

#### Mindfulness Emotion Regulation



#### What is mindfulness?

 Many connotations in our culture conjures up images that look to the East



- True it has roots in the spiritual traditions of Buddhism, Hinduism, Taoism
- It has been westernized and secularized for many decades
- Really means 'having good control over your attention'



#### Focus

All done with a and gentleness

#### When attention is steady, mind is steady

mindfulness practices – train the mind to focus (and then refocus and then refocus) without judgment

#### aim is twofold:

taking control over what is held in our 'mental chalkboard'/ awareness What do you want to hold in your focus?

taking control over 'stimulation seeking' Adjusting level of stimulation to 'optimal' for you

unuation to optimal for you



# Individual Variation

- Temperamental differences
  - Holding Information in awareness: obsessive to unfocused
    Allowing in new information: inflexible to flighty
  - Seeking stimulation: apathetic to voracious

#### Cultural differences

Modern Western Culture - information overwhelm/ stimulation overload
 One outcome – habituates us to 'overload' and stimulates 'monkey brain'

- Situational differences
  - Motivation, fatigue, illness, low blood sugar, preoccupation with worries/ sadness
- What is optimal focus & stimulation?
  - Moderate stimulation Yerkes Dodson Law
  - · Focused but flexible focus





#### **Moderate Stimulation**

- Quiet sitting can feel 'boring'/ the mind can rebel • what to do...
- Create novelty that intensifies attention pay attention to the details of your body/ inner experience be creative and fluid in this –
- Moving meditation walk
- Savor the nice feelings bring them into acute awareness; experiment with amplifying them

## Focused but Flexible

- Imagine yourself a 'reporter' of the action watching and carefully noting what you experience
- Use your language centers label what you notice
- Create 'smoothies' of blended experience add positive emotion to the mundane experiences you are noticing "I absolutely love the warmth of my in breath"



# UCLA Study – apply a label

• Mindfulness of emotion non judgmental awareness of emotion

subjects were shown angry and fearful faces asked to label them with emotion or gender labels

when they used emotion labels activated right prefrontal cortex reduced activity in amygdala



# Dan Siegal

- UCLA, MD/ neurologist & psychiatrist
- Interested in brain development & attachment sees relationships as key to brain structuring includes the relationship to ourselves as key
- · Offers us the concept of 'Mindsight' directing attention – shapes brain firing patterns 'what fires together wires together'



- The focusing skills (mindfulness) it possible to see what is inside, to accept it, and in the accepting to let it go, and finally, to transform it. This is like providing yourself with a 'good listener'
  - We have innate wisdom and can tap into that through a path of focus & acceptance (link to Rogers)

# Brain & Meditation

 Harvard Study looked at the impact of insight meditation measured brain structure with MRI long term meditators (9 years, 30 minutes daily)

thicker prefrontal cortex thicker insula

also found age related thinning of the cortex was not present 50 year old brains were as thick as 20 year old control brains

### **Professional Meditators**

- Matthieu Ricard Buddhist Monk 10,000 hours of meditation
- Brain waves measured with EEG along with 30 other monks

compared to 30 college student controls

asked to meditate on compassion very powerful gamma waves (30x) left prefrontal cortex much larger left and right hemispheres synchronized





#### **Brain Wave Patterns**

	0.5 - 3 Hz	
Delta	~mmm	Deep Sleep
	4 - 7 Hz	N. H. K. K.
Theta	mannanthe	Deep Meditation
Alpha Beta	8 - 13 Hz	5
	MMM www. marker will have and have and have and have a second of the sec	Visualization
	14- 40 Hz	and Meditation
	mann	Wakefulness REM
	40 Hz	
Gamma	Heighte	ned Perception

# Shifts in hemispheric activity

• Employees at a high tech firm in Massachusetts chose high stress individuals

taught half mindfulness meditation for 8 weeks

brains were scanned at baseline, completion and 4 months later  $% \left( {{\left[ {{{\rm{T}}_{\rm{T}}} \right]}_{\rm{T}}}} \right)$ 

• Resting brain activity decreased in the right hemisphere Increased in the left hemisphere



## MBSR

 Jon Kabat Zinn combines mindfulness meditation and yoga

typically 8 week programs mind/ body connections for healing

 Started at U Mass Medical Center in 1970 now available in over 200 hospitals



## **Umass Medical Center**

 Reduced symptoms/ increased medical efficacy Chronic pain serious skin aliments (psoriasis) bone marrow transplant prostate cancer anxiety/ panic



 Increased coping more coherent sense of self great self efficacy ability to respond effectively under conditions of high stress



## Going to Pieces

- · Blends Buddhist/ mindfulness ideas with psychology
- Attempts to balance two competing ways of experiencing Ego's need to 'do' and our inherent capacity to 'be'
- Letting go/ letting it be in the face of struggle offers freedom and a path to happiness
- Mindfulness is the pathway to 'letting it be'

4