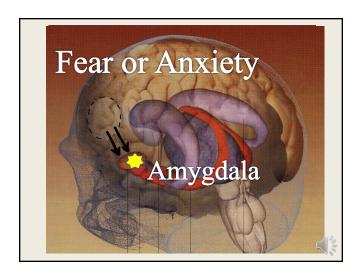
Potentials for Plasticity

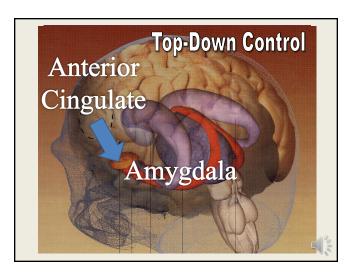
- Neurogenesis
- Dendrite proliferation
- Synaptogenesis
- Recruiting top-down control

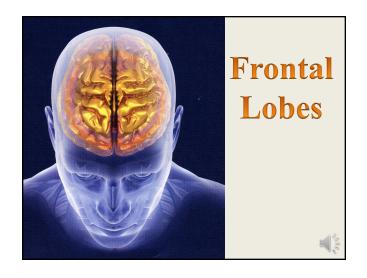


The concept of Top-Down Control









Frontal Lobes: % of total brain

• Humans: 30%

• Chimps: 12%

• Dogs 6%

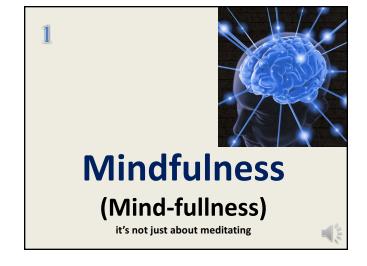
•Cats 3%



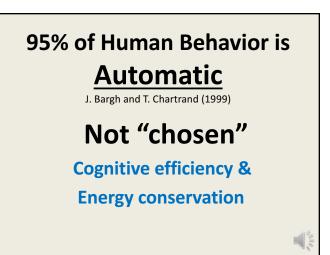
Psychopathology,
Psychotherapy,
Brain Changes
and
Neuroplasticity

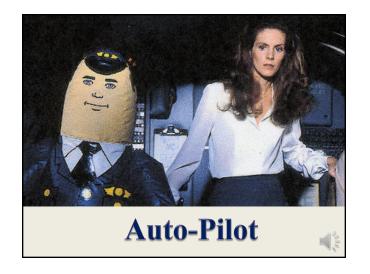


Three concepts



Mindfulness: is about Being Awake: about Awareness both Internally and Externally



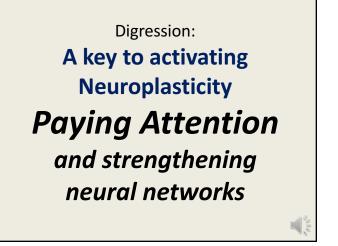


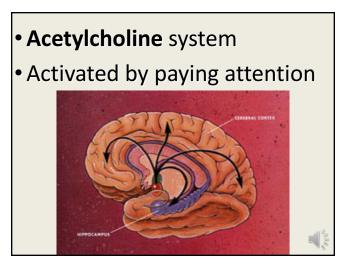
<u>Autopilot</u>

- Highway hypnosis
- Zoned out....missing

 a lot of life in
 the moment



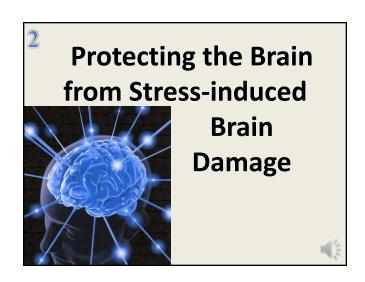




Aceytlcholine System

- Less active with age
- Destroyed: Alzheimer's disease
- Activate by

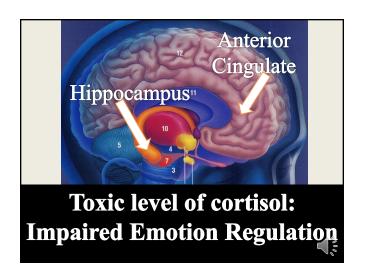
learning novel tasks: paying close attention, interoception, mindfulness

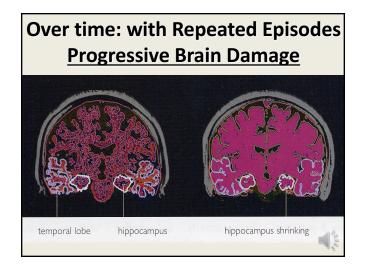


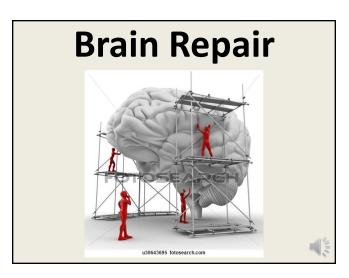
Hypercortisolemia

- Depression
- Extremely severe, chronic, inescapable stress

(perception of powerlessness)







BDNF: revisited

Protecting and healing the brain

- Can protect the brain
- Dendrites and strengthen synapses
- Can activate "neurogenesis"
 (the birth of new nerve cells in the hippocampus)



Brain Repair

•New nerve cells:

"neurogenesis"

hippocampus



Brain Repair

•Dendrite growth:

hippocampus & anterior cingulate



However,

Decreases in BDNF

seen in major depression and severe, inescapable stress



Increased Cortisol co-occurs with Decreased BDNF

Restoring BDNF

Mastery and
Overcoming
Powerlessness



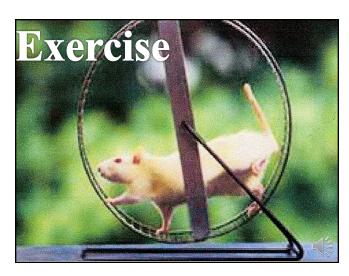
BDNF

>MAY BE ACTIVATED BY:

- * Antidepressants
- * Lithium, Depakote, Tegretol, Lamictal
- * Seroquel, Abilify, Latuda, Saphris

and





Additional Neuro-protective Proteins

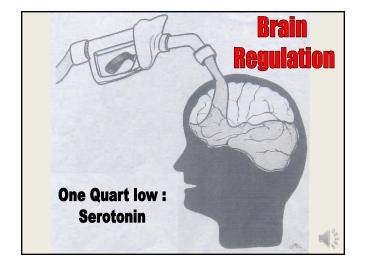
- GDNF: glia derived neurotropic factor
- Myokines:

from Muscles during exercise *

- VEGF: increases capillaries (brain and body)
- IGF-1: increases serotonin and glutamate
- FGF-2: enhances neurogenesis

