

MENTAL IMAGERY

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Peace.

It does not mean to be
in a place where there is
no noise, trouble, or hard work.
It means to be in the midst
of those things and still
be calm in your heart.

(unknown)

Mental Imagery

- What is mental imagery?
- History
- Relevance to medical patients
- Theory and rationale
- Creating an Imagery Exercise
- Technique & Experiential Exercise
- Questions
- Optional practices

What is Mental Imagery

- Visualization
 - A form of thought
 - May be out of consciousness
- Cognitive-Behavioral Therapy & Mind-Body Medicine
 - Empirically-based, i.e., shown to help many persons
 - Goal: replace negative stress reactions with more relaxed responses
- Many different applications across disciplines
- Easy to master with regular practice

History

“Remembered Wellness”

- **Interest** spans many centuries, cultures and disciplines
- **Ancient Egyptians, Hindus & Greeks**
 - Believed images released spirits in the brain that aroused the heart and other parts of body
 - Believed strong images can affect body
 - Greeks** used imagery as memory aid (mnemonics/method of loci)
- **Plato** conceptualized memory as analogous to images carved onto the brain, similar to impressions stamped onto wax tablet

Modern neuroscience suggests that regular practice can create and strengthen neural connections in the brain

History

“Remembered Wellness”

- **Navajo Indians**
 - Healing tool in elaborate rituals
 - Envision oneself as Healthy
- **Spiritual Practice**
 - Increase creativity and Expand consciousness
- **Dale Carnegie and Steven Covey, authors**
 - “Seven Habits of the Most Effective People
 - Elicit **peak performance**
 - Business & Leadership training
 - Astronauts & World-Class Athletes

History

“Remembered Wellness”

- **Paul Schilder, MD, neurologist, psychiatrist**
First to discuss effect of imagery on behavior
Study: Activation of muscles stimulated by using visualization

Images have psychological components
(i.e., the mind communicates with the body through images)
- **Herbert Bensen, MD, Harvard Medical School, Associate Professor**
Head of Benson-Henry Institute for Mind-Body Medicine

Studied how mental processes affect physical healing for over 35 yrs
Benson believes
“The brain’s ability to create visual images, and to treat those images as real, may lie at the center of a type of mind-body healing”.

“You are wired in your brain to know what it is to experience feeling well. You can reconstitute that image.”

Bensen called this phenomenon “remembered wellness”

The mind communicates with the body
through images.

Paul Schilder, MD

“The mind has the ability to create images
and to treat those images as real.”

Herbert Bensen, MD

Medical patients and caregivers face many challenges during the course of diagnosis and treatment.

Common Stressors for Brain Tumor Patients

- **Treatment**
Surgery & Anesthesia, Radiation, Chemotherapy, Medication
- **Brain Injury**
Slow to heal
Possible cognitive impairment
Fatigue & Increased sensitivity to stimuli
- **Seizures**
- **Emotional Distress**
Changes in mood experienced by **50%** of patients
Possible behavioral & personality changes

Effects of Stress for Medical Patients

- Relationships with family, doctor, caregivers
- Role functioning
- Deterioration of overall Quality of Life
- May affect:
 - Response to treatment
 - Overall course of treatment
- Poor Stress Response & Prolonged Depression are linked to:
 - Increased cancer progression
 - Reduced rates of survival

Family and Caregiver Stressors

- Feelings of Loss and of being Overwhelmed
- Anger or Guilt
 - Due to behaviors patients cannot control
- Ambivalence
 - Provision of high levels of care
 - Deterioration of quality of life
- Disruption of life
 - Change of plans
 - Isolation
- Financial concerns

Stress Warning Signs

Cognitive Symptoms

Forgetfulness
Constant worry
Loss of sense of humor
Trouble thinking clearly

Physical Symptoms

Headaches
Indigestion
Sleep difficulties
Back pain
Restlessness
Muscle tension

Spiritual Symptoms

Martyrdom
Loss of meaning
Emptiness
Unforgiving
Loss of direction

Emotional Symptoms

Boredom
Crying spells
Anger
Loneliness

Behavioral Symptoms

Grinding teeth at night
Compulsive eating
Overuse of alcohol
Critical of others

Relational Symptoms

Intolerance
Resentment
Loneliness
Nagging
Distrust
Lack of intimacy
Low sex drive

