BODY POSTURE AND MINDFULNESS: The Power of Presence

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In This Talk you Will:

- Examine the effect of stress on the body/mind
- Practice mindfulness
- Learn about body posing and presence
- Examine related research
- Practice body posing techniques

Mindfulness

- Cultivating a nonjudgmental awareness of the present
- Things and events are not inherently good or bad: it is thinking them that make them so.
- Our minds race to label our experiences, both past and future, thereby taking us out of the present, which is the only reality.
The Paradox of Living in the Moment

• Thinking about what you are doing makes you not present to reality
• Life unfolds in the present
  • Hyperactive “monkey minds”
  • Our thoughts are lenses by which we view the world
  • Therefore distortion is inherent

Benefits of Mindfulness

• Reduces stress
• Boosts immune functioning
• Reduces chronic pain
• Lowers blood pressure
• Helps patients cope with cancer and other illness
• Decreases depression and anxiety

Mindful People Are:

• happier, more empathetic, more exuberant, and more secure
• have a higher self esteem and are accepting of their own weakness
• able to hear negative feedback without feeling threatened
• able to have more satisfying relationships
• anchored in the present, which reduces the kinds of impulsivity and reactivity that underlie depression, binge eating and attention problems
• healthier physically
Our Ancestors

• Scanning the environment: Good berries vs. bad
• Tigers in the shrub
• Fight/Flight/Freeze
• Thoughts as modern day tigers

Thoughts are Our Tigers

• In our non-stop society most of us operate in nonstop activation of the Sympathetic Nervous System (SNS) and Hypothalamic-Pituitary-Adrenal Axis (HPPA)
• Continuous shunting of resources from developing a strong immune system, reproduction, good mood, etc, in favor of short term mini-crisis

Our Brains on Tigers

• Taking in information
  • Anxiety producing thought (mind’s eye as opposed to occipital cortex)
  • Information sent to:
    • Hippocampus: evaluation compared to short list of jump-first-evaluate-later stimuli
    • Amygdala: Fight/Flight
    • Prefrontal Cortex: Pulls information from long term memory to determine threat level
The Tiger Leaps

- Alarm: Amygdala alerts thalamus, “Wake Up!”
- Stimulating norepinephrine releases
- Sympathetic Nervous System signals to major organs and muscle groups (fight/flight in action)
- Hypothalamus releases stress hormones (epinephrine (adrenaline) and cortisol)

Epinephrine
- Increases heart rate
- Dilates pupils

Norepinephrine
- Shunts blood to large muscle groups
- Bronchioles of your lungs dilate

Cortisol
- Suppresses immune system to reduce wound inflammation
- Alerts brain stem to further stimulate amygdala, awakening SNS and Hypothalamic-Pituitary-Adrenal-Axis (HPA)
- Suppresses hippocampal activity, leading to more stimulation of amygdala and increasing cortisol

Physical Consequences

- Gastrointestinal
- Immune
- Cardiovascular
- Endocrine
- Muscular
Mental Consequences

- Anxiety
  - SNS/HPAA activity: State Anxiety
  - Implicit memories formed (beneath conscious awareness) based on fear, intensifying Trait Anxiety
  - Hippocampus worn down, impairing ability to produce new explicit memories (what actually is happening)

- Depression
  - SNS/HPAA activation:
    - Lower production of dopamine (anhedonia)
    - Reduces serotonin (depressed mood)

Other Mental Health Consequences

- In addition to:
  - Impulse control disorders
  - Inattention
  - Anger management
  - Somatic symptoms
  - Relational challenges
  - Trauma-related symptoms worsen

Parasympathetic Nervous System

- Conserves energy
- Produces relaxation
- Sense of contentment
- Normal resting state of body, brain, mind

Essential for life: If the PNS is severed, we would die. If SNS is severed, we would live (though would not be good in an emergency!)
SNS-PNS Activation

Balance

• PNS & SNS: We need both
  • Goal:
    • Mainly PNS arousal for baseline
    • Mild SNS for enthusiasm, vitality, passion
    • Occasional SNS spikes to deal with demanding situations
  • Many of our students with trauma live primarily in the SNS

Brain Functioning of Mindful People

• In a 2011 study (Holzel, et al.) participants took part in an 8 week mindfulness meditation program
  • Average of 27 minutes a day
  • Compared to controls, participants had on MRI:
    • Increased grey matter in hippocampus
    • Decreased brain matter in amygdala

  In addition, increases in relaxation and stress reduction were reported
Brain Functioning, cont.

  - During meditation increases in activity in hippocampus, prefrontal and parietal cortices, temporal lobe, and other areas of the brain associated with the relaxation response.
  - The practice of meditation activates neural structures involved in the control of the SNS and PNS.

Brain Functioning, cont.

- Tibetan monks produce uncommonly powerful and pervasive gamma brain waves, integrating and unifying large territories of the mind (Lutz et al, 2004).
- Activity in the left prefrontal cortex (the seat of positive emotions such as happiness) radically exceeded activity in the right prefrontal (site of negative emotions and anxiety).
- Significant increases in grey matter in hippocampus, decreased amygdala matter.

Research On Mindfulness and Children

- Multiple studies, multiple benefits
  - Executive functioning
  - Attention
  - Anxiety
  - Depression
  - Self-awareness/self monitoring
  - Decreased aggression
  - Increased empathy
  - Stress reduction
  - Trauma
Mindfulness Research, Trauma and Mood

- Mendelson et al. (2010) found 97 4th and 5th graders exposed to trauma in Baltimore public schools, after a 12 week mindfulness program, had significant improvement in rumination, intrusive thoughts, and emotional arousal compared to controls.

- Kuyken et al. (2013) found in a study of 522 youth aged 12-16 to have fewer self reported depressive symptoms after 9 mindfulness sessions.

Mindfulness: Research

- Fung et al. (2016) found after a 12 week mindfulness program with 19 Latino and Asian-American students reductions in internalizing and externalizing symptoms, including parent reported reductions of child emotional and behavioral Sx.

- Children with PTSD after the tsunami in Sri Lanka evidenced significant reduction of PTSD Sx after 6 mindfulness sessions, with lasting results at 1 and 6 months post-intervention as compared to controls (Neuner et al., 2008).

Breathing and Meditation Exercise

- Coming into breath
- Being aware of our bodies
- Opening up to our other senses
- Labeling thinking as "thinking"
- Opening up our "mental hands" to thought
The Mind-Body Connection

- Countless studies
  - Benefits of Yoga on mental health
    - Reduces stress
    - Increases positive mood
    - Decreases depression and anxiety
  - Benefits of Exercise on mental health
    - Mood enhancement (short and long term)
    - Better sleep
    - Decrease fight or flight
- Often neglect this connection in our work with students

Presence

- Believing in and revealing our abilities
- Present in our minds, and bodies
  - Anchored in the here and now
  - The more present we are, the more we are able to be confident, thereby decreasing the stress response
Amy Cuddy’s Research

The Research
- Power posing
- Athletic tape experiment
- The slumped posture experiment
- Iposture
- Imaginal posing

Power Posing Experiment
Athletic Tape Experiment

- Tape applied in straight or slumped postures
- 5 minute talk to impactive judges
- Upright postures deemed as more enthusiastic, strong, less nervous, less self-focused, used fewer works
- Slumped: rated opposite

Slumped Posture Experiment

- 30 depressed inpatient subjects
- Slumped or upright posture
- Shown word series on screen
  - Positive
  - Negative
- Recall test results
iposture Experiment

- Random Assignment
- iPod touch
- iPad
- Laptop
- Desktop
- Filler activity for 5 minutes
- Experimenter instructed after 5 minutes to come get him/her for debrief and to be paid
- Results!

Imagery Experiment

- 2 minutes of imagery
- Results!

A Counter-argument

- Dana Carney (former researcher with Cuddy)
- Doesn’t think that the power-posing effect was real, and that the original study had fatal methodological shortcomings.
- Statistical analyses not up to today’s standards of rigor
Cuddy’s Response

• “the power posing effect,” is simple: adopting expansive postures causes people to feel more powerful. Since my coauthors and I first published our evidence, this effect has been replicated in at least nine published studies and in at least four unpublished studies from nine different labs.
  - Amy Cuddy, 2016

• Adam Galinsky and colleagues wrote in their 2016 review:
  • a person’s sense of power...produces a range of cognitive, behavioral, and physiological consequences, including improved executive functioning, general optimism, creativity, authenticity, the ability to self-regulate, and performance in various domains, to name a handful.

• The current complete body of evidence on expansive postural feedback includes 46 studies from 96 researchers from university labs around the world, including:
  • social psychology
  • health psychology
  • clinical psychology
  • sports psychology
Quick Try

Our Most Vulnerable Students
- Disempowered
- Traumatized
- Low confidence
- Defeated
- Disenfranchised
- Seeking maladaptive means to achieve wellbeing and presence

Mindfulness-Body Model in the Schools

TIER 3
- Individualized mindfulness-body interventions

TIER 2
- Targeted classroom interventions
- Group mindfulness & body work with students of similar needs

TIER 1
- School-wide mindfulness curriculum
- Daily mindfulness practices and rituals in the classroom
Tier 1
Universal Interventions

- Incorporating mindfulness-body work into the classroom or into current SEL program
- Stand-alone mindfulness programs examples on next slide
  - Consultant based
  - Teacher/School personnel based
  - Clinically based

Select Resources for School Programs

- Mindful schools (K-12) www.mindfulschools.org
- Mindful Life Project: http://mindfullife.org
- Inner Kids Program (K-8) InnerKidsProgram.org
- Inner Resilience Program (K-8), InnerResilienceTidesCenter.org
- Learning to Breathe: http://learningtobreathe.org
- MindUP: (preK-8) www.thewhaftoundation.org
- Still Quiet Place (K-12) www.stillquietplace.com
- Stressed Teens (13-18yo) www.stressedteens.com
- Wellness Works in Schools (3y-18y) www.wellnessworksinschools.com

Mindful Life Project Video
Tier 2
Targeted Interventions

• Small group mindfulness-body interventions tailored to the student’s needs
  • Internalizing problems
  • Externalizing behaviors
• Targeted classroom interventions
  • Skills building based on the needs of the student
  • Teacher support in classroom/prompting

Tier 3
Intensive/Individual Interventions

• Appropriate for students with high level needs
  • Aggressive behavior
  • School refusal
  • More intense internalizing problems
  • ADHD
  • PTSD
• Implemented by School Psych or other mental health provider/One on one support

How do we change, how can we help our students to change?

• Become aware of our “monkey minds” and the tenants behind the teaching of mindfulness.
• Stop the labeling of our experiences, relationships, and even our thoughts
• Body Posing Work
• Journaling (left-right hemisphere link)
  • Gratitude journaling
Change, cont.

- Quiet the mind
  - Through breath
  - Through our other senses
  - Mindful eating
  - Meditation
  - Curiosity
  - Yoga
  - Nature

We must practice what we are teaching: therefore, we must first become comfortable with mindfulness practices.

Breaking Habits

- Breaking Habits:
  - Creatures of habit: comfort in sameness/autopilot and taking things for granted
  - Try something new (new seat/new path)
- Mindful walking
  - No goal
  - Sights, smells, sounds, your body in action

WRAP UP

- Discussion
- Questions
Practice: Select Resources