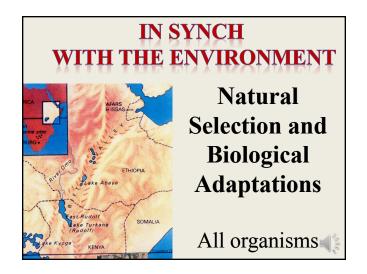
* "Spark"

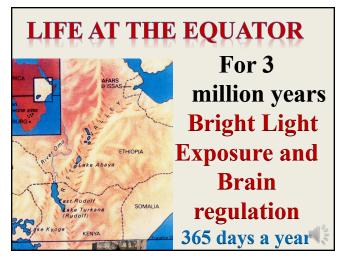


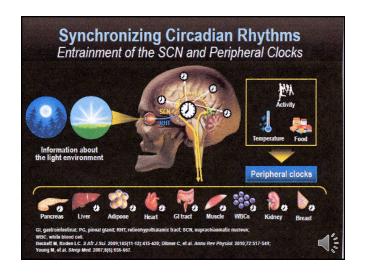


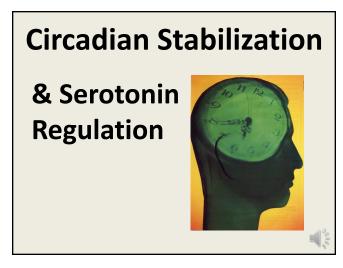
Nature may provide keys to resilience

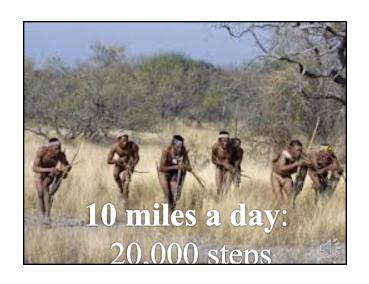
A 3 million year longitudinal study

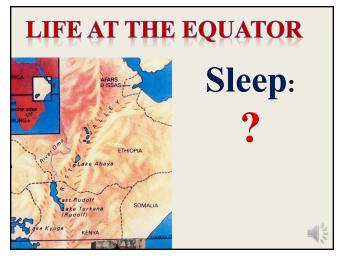






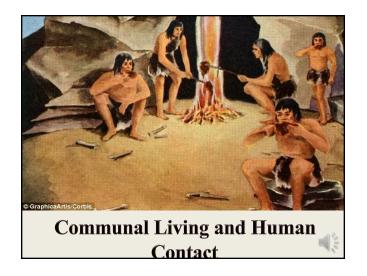






Americans Today sleep 1.5 hours less per night than 100 years ago

Need for sleep:7-8 hours



Environmental Factors Influencing "Natural" Brain Regulation

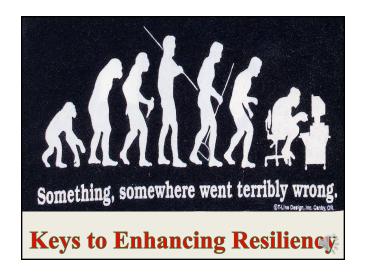
- Bright Light Exposure
- Exercise
- Sleep
- Communal Living

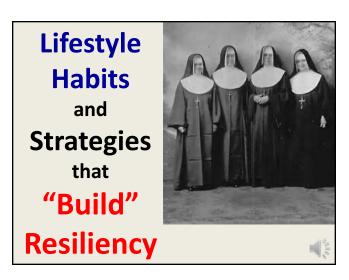


"As a society where lifetime stress is increasing and where evolutionarily ancient homeostatic systems are facing new challenges, we cannot afford to ignore these factors"

Bruce McEwen (2013)

R





Brain Regulation: The importance of Sleep

•SLEEP...THE BATH

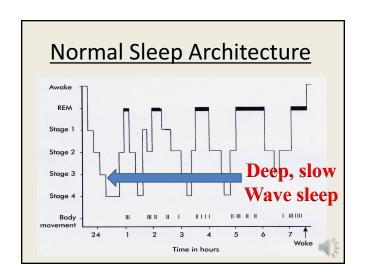
AND BALM OF

HURT MINDS

William Shakespeare

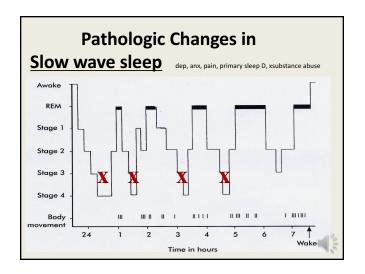


"To Do List"
&
James Pennebaker's
Approach



Slow wave (deep) sleep

- Restorative sleep
- Deprivation:
 - > Fatigue
 - > Troubles concentrating
 - > Impaired emotion regulation (irritability or depression)



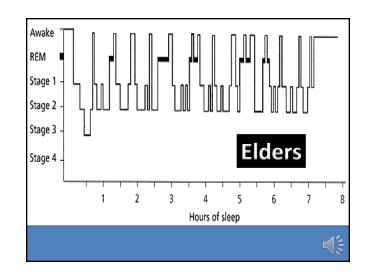
Depression (cortisol) Anxiety (adrenalin; norepinephrine) Pain * Peri-menopause GERD (acid reflux) * Aging Frequent nighttime urination Sleep apnea * Menopause

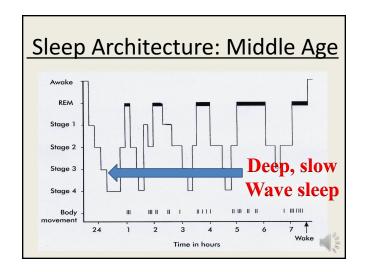
• Substance use/abuse (caffeine)

* Pregnancy

Restless legs

Common causes of sleep disorders





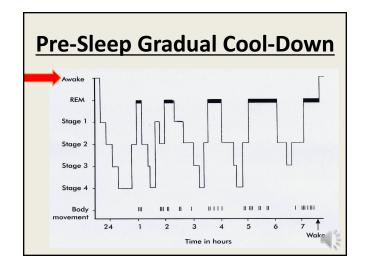
Increasing Deep Sleep

- Regular exercise
 (not 3 hours before bed)
- Calm evenings
- Dark and quite...
- In bed: sleep and sex (only)
- Sleep cool