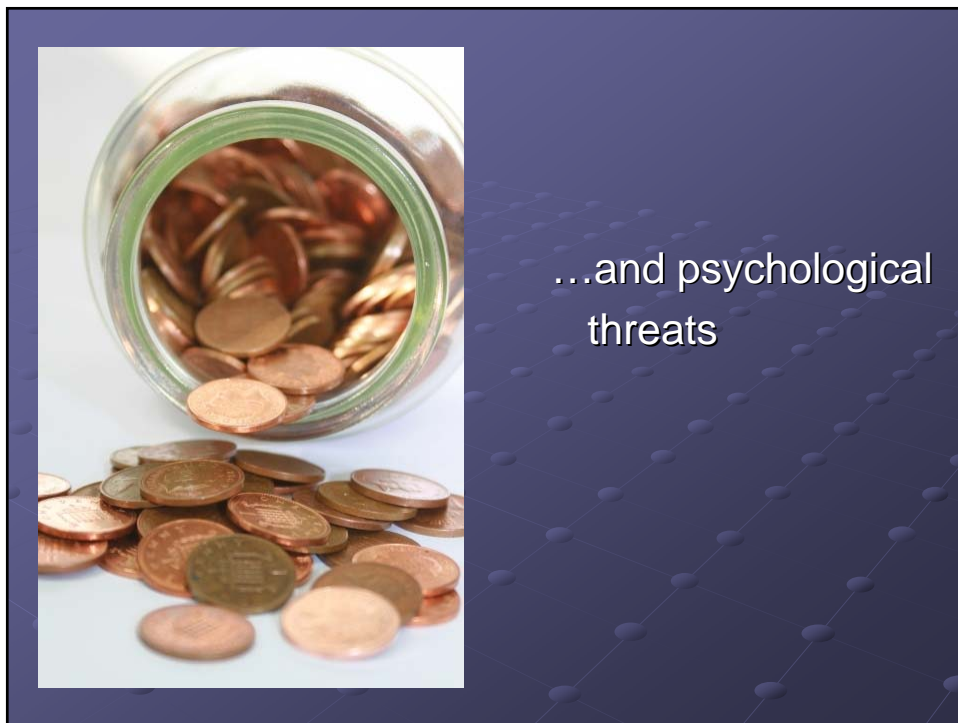
Stress Response

- Arousal is a healthy response to danger or to perceived threats

Fight , Flight or Freeze

- It helps us make fast decisions and respond quickly to external demands

However...



Stress Response

- *The body's response to physical danger and psychological threats is identical*
- Too much psychological distress can keep the body's stress response "on" most of the time
- The more it is activated, the easier to trigger and harder to turn off

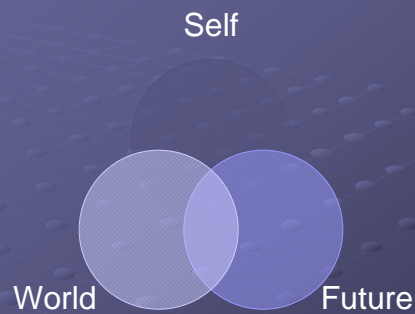
Stress Response

- Individual levels of stress tolerance vary
 - Symptoms can develop when situation overwhelms coping ability
 - Long-term stress
 - Can "re-wire" the brain
 - Can increase vulnerability
- Illness**
Depression and Anxiety

Symptoms of Depression

- Mood:
Sad, angry, or irritable
- Behaviors:
Decrease in activities, withdrawal, social isolation
- Physical Symptoms or body reactions:
Fatigue, appetite change, sleep problems, pain, changes in sex drive, decreased immune functioning, cognitive difficulties, shallow breathing, memory and attention problems, psychomotor slowing

Depressive Thoughts Negative View of



- Tendency to have *irrational* or *distorted* thoughts
- Thoughts are *negative* and tend to be *automatic*
- Mental images are a form of thought

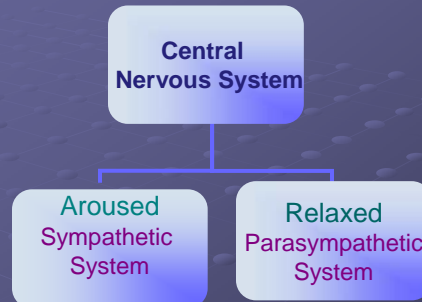
Aaron Beck, M.D. Cognitive Triad of Depression

Anxiety

- Fear and anxiety have *identical physical symptoms*
- Fear is an appraisal of danger
 - Adaptive response
 - Facilitates performance in an emergency
- Anxiety
 - Provoked by *irrational* thought of being in danger
 - In reality nothing is happening *now*
 - Usually a false perception
- ***The body does not distinguish between faulty perception (imagination) and reality***

There is something you can do!

Both Arousal & Relaxation Cannot Coexist



- ↑ Heart rate & BP
- Five senses keen
- ↑ Muscle tension
- Breathing shallow & rapid
- Focus on external world

- ↓ Heart rate & BP
- Senses duller
- ↓ Muscle tension
- Breathing deeper & rhythmic
- Focus on body and thoughts

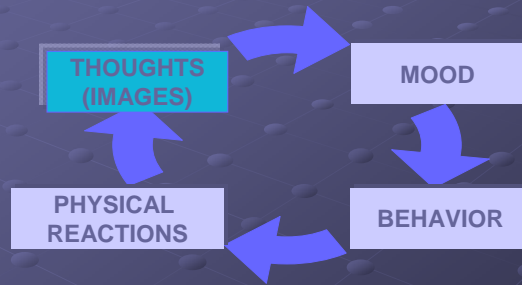
Relaxation Response

- *Arousal (fear or anxiety) and relaxation cannot coexist*
- *If one learns to live in a relaxed state, the alarmed/aroused state cannot coexist*

Cognitive-Behavioral Theory

Thoughts, Mood, Behavior & Body Reactions Interact

© 1986 Center for Cognitive Therapy



Mind-Body Medicine

"Remembered Wellness"

Herbert Bensen, MD

- *"You are wired in your brain to know what it is to experience feeling well"*
- *"You can reconstitute that image"*
- *The mind has the ability to create images and to treat those images as real"*

Mental Imagery for Wellness

Review

- The mind communicates with the body through images
- The brain does not distinguish between images (imagination) and reality
- Images can change physiological processes from state of arousal to state of deep relaxation
- With practice your body can *re-learn* it's response to stress

Mental Imagery for Wellness

- Relaxed state may aid healing, relieve symptoms, and enhance sense of well-being
- May help you feel greater sense of control over thoughts, emotions & the situation
- Increased coping ability can help improve mental attitude & resilience

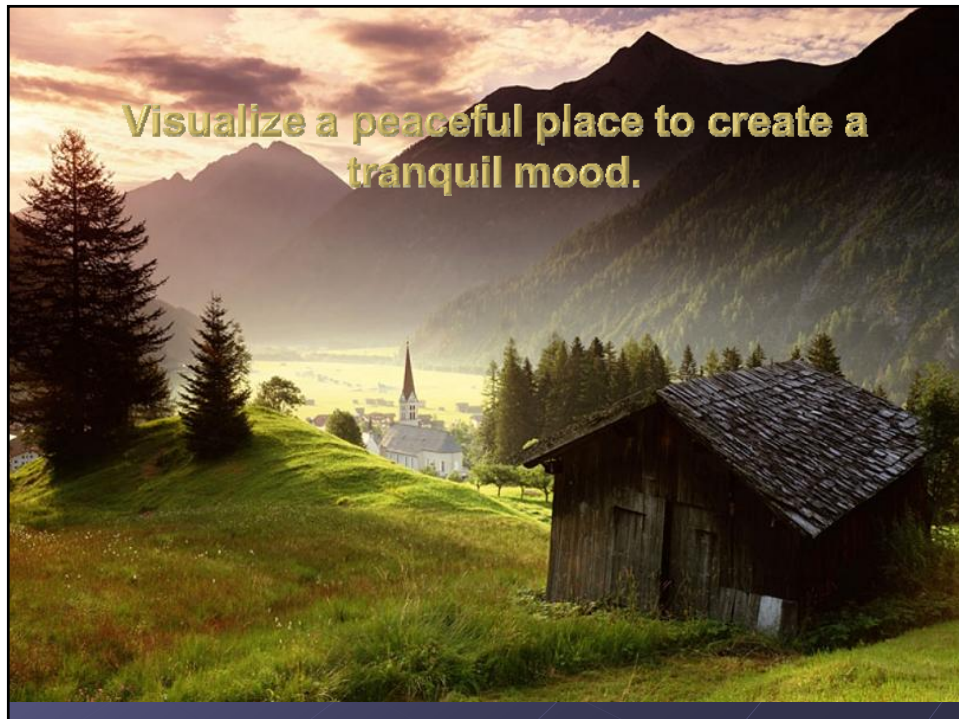
Creating a Mental Imagery Exercise

Design exercise around your *personal goals*

If you are *anxious* use *relaxing images*

If you are *depressed* use *uplifting images*

(Yale study)



Imagine having fun at a carnival to uplift
your mood



Designing an Exercise

Images with *personal meaning* connected to *strong positive emotions* are very effective (e.g., favorite vacation spot or honeymoon location)

Be mindful to *avoid using scenarios associated with negative memories* (e.g., do not use honeymoon location if you had a big fight on your wedding night!)

