Mindfulness-Based Interventions for Clinician Burnout

Ann Sebren, EdD, CMT-P
Teaching Professor
Certified Mindfulness Facilitator - Professional
College of Health Solutions

I, Ann Sebren, have no relevant financial relationships with ineligible companies to disclose in relation to this activity.

ASU College of Health Solutions
Arizona State University

Agenda

- Burnout
- Mindfulness-Based Interventions
- How MB Practices Impact Stress & Burnout
  - Attention Monitoring & Acceptance:
    - Emotion Regulation
  - Compassion and Empathic Distress
  - Self-Compassion
- Mindfulness-Based Micropractices
- Resources

Burnout

Burnout Definition

- Burnout is a **syndrome** conceptualized as resulting from chronic workplace stress that has not been successfully managed.

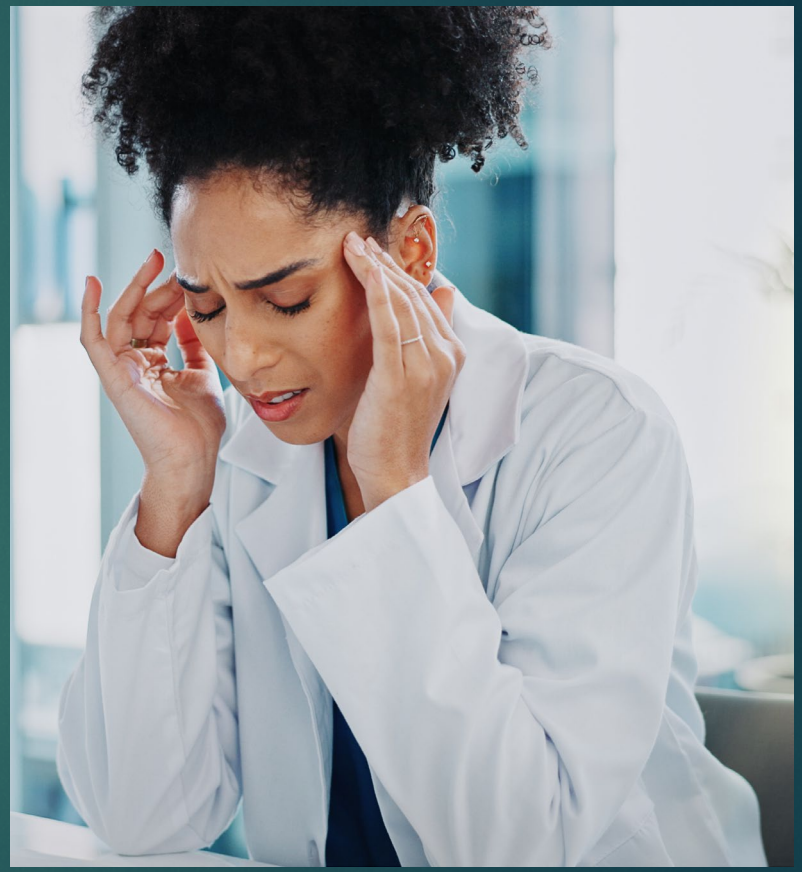
- Burn-out refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life.

- It is characterized by three dimensions:

WHO ICD-11, 2025: https://icd.who.int/browse/2025-01/mms/en#129180281

Burnout Dimensions

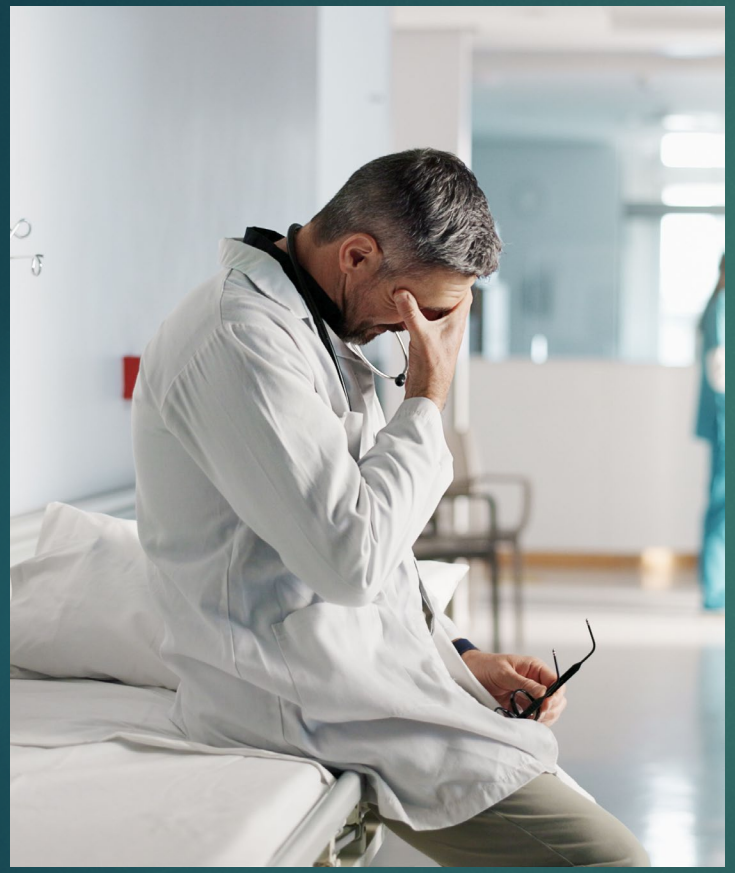
- Emotional Exhaustion
  - feelings of **energy depletion or exhaustion**
    - WHO ICD-11, 2025: https://icd.who.int/browse/2025-01/mms/en#129180281
  - "wearing out, loss of energy, depletion, debilitation, and fatigue"
    - (Maslach & Leiter, 2016)
  - "extreme fatigue, inability to face the work demands, and inability to psychologically support patients"
    - (Salvado et al, 2021)



Burnout Dimensions

- Cynicism (Depersonalization)
  - increased **mental distance** from one's job, or feelings of negativism or **cynicism** related to one's job
    - WHO ICD-11, 2025: https://icd.who.int/browse/2025-01/mms/en#129180281
  - "negative or inappropriate attitudes towards clients, irritability, loss of idealism, and withdrawal"
    - (Maslach & Leiter, 2016)
  - "detached feelings and impersonal treatment toward patients and negative attitudes towards colleagues"
    - (Salvado et al, 2021)

Burnout Dimensions



- Reduced Personal Accomplishment
  - a **sense of ineffectiveness** and lack of accomplishment
    - WHO ICD-11, 2025: https://icd.who.int/browse/2025-01/mms/en#129180281
  - "reduced productivity or capability, low morale, and an inability to cope"
    - (Maslach & Leiter, 2016)
  - "sense of not being capable of helping patients and [not being] effective at work"
    - (Salvado et al, 2021)

WHO ICD-11, 2025: https://icd.who.int/browse/2025-01/mms/en#129180281

Prevalence of Clinician Burnout

- Prevalence of burnout highest in the helping professions (e.g., health care workers and clinicians, teachers, first responders, etc)
  - Term burnout first used in 1974 to describe the exhaustion observed in people in the "healing professions"
    - Antico & Brewer, 2025
- Prevalence in US Clinicians:
  - 45.2% respondents experience at least 1 symptom of burnout
    - Shanafelt et al, 2025: DOI: 10.1016/j.mayocp.2024.11.031

Context of Burnout

- **Clinician burnout is complex** and multifactorial
- "Arises from both institutional and individual factors that create an imbalance between job demands and available resources"
  - High workload, long hours
  - Administrative tasks
    - Recent research focused on impact of EMR on increased cognitive load and burnout
  - Inadequate staffing
  - Lack of control over work environment (loss of autonomy)
  - Chaotic organizational cultures
  - Disconnect between values and decisions
  - Many aspects of clinical work are uncertain
  - Empathic Distress

Antico & Brewer, 2025: U.S. Surgeon General's Advisory, 2022

Context of Burnout

- Addressing burnout thus requires both systemic and individual level interventions
- Mindfulness-based interventions may be useful in helping individuals prevent, mitigate, or reverse symptoms of burnout but **should not be seen as shifting responsibility solely to the individual** for their experience of burnout
- MBI appear to be most effective when provided and supported at an institutional level as part of a larger culture that values the well-being of health care worker and providers.

Mindfulness-Based Interventions

Mindfulness: Definition

Awareness that arises from paying attention, on purpose, to present moment experience with nonjudgment (openness, receptivity, non-reactivity)…

in order to reduce reactivity and enhance wise, caring response

Types of Mindfulness-Based Interventions

- **MBSR** (8 weeks, 2 hrs/week, 45 min Home Practice)
- **Abbreviated Adaptations of MBSR**
  - Shorter sessions (30-1hr), Fewer Weeks (4-6) or 1-3 days, Shorter Home Practice (10-30 min)
- **Compassion Cultivation Training, Mindful Self-Compassion**
- **Positive Emotion Skills Training**
- **Digital Interventions**
  - Shorter sessions (10-30min), Variation in Lenth (1-12 wks), 1/wk or Daily, Shorter practices (5-15 min)
  - Hybrid, Self-Paced, Apps, Podcasts, Website Resources
  - Increased use of Micro-Practices

Characteristics of MBI

- Formal Mindfulness Practices:
  - Sitting (awareness of breath, body, sound, emotion, thought)
  - Body Scan
  - Mindful Walking / Mindful Movement (Yoga, etc)
  - Lovingkindness, Compassion (Self, Other) Practices
  - Mindful Eating
  - Mindful Communication

Characteristics of MBI

- **Informal Mindfulness Practice**
  - Short practices for enhancing awareness in daily activity
  - May include Micro-Practices
- **Psycho-Education**
  - Stress Physiology and Psychology
  - Basic Science of Mindfulness
  - Coping Models and Strategies
- **Group Inquiry, Dialogue and Reflection**
- **Home Practice**
  - Mindfulness Practices; Short Written Activities

Effects of MBI on Burnout in HCP: Meta-Analysis

- **Most Meta-Analysis: MBSR or Adaptations**
- Primary Outcome: Change in Maslach Burnout Inventory
- Significant Small to Moderate Effects on Burnout Score
  - -0.51 ES Pre-Post MBI
    - Lomas et al, 2019
  - -0.26 to -0.44 ES in RCT
    - Fendel, Bürkle, & Göritz, 2021; Lomas et al, 2019; Ong et al, 2024; Spinelli, Wisener, & Khoury, 2019
- 1 MA: Pooled Effect of MBI on Burnout Domain Scores in Primary HCP

Effects of MBI on Clinician Burnout

- Pooled Effect of MBI on Burnout Domains in Primary HCP

Burnout Domain	Pooled Effect Size	Mean Score Difference	Authors Conclusion
Emotional Exhaustion	-0.54	-5.98	Clinically Meaningful*
Cynicism (Depersonalization)	-0.34	-1.96	Clinically Meaningful*
Reduced Personal Accomplishment	-0.34	-2.05	Clinically Meaningful*

*1 point increase in Burnout Domains have been associated with increased reported suicidal ideation, reported medical errors, and reduced working hours

Salvado, et al, 2021: doi: 10.3390/healthcare9101342

How Might Mindfulness-Based Practices Make a Difference in Stress and Burnout?

EMOTION REGULATION: ATTENTION MONITORING AND ACCEPTANCE

COMPASSION AND EMPATHIC DISTRESS

SELF-COMPASSION

POSITIVE EMOTION

Emotion Regulation

- Primary Components of Mindfulness:
  - Attention Monitoring and Acceptance
  - Distinct but synergistic – both necessary

- Attention Monitoring: self-regulation of attention to orient toward present moment experience (sensations, thoughts, emotions)
  - Helpful in **affectively neutral tasks** – ability to focus and regulate attention contributes to better cognitive function

Bishop et al, 2004; Greeson et al, 2014; Lindsay & Cresswell, 2017

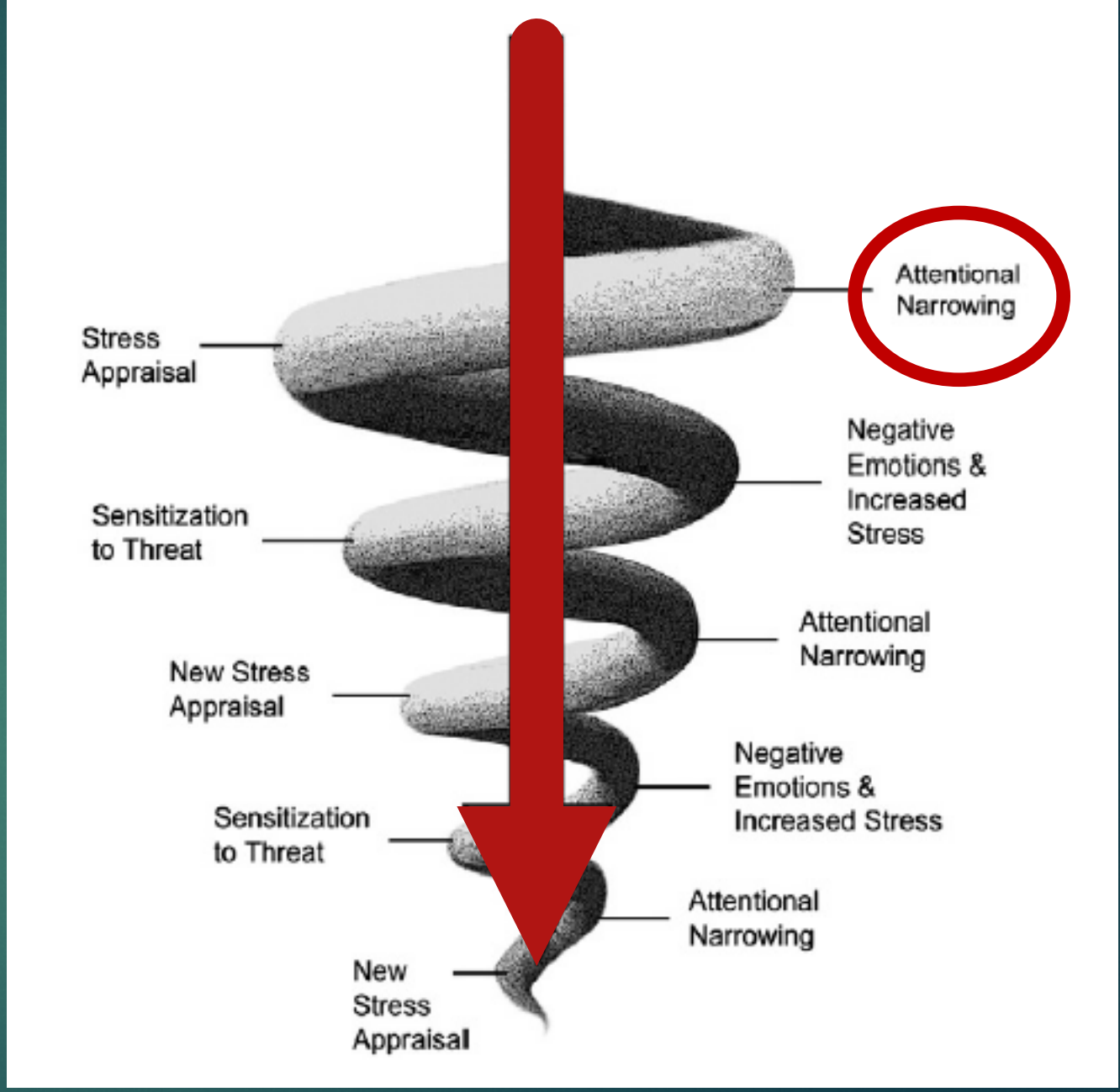
Emotion Regulation

- In more **affective, emotionally intense contexts**: paying attention to present moment experience <u>without</u> acceptance leads to:
  - Increased maladaptive emotion regulation
  - Greater distress and distress intolerance
  - Increase in depression and anxiety symptoms
  - Increase in maladaptive coping behaviors

Bishop et al, 2004; Greeson et al, 2014; Lindsay & Cresswell, 2017

Emotion Regulation

- Paying attention to momentary experience in highly affective contexts without acceptance leads to a narrowing of focus on negative experience



Garland et al, 2010; Lindsay & Cresswell, 2017

Emotion Regulation

- Acceptance appears to be the **core** factor in mindfulness practice that contributes to beneficial outcomes
- Acceptance:
  - Objective non-reactive lens through which we view momentary experience
  - Practice/skill of allowing experience to arise and pass (come and go) without added:
    - Elaborations – narratives
    - Judgments, criticisms, analysis
    - Habitual, automatic, reflexive reactivity

Bishop et al, 2004; Greeson et al, 2014; Lindsay & Cresswell, 2017

Emotion Regulation

- Contrast to Suppression and Avoidance
  - Evidence suggests that suppression and avoidance may play a role in emotional exhaustion
  - Requires cognitive and emotional effort that consumes psychological and physiological resources
  - Paradoxically can also lead to greater emotional intensity over time

Grandey & Gabriel, 2015; Greeson et al, 2014; Lindsay & Cresswell, 2017

Emotion Regulation

- High levels of Attention Monitoring + Acceptance:
  - Improved ability to tolerate experience of distress
  - Reduction in rumination
    - Remove and Replace: Shift attention to more neutral or positive experience (e.g., bodily awareness, neutral or kind thoughts)
    - Change relationship with thoughts: Let them come and go without getting lost or swept up in the narrative
  - Improved ability to reappraise stressful situations
  - Reductions in depression and anxiety symptoms
  - Reduction in maladaptive coping behavior (eating, substance use, etc)

Bishop et al, 2004; Greeson et al, 2014; Lindsay & Cresswell, 2017

Empathic Distress

- Empathy has been found to be a protective factor in burnout – but recent research suggests it may be compassion (empathic concern) that is the primary contributor.
- Components of Empathy:
  - Emotional or Affective – Feeling what others feel
  - Cognitive – Perspective Taking
  - Empathic Response
    - Compassion (Empathic Concern)
    - Empathic Distress

Singer & Klimecki, 2014: https://pubmed.ncbi.nlm.nih.gov/25247366/

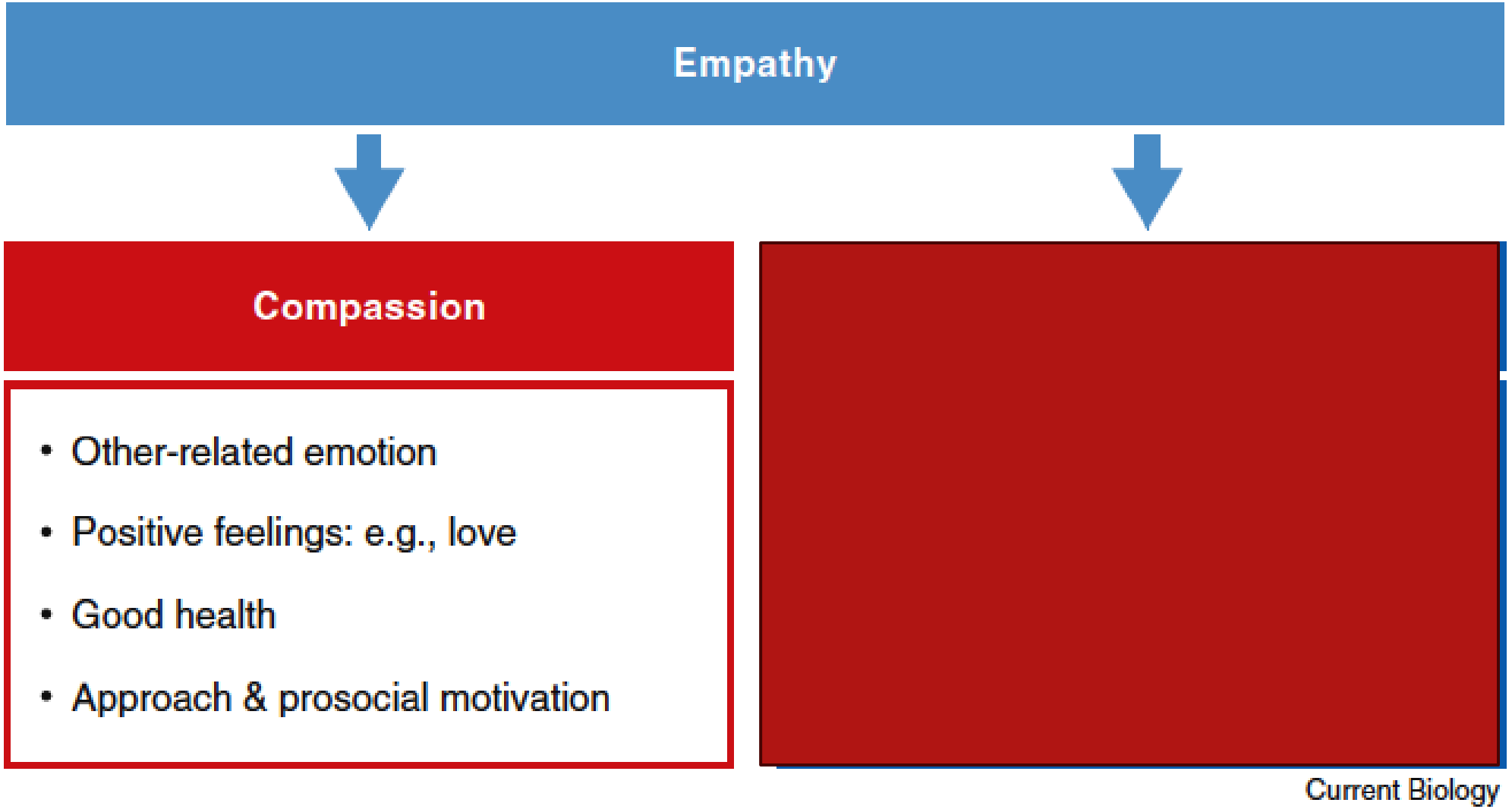


Figure 1. Compassion and empathic distress.
Schematic model that differentiates between two empathic reactions to the suffering of others.

Singer & Klimecki, 2014: https://pubmed.ncbi.nlm.nih.gov/25247366/

Empathic Distress

- Affective Empathy involves neural networks related to the **monitoring of bodily states and emotion perception and processing** (insula, ACC, amygdala) leading to shared emotional experience (e.g.,pain, distress)
  - High AE associated with increased BO scores
- Affective empathy in the absence of the ability to regulate one's own emotional reactivity (e.g., attention monitoring with acceptance of one's own momentary experience) can lead to "empathy fatigue" or empathic distress

Delgado et al, 2023; Kamal et al, 2025; Novak et al, 2022

Empathic Distress

- Compassion (Empathic Concern) appears to involve different neural networks:
  - **Executive Function Networks** (PFC) – involved in attention monitoring and acceptance
  - **Reward & Affiliation** (Caudate Nucleus, Oxytocin/Dopamine)
- Creates a positive, calm response with a desire to help
- Recent Meta-Analysis: Empathic Concern Correlated with:
  - Lower Depersonalization
  - Higher Personal Accomplishment

Delgado et al, 2023; Kamal et al, 2025; Novak et al, 2022

Self-Compassion

Neff & Dahm, 2015

- Compassion:
  - Sensitivity to the experience of suffering (includes acknowledgment of the presence of pain) and a desire to alleviate that suffering
- Self-Compassion:
  - Compassion directed inward, relating to oneself as the object of care and concern when faced with the experience of suffering
  - Components:
    - Mindfulness
    - Self-Kindness
    - Common Humanity

Neff, 2023

Self-Compassion

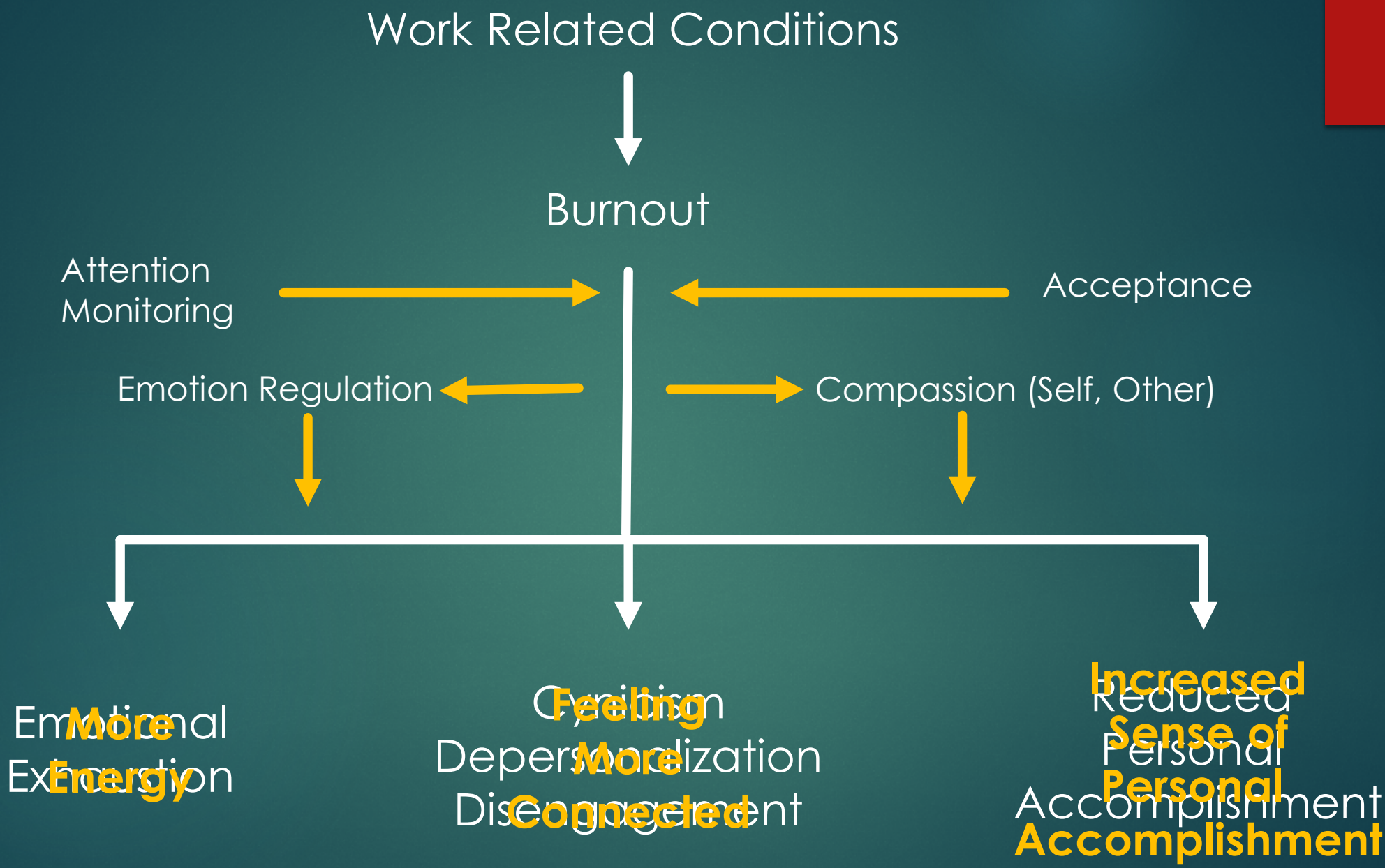
- Low self-compassion:
  - Significantly associated with higher levels of burnout (especially emotional exhaustion and empathic distress)
- Higher self-compassion:
  - Significantly associated with less emotional exhaustion
  - Significantly associated with less cynicism (depersonalization) and greater job satisfaction
  - Significantly associated with greater prosocial behavior

Begin et al, 2024; Loera et al, 2022; Liu et al, 2025

Self-Compassion and Burnout

- Self-Compassion training
  - Moderate to large ES on Reduction in Burnout Scores
- MBI have been consistently found to also increase self-compassion
- Changes in self-compassion have been found to be a strong predictor of outcomes in MBI and may explain the benefits of mindfulness training on burnout.

Crego et al, 2022; Delaney, 2018; Lyons & Galbraith, 2023


Work Related Conditions
Burnout
Attention
Monitoring
Acceptance
Emotion Regulation
Compassion (Self, Other)
Emotional
Exhaustion
More
Energy
Cynicism
Depersonalization
Disengagement
Feeling
More
Connected
Reduced
Personal
Accomplishment
Increased
Sense of
Personal
Accomplishment

Barrier to Mindfulness Utilization in HCP

- Time constraints
- Increasing Demands (work and home)
- Unpredictable work schedules

- Creates reluctance to commit to MBP even if there is growing evidence of benefit

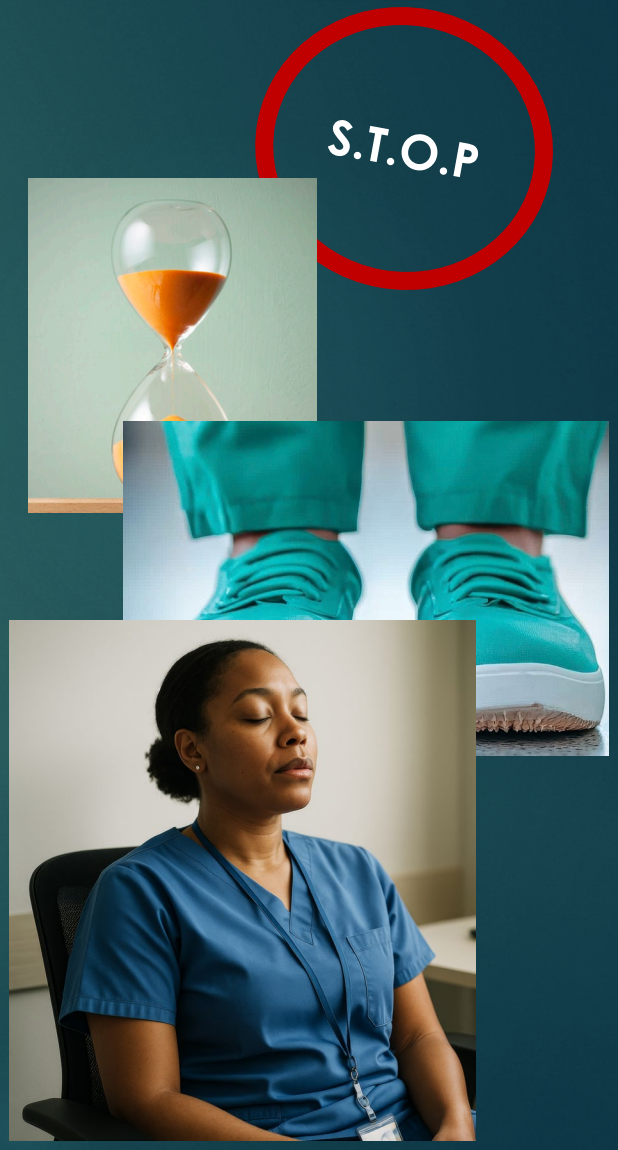
- Further adaptations for health care environment essential

Mindfulness Micro-Practices

- Recent research suggests that frequent, shorter practices throughout the day can enhance mindfulness and reduce stress
  - Manigault et al, 2021; Strohmeier et al, 2021
  - Critical element associated with outcomes in MBI
- **Short Practices – Many Times**
- Supports integration of mindful awareness and compassion (self and other) into daily activities

Mindfulness Micro-Practices

- S.T.O.P: Stop-Take a Breath-Observe-Proceed
- 3 Minute Breathing Space
  - 1 minute – observe body, thoughts, emotions
  - 1 minute – awareness of sensations of breath
  - 1 minute – awareness of sensations in whole body
- Soles of the Feet – orienting attention to sensations in each foot, then both; focus on sense of connection with ground
- Brief Body Scan – 3-5 minute awareness of sensations in various parts of the body (jaws, face, shoulders, back, arms, legs, feet)



Lovingkindness MicroPractices

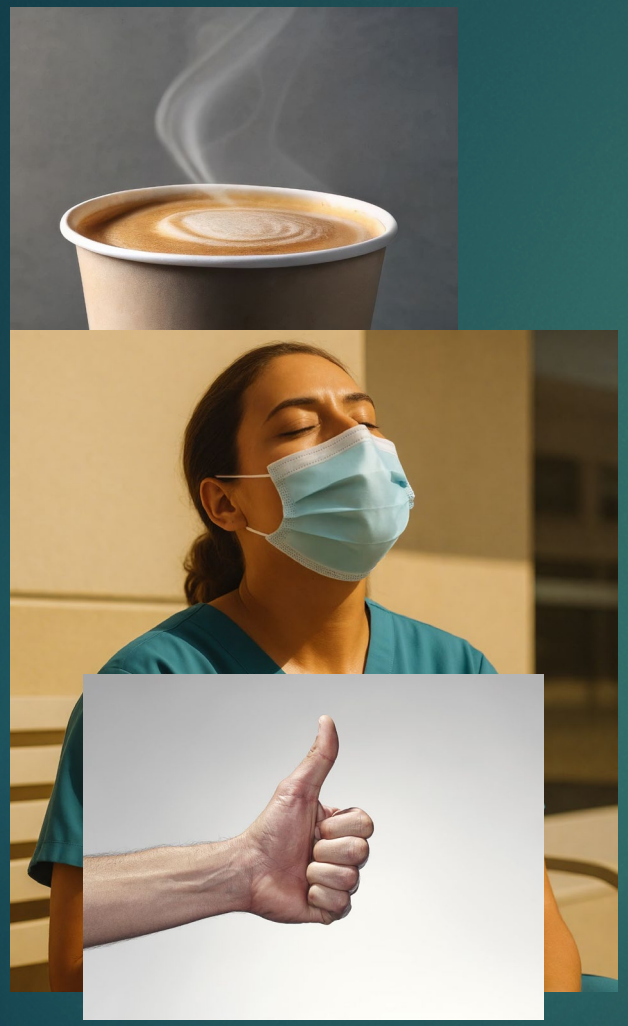
- Just Like Me
- Intentional wishes for well-being for those we encounter in daily activity
  - Acknowledge their humanity and silently wish them well
- Looking for Good Intentions

Self-Compassion MicroPractices

- Self-Compassion Break
  - Aware of one's feelings of stress, overwhelm (mindfulness)
    - Acknowledge – This hurts; This is hard
  - Recognize that this is part of life (common humanity)
    - Note to oneself – Other's too feel this way: I'm not alone; It's not just me
  - Offer self kindness, grace, space, and support
    - What do you need to hear right now that would be kind?
      - How would you respond to a friend?

https://self-compassion.org/exercises/exercise-2-self-compassion-break/

Positive Emotion Practices



- Savoring
  - 15-30 seconds to bring full awareness to feel pleasant experience
- Nature Exposure
- Appreciation
- 3 Good Things
  - Evening Recall Activity (written)
  - Write down 3 things that went well, recall and describe how you felt at the time
  - Reflect on why that thing went well
  - 7 Days

Resources

- Website Resources
  - Variety of Online MBSR and Adaptations for HealthCare Providers/Professionals, Compassion