Sleeping Cool

- Environmental Engineering (thermostat, etc...)
- Melatonin igspace body temperature
- Blue light suppresses melatonin
- DLMO: dim light melatonin onset





Increasing deep sleep

- No "screen time" ½ hour before bed
- Melatonin...low dose:0.5 mg ½ hour before bed

(Note: does not cause sedation)

Increasing slow wave sleep

High doses of melatonin:

 interfere with circadian
 rhythm and can 个 depression
 destabilize bipolar disorder

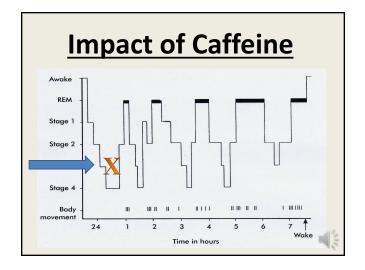
Increasing slow wave sleep

 Avoid substances that interfere with slow wave sleep

Drugs and Sleep Disturbances

- Caffeine
- Alcohol
- Tranquilizers
- Narcotics
- Most Rx Sleeping pills





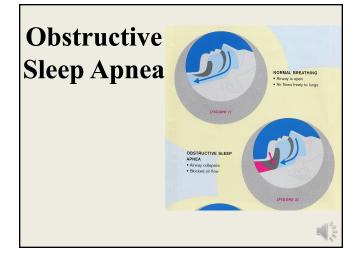
Best to keep
Caffeine
intake
at 250 mg.
or less and
Before noon

Drugs and Sleep Disturbances

- Caffeine
- · Alcohol !!!!!
- Tranquilizers
- Most Rx sleeping pills
- Narcotics

Identify and Treat Primary Sleep Disorders

(very common and often undetected)



Primary Sleep Disorders

- Obstructive Sleep Apnea
 - * 24% of men
 - * 9% of women
 - * 45% have depressive Symptoms
 - * Often: no response to Antidepressants

 $\mathsf{obstructive} \to$

Apnea Clues

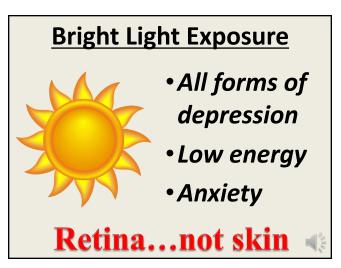
- Depression: 45%
- Impaired affect regulation
- Day time fatigue!
- "Snoring"

Restless Legs 10% of people

& can be an antidepressant side effect 15% (except Wellbutrin)

40% develop depression





High-intensity light Exposure



- 10-20 minutes a day
- Light entering the eye not the skin: don't get melanoma
- Light box or going outside (without sun glasses)
- Contraindicated for people with eye diseases
- Caution with bipolar disorder: can provoke mania

Exercise



Mood Regulator. "Energy Booster"

- 10 minute brisk walk: ↑ energy 60-120 minutes
- Rapid reduction: anxiety
- 30 minutes a day: mood regulation (10,000 steps a day)

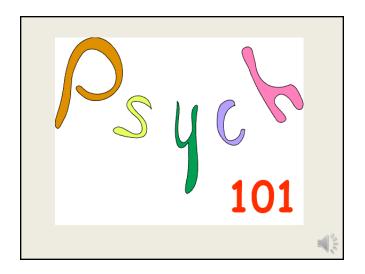


Dehydration and Mood Regulation

- Mild dehydration: 1.3% or greater
- Noticeable impact on cognition and mood
- Measuring hydration

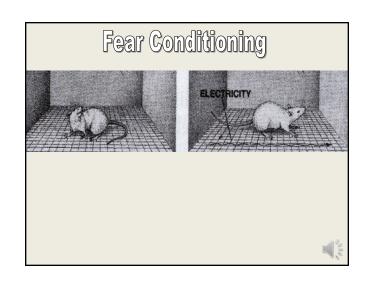
www. ncbi.nih.gov/pubmed/22190027

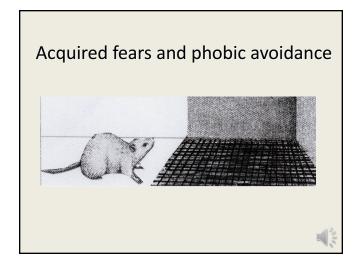
Neurobiology, Psychopathology & Therapy



Terms and Concepts

- Classical conditioning
- Avoidance
- De-conditioning / extinction
- Avoidance reinforcement
- Response prevention





Terms and concepts

- Classical conditioning
- Avoidance
- De-conditioning / extinction
- Avoidance Reinforcement
- Response prevention



Keys to Successful Exposure Therapy in humans

- Exposure without re-traumatization
- Graded exposure
- Prolonged exposure

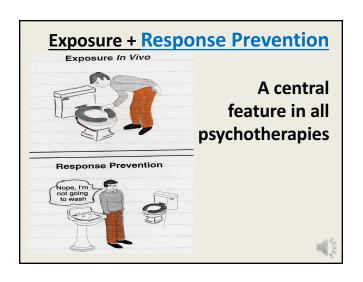


Terms and concepts

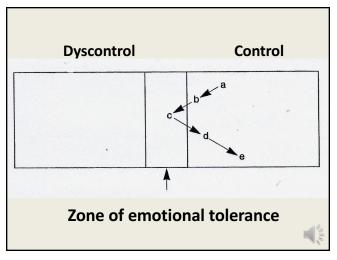
- Classical conditioning
- Avoidance
- De-conditioning / extinction
- Avoidance reinforcement →
- Response prevention



Abbreviated
exposure and
intensification of
fear and avoidance
(avoidance reinforcement)



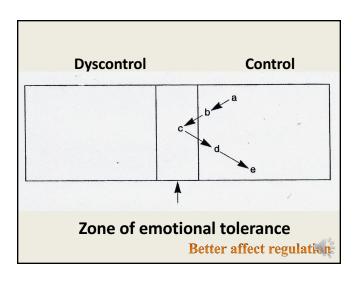






Vignette: Fred

- His wife died 4 months ago
- He's collapsed into major depression
- Explore "Fleas and Ticks"
- Case formulation: normal grief and mourning blocked by over-defendedness



6 Common Resistances

Dealing with Resistances:
Response prevention



Dealing with Resistances

- Minimizing:
 - "I feel <u>kinda</u> sad" ...

 "I feel <u>pretty</u> angry"...

 "I think I was pretty upset..."

"Oh, it's no big deal"....

really

Given what you've told me...

Dealing with Resistances

• Changing Passive to Active:

"Well, I know this is silly, but..."

"I'm just making a mountain out of a mole hill"



Dealing with Resistances

• Injunctions:

"What the hell is wrong with me? ...I shouldn't be so upset!"

...maybe in the past it's been important given what you have told me....



Dealing with Resistances

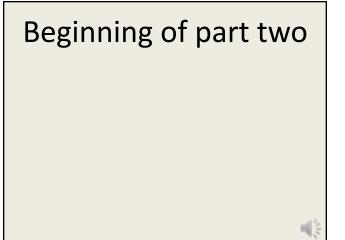
>Intellectualization: not aware of emotions or physiological experiences:

- ➤Go with their style for a while
- > **Bridging**: focus on physiological sensations or images
- ➤ Noticing experiential processing





End of part one





Dealing with Resistances

• Language that creates distance:

"It hurts"...

"That's how **a** parent is supposed to feel" "Well..these things are hard on **people**"

Dealing with Resistances

• Language that negates:

"It hurts, but it's no big deal"

BUT: "Behold the Unspoken Truth"



OPENING UP (James Pennebaker)



Therapeutic Writing

Vignette: Mary

55 year-old widow complicated bereavement

- > Symptoms
- > Her "pain"
- > Her "problem"
- > Good ego strength
- > Good therapeutic alliance >Time limited therapy
 - > Session 11 of 15



C: In the last months before Ben died I just thought I was a bad wife. (tenses up, looks away, holds back tears)

T:How are you feeling right now, Mary? Right this moment...

C: Well, sad of course..that's how **a** wife is supposed to feel, right? (back off from emotions)

T: You are saying that's how <u>a</u> wife is supposed to feel...?

C: (tearful) Crying doesn't help. He's dead and that's just the way it is. I just gotta move on with my life.

T: Moving on with my life...Mary,
I got a feeling "I gotta move on
with my life": that that's a way
you're keeping
yourself away from your feelings?

C: I don't know (cries)...I just have to get on with my life (silence) People don't wanta hear a person cry T: Has that been your experience?
....that people don't want
to see you cry?

C: Sure...all they say is, "oh, with time, everything will be all right...you'll get over it"

T: Is that true?! Do you think everything will be all right?

C: No! (very tearful) ...God I just miss him so much... (begins to openly sob)

Points

- Adequate ego strength
- How much to push
- How persistent resistances can be if the time is not right to open up
- The impact for Mary



"And so each venture
is a new beginning,
a raid on the inarticulate...
There is only the fight
to recover
what has been lost"

T.S. Eliot



"Real suffering burns clean.

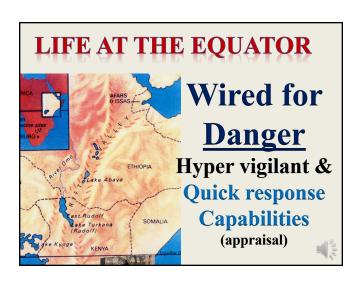
Neurotic suffering creates more and more soot"

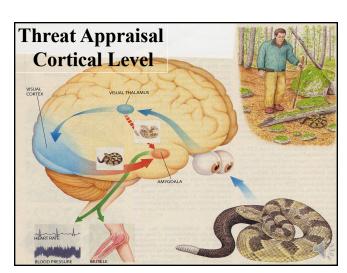
- Marian Woodman



Downloading life experiences

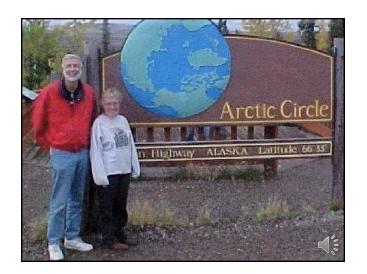
Neuro-Circuitry of Threat Appraisal
Systems
&
Acquired Fears





Cortical-level Appraisal

- Multi-sensory integration
- Reflective (vs. impulsive) style
- Can reality testing



Explicit Memory

Survival of the busiest

"Use it or lose it"

Subject to reconsolidation

PTSD vignette...re-writing

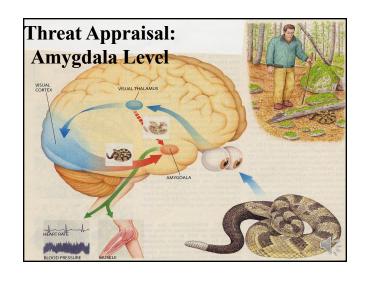


Memory for 911

(Scientific American)

- "Flashbulb memories"...N: 3000
- Soon after the attack, one year,
 three years (where were you?)
- Vivid...great clarity and confidence
- One year: 63%...three years: 57%





Amygdala Level: Implicit Memory:

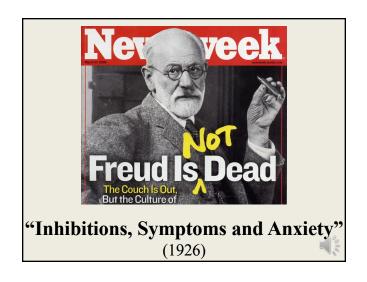
One trial learning

no reconsolidation highly resistant to extinction

Information Processing and Responding: Amygdala

- Pattern recognition
 (simple and very complex)
- Appraisal beneath the radar of consciousness
- Prone to false alarms





Cortex-Amygdala Integrated versus disconnect

> Unconscious perceptions leading to symptoms and inhibitions

child abuse vignette

From specific fears to characterological adaptations



Attachments...Basic Trust
Pervasive fearfulness
Timidity
Non-assertive; afraid of anger
Extreme sensitivity
"Feeling Small"

Stifling Aliveness and Self-expression

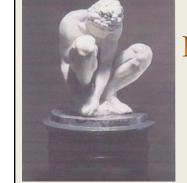
- Openly expressing love
- Unspoken, heart-felt gratitude
- Not setting limits or confronting others about important issues
- Back off from intimacy
- Not pursuing a dream



Pushing Our Buttons

Sensitivity to

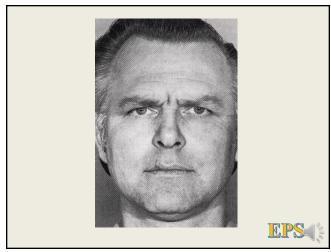
- Judgment....criticism
- Rejection...abandonment
- Shaming...humiliation
- Fear of anger

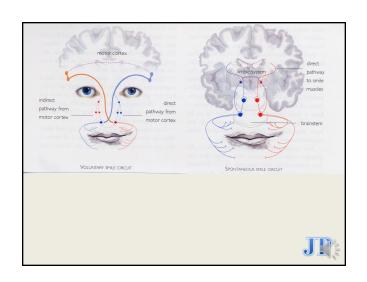


Person Interrupted





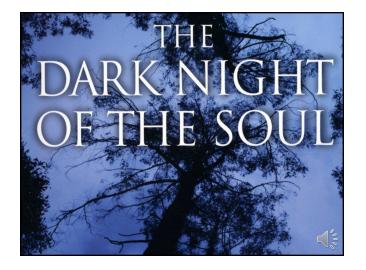










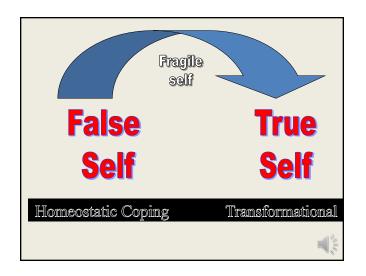


Dark Night of the Soul

- Loss of control:
 - fought against or surrendered to
- Ambiguity
- But....Eventual clarity
- Leads to transformation

quote







Emotionally Resilient People

- Figure out their triggers
- Make sense of the origin
- Exercise self-compassion
- Make wise choices and go for it



(e.g. relationships; occupations)



9/10ths of Death bed regrets:

Regretting what I didn't do

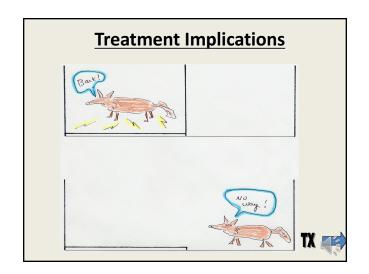
Top Three Death-bed Regrets

- "I wish I hadn't worked so hard"
- "I wish I had stayed more in touch with my friends and loved ones"

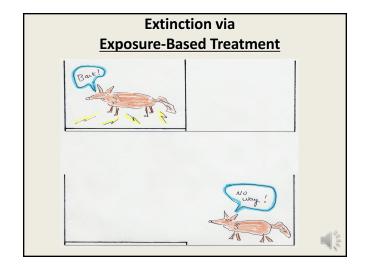
Top Three Death-bed Regrets

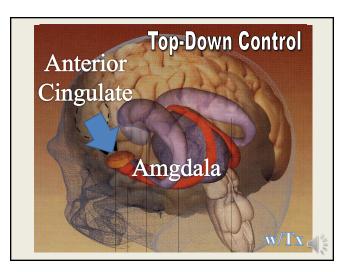
 "I wish I had lived a life truer to my dreams instead of what others expected of me"

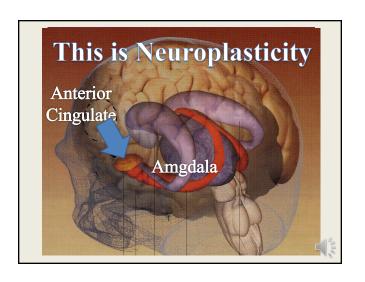
Treatment Implications







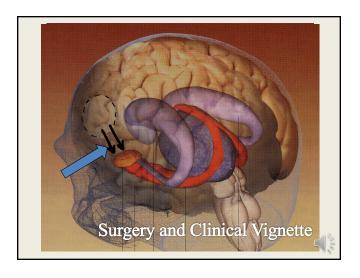




The role of serotonin

- Antidepressants targeting serotonin
- Injecting serotonin into frontal lobes

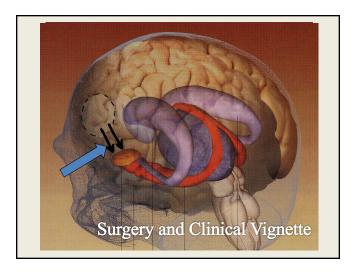




Experiences that Lower Serotonin

- Major losses
- Immobilization
- Experiences of "powerlessness"





"When we are tired we are attacked by ideas we conquered long ago "

-Friedrick Nietzsche

Extinction / De-conditioning

- Not just Symptom disorders
- Symptoms as messengers
- Re-shaping character
 fundamental ways of
 navigating through life

Over-Coming Acquired Fears



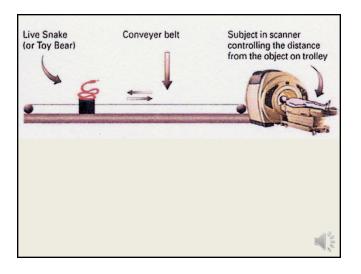
Exposure Techniques and the Will to face fears

"Fear Thou Not" Neurobiology of Courage

Nili, et al., Neuron, 2010

- Ss: > afraid of snakes
 - > not afraid of snakes
- Functional MRI →





"Fear Thou Not" Neurobiology of Courage

Nili, et al., Neuron, 2010

• Ss: > afraid of snakes: advance

> afraid of snakes: retreat

> not afraid of snakes



"Fear Thou Not"

- In scanner: asked to move

 a snake closer and closer to
 their heads
- Measured metabolic activity, subjective sense of fear, and GSR



"Fear Thou Not"

- Advancers: on-going activity in anterior cingulate (AC)
- Reduced activity in amygdala
- Reduced GSR (galvanic skin response)
 despite reported fear
- Retreat: drop in activity in AC



"The absence of fear is not courage... the absence of fear is some kind of brain damage"

- M. Scott Peck



The Choice to Face Fears Impact on two levels:

Activation of PFC (top-down control) and cognitive changes (view of ones self)

Phobia viginette

New Zealand
21 Year Longitudinal
Resiliency Study
• Support and encouragement

Distress Tolerance,
Maintaining
Perspective, &
Acceptance

Human Nature →

Painful Emotional States are Amplified by Self focused Negativity Bias Loss of Perspective

Loss of Perspective

Jumping to conclusions

> Often Unexamined



Loss of Perspective

"What if?"
 Predicting bad outcomes
 anxiety provoking thoughts
 (job, date, expected call, lab results)



Loss of Perspective

- "It'll never get better"

 "I'll never"
 - ↑ hopelessness, depression, feeling defeated

Loss of Perspective

• "It's not fair !" "This shouldn't be happening !"

frustration, anger; helplessness



John Preston, Psy.D., ABPP

• Website: www.psyd-fx.com



End of Part two

Beginning of Part Three



Loss of Perspective

• "I'm a complete loser"

All or None thinking

depression; low self esteem

Loss of Perspective

• "I'm a complete loser"

All or None thinking

depression; low self esteem



Cognitive Approaches to Reducing Misery: In A Nutshell

- Key approaches to managing
 - > Notice a feeling
 - > Increase conscious awareness

(what is going thru my mind?)

Cognitive Approaches to Reducing Misery

- Key approaches to managing
 - > Writing verbatim always helps increase awareness

Cognitive Approaches to Reducing Misery

- Key approaches to managing
 - > Reality testing: are my conclusions 100% accurate ?
 - > Gain clarity and perspective

Anxiety Generating Cognitions

- Loss of perspective
 - > Something bad will happen
 - > Magnify risks: It <u>will</u> be catastrophic
 - > The stress will last a long time

Two Step Strategy: Temporal Perspective

- How bad is a negative outcome likely to be?
- How will I feel in the future?

What went well today?

A technique from Positive Psychology

• Each day ask:

"what three things went well today?"



Buddhist Tradition

- Transforming suffering by the way we relate to it
- Struggling against it
 个 suffering

Muddy water...

Let stand...

Becomes clear

- Lao Tzu



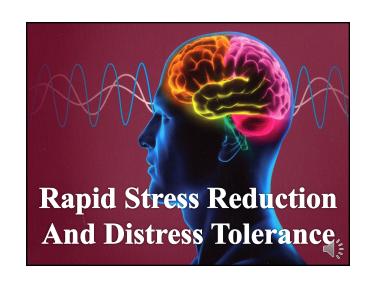
vignette

Radical Acceptance

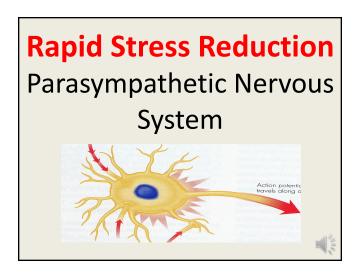
but...not passivity

"If you must walk through the Valley of the Shadow of Death....just don't stop"

Winston Churchill



First: Offer explanations



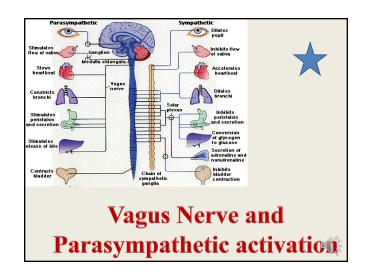
Parasympathetic <u>Dominance</u>

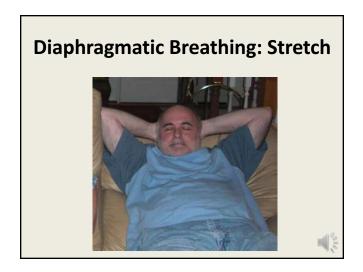


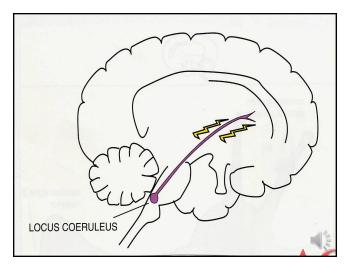
Decreased:

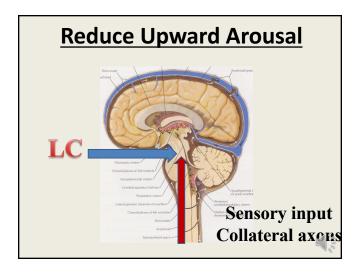
heart rate, blood pressure, respiration, perspiration, and

GSR: galvanic skin response









Affect Regulation Techniques:

• Relaxation Techniques (reduce muscle tension)

CRYING

(William Frey)

- A "Good Cry"
- Parasympathetic response
- Emotional Tears

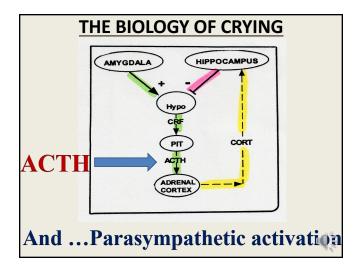
CRYING BEHAVIOR

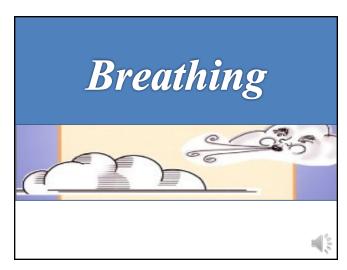
(William Frey)

- Average Duration of Crying Spells:
 1-6 minutes
- Felt better after a "Good Cry":

Women: 85%

Men: 73%





Breathing

- Diaphragmatic breath (belly)...slow exhale
- 4-7-8 breathing
 - > inhale (4) nose...hold (7)
 - > extended exhale (8)



Deep breathing not recommended if there is shortness of breath and hyperventilation

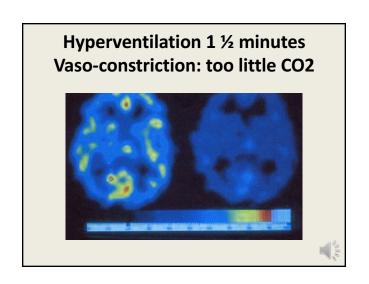


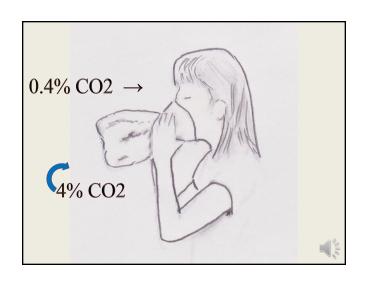
Hyperventilation

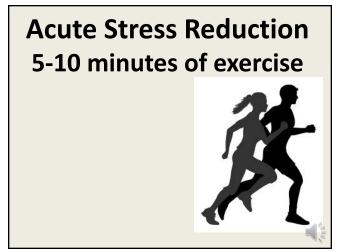
↓↓ CO2

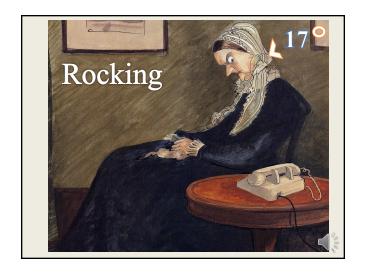
respiratory alkalosis

causes vasoconstriction in the brain hemoglobin binds O2 tightly









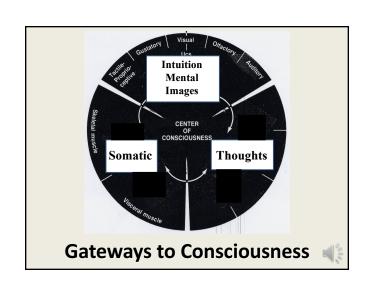


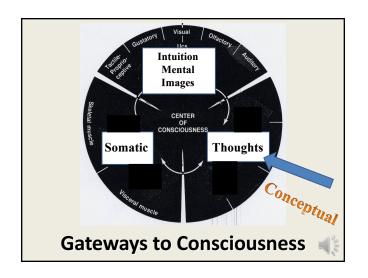
...However.... Excessive Control Can Stifle Aliveness

Gateways to Awareness:

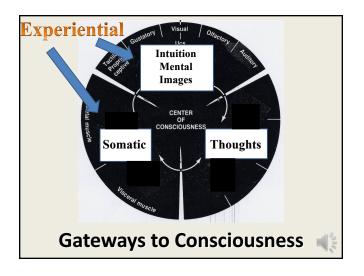
Cognition, Information
Processing, Life
Choices, and
Emotional Healing







Conceptual Processing:
largely mediated
by the left hemisphere
more likely to be conscious



Experiential Processing

- Effortless
- Intuitions; hunches
- Gut feelings
- Perceiving others' emotional state



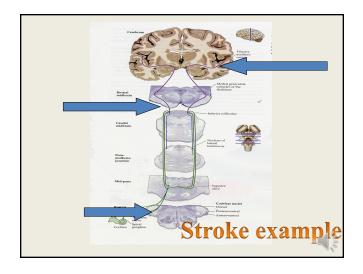
Why so much in conceptual processing

?

to escape emotions; emotions are punished. Emotions pushed away

The role of Disuse

- > stroke recovery
- > L/R disconnect



Often experiential processing does not enter into conscious awareness
A major psych Liability



Vignette: Sally

"You know I love you"

Her trip to the doctor

Her symptoms and her story



Symptoms: A "chemical imbalance"

Clinical Example: Sally

Version One of Reality:

 in consciousness
 likely left hemisphere
 mediated



Clinical Example: Sally

- Version One of Reality: In awareness
 - > pronouncements / beliefs (my husband is a good man)
 - > shoulds (I shouldn't complain)
 - > injunctions
 (don't be so sensitive!)
 - > her hopes and dreams

Clinical Example: Sally

- Version Two of Reality:
- dim awareness at best...
- likely right hemisphere mediated



Sally: On the Edge Awareness

- > non-verbal cues
- > tone of his voice
- > one's direct experiences
- > intuitions
- > gut feelings

develop internal listening skills

Non-Integrated; Unconscious:

Dissonance,

ill-defined symptoms,

Inhibitions

These *are* symptoms but they also are manifestations of character



Her Pain and Her Problem

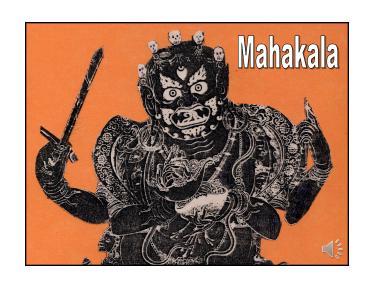
she is gritting her teeth, defending against awareness (characterological?) what can she do? "Your vision will become clear only when you can look into your own heart...

Who looks outside dreams; who looks inside, awakes"

Carl Jung

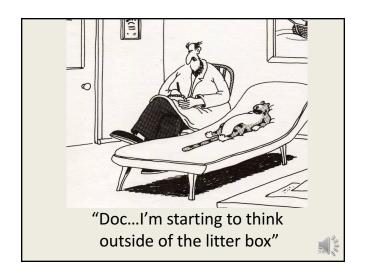
Sally:

Facing the truth...
...Getting clear



"Our life transformation is in exact proportion to the amount of truth we can take without running away."

- Vernon Howard



Over the Counter: Limitations of FDA monitoring

Lack of Quality Control

- BMC Medicine (2013)
- 44 Products...dozens of companies
- 50% contained plant species not listed on the bottle
- 30% had none of the plant listed on the bottle
- One St. John's Wort product: no SJW... instead: an herbal laxative



Products Endorsed By:

USP (US Pharmacopia)

General caution:

Anything that treats
depression can provoke
a manic episode in
people with bipolar disorder
(except omega 3 and
Folic acid)

Self-diagnosing and treatment can be a disaster



Omega-3: Essential Fatty Acids

Families of Fatty Acids

Omega-3

> LNA: seed and nut oils
(flax and chia seeds, walnut oil)

> EPA: fish & krill oil

> DHA: fish & krill oil

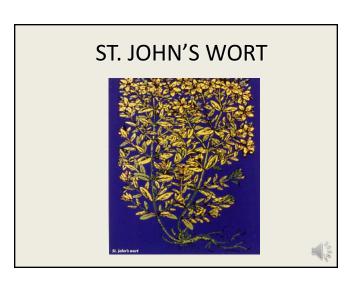


Omega-3 and Depression

- Fish oil: Much better bio-availability
- 1-2 grams a day (EPA + DHA)
- EPA is the omega 3 that ↓ depression
- 1 gram a day: EPA
- 15 published studies: major depression
 - > all: add-on studies
 - > all significant better than placebo







Cochrane Data Base: Systematic Studies

- Meta analysis
- St. John's Wort; equal efficacy to prescription antidepressants if high enough dose
- Linde, et al. (2008)

ST. JOHN'S WORT

TREATMENT

- > Reasons for use
- ≥900-1800 mg per day
- **►**Three, divided doses
- **Cost:** \$1.00 per day
- ➤ Warning: drug interactions (birth control pills)

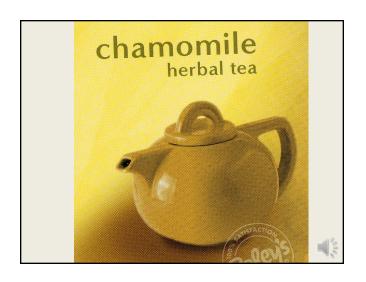




Folic Acid

- Dosing: **500 mcg** per day
 - vitamin B-9
- L-methyl folate: Deplin (Rx)
 or over the counter
 - 7.5-15 mg
- Significant augmenter vs placebo in treatment of depression
- No known risks





Chamomile and GAD

- Significant reduction in anxiety
 vs. Placebo
- 1500 mg at bed time (2013)
- Tea: 400-600 mg

(Amsterdam, J,)





Time Magazine Poll (2004)

- 17% report " brimming with happiness just about all of the time"
- 58% "frequently happy"
- About 25 % almost never experience much happiness

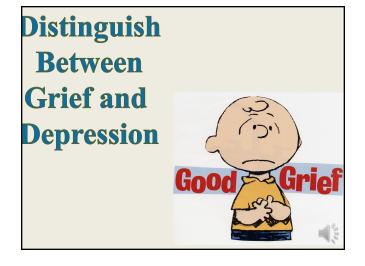


Happiness and Beyond

- Pleasure...often fleeting
- Engagement
- Meaningfulness
- Sacrifice
- Transcending suffering and psychological burdens

(bigger picture)

Additional Keys to Resiliency



Grief

- Not pathological
- Self esteem is preserved
- No anhedonia (waves)
- Functional
- Engagement in life

Common Sources Of Loss

- Divorce or Separation
- Death of a loved one
- Estrangement; betrayal
- Geographic Relocation
- Miscarriages, Still births,
 Abortions and Infertility
- Kids leaving home
- Loss of a home...unemployment

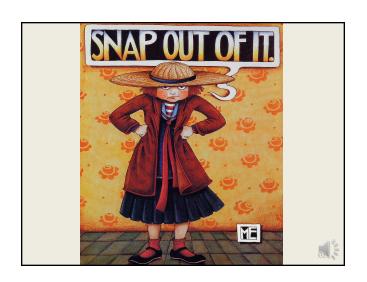
Common Sources Of Loss



- Brain Injuries/Disease, loss of Vision, Hearing or cognitive functioning
- Loss of a Dream
- Losses associated with retirement, etc.
- Loss of security

"How long does it take to get over the loss of a loved one?"







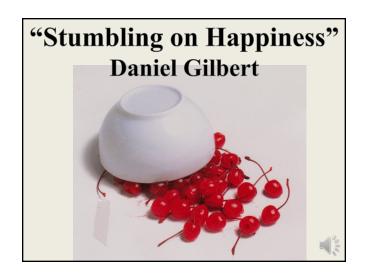
Resilient people mourn losses

"To weep is to make less the depth of grief"
- Shakespeare

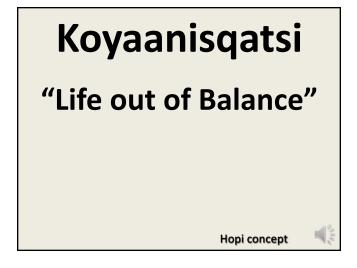


Research:

Habits that are associated with greater sustained levels of well being



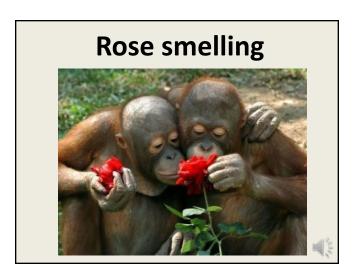






Mindfulness

Increasing awareness
Externally and Internally
Activating Frontal Lobes



Focused Awareness

- Resilient people take things in:
 moment-to-moment
 (spend time...take it in)
- Concrete reminders to savor the moment
- ullet The problem of habituation ${
 m I\!\!\! R}_{
 m a}$





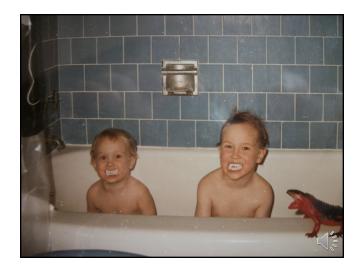
Fun, Humor and Self Nurturing

Survival Mode and Maintaining Balance

Re-circulating **Joyful States**

- The habit of recapturing positive memories
 - –Photos, scrapbooking, digital photo frames...reminiscing with old friends

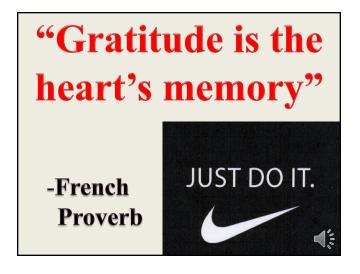




Expressing Emotions

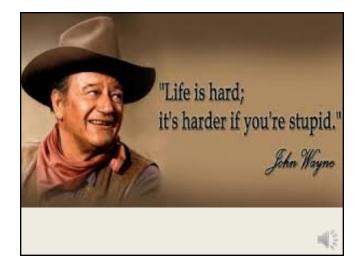
- Happy people express:
 - -Empathy
 - -Compassion
 - -Gratitude

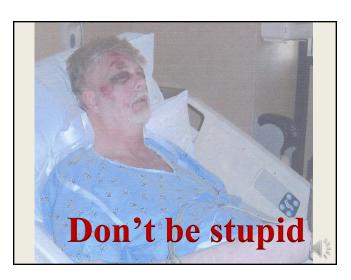




In Brief...

- Setting Limits...limit "rescues"
- If you are riding a dead horse...
 dismount!
 (toxic people and obligations)





7 Actions that Have Highest Yield in Promoting Well-Being

• <u>The</u> most potent way to improve mood:

Once a day: an act of kindness

 Every day: review: 3 things for which you feel grateful

7 Actions that Have Highest Yield in Promoting Well-being

- Ongoing work toward a valued goal (keeping clear about what matters)
- Daily contact with nature and other living creatures







- 7 Actions that have High Yield in Promoting Well-being
 - Establish a daily routine
 - Keep your environment cool
 - Giving money away



Metaphor and a piece of advice



"You can't stop the waves, but you can learn to surf"

- Jon Kabat-Zinn

Finally...One More Piece of Advice

(not empirically supported...yet)

Stay away from Jerks