Improvise, use a narrator, audiotapes or scripts

Choosing Images

- Identify Problem
For example, feeling burdened with responsibility and worry
- What is your Goal? To feel more peaceful, light-hearted and free
- Think of scenarios that elicit the feelings you wish to create
OR
- Think of symbols for the problem and for your goal

What is the most peaceful place you have ever been ?
Example: Resting in the woods near a quiet stream, hiking in the mountains, a train ride in the country

What makes you think of lightness or freedom?
Example: Feathers or leaves floating in the air, swimming in the ocean

What symbolizes burden or being overwhelmed?
Example: A heavy backpack

Enhancing Visualization

If you feel you are not good with visual images

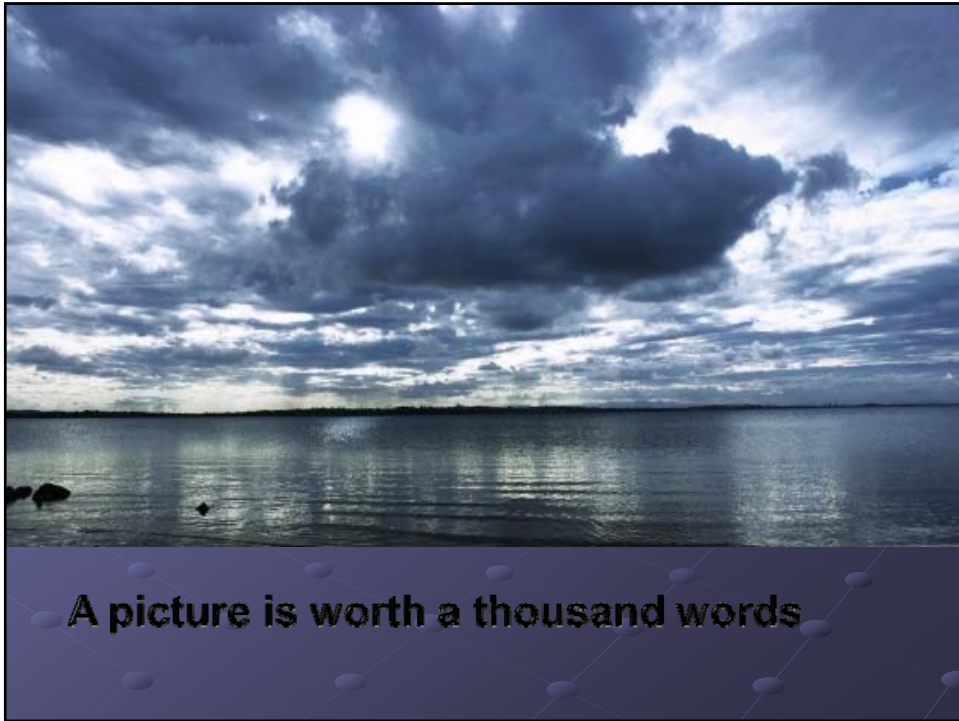
You can improve with **practice**

Focus more on **auditory** or **kinesthetic** aspects

First, imagine yourself in familiar surroundings

Visualize familiar objects (e.g., eating a juicy orange)

Gaze at scenic pictures, videos, beautiful or cherished objects, photos of loved ones or pets



A picture is worth a thousand words







Mental Imagery Basics

- Visualization: always begin with a few moments of quiet relaxation
- Use all five senses & focus on the details to help your images come alive
- Be creative. Feel free to change as you go
No one correct way
Imagination is infinite / does not have to be logical
- End gently, slowly open your eyes

Mental Imagery Technique

- Sit or recline comfortably in a quiet, private place
- Close eyes and notice your safe, comfortable surroundings
- Relax: Practice deep-breathing or mindfulness meditation 2-3 min.
You may use relaxing music, nature sounds
- Deep-breathing: *very slow*, deep breaths 30 seconds each
- Mindfulness: breathe naturally and focus on your breathing
- When you feel relaxed begin visualization
For example, imagine you are in a peaceful, pleasant or happy place (e.g., tropical island, garden, or sailing) or use photos
- Use all five senses to immerse yourself in the imagery
For example, see shapes, colors and textures above, beneath, & surrounding you; feel the warmth of the sun, the humidity, or brush of the wind against your face; smell the flowers; taste the salt in the air; hear the birds, water, or other sounds....
- End gently by focusing on breathing, slowly open eyes



Alternate Coping Strategies

- Depression
 - Increase pleasant and mastery activities
 - Balance negative thoughts with positive
 - Coping self-statements or affirmations
 - Self-hypnosis
- Anxiety
 - Deep-breathing
 - Progressive muscle relaxation
 - Mindfulness meditation
 - Self-Hypnosis

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(unknown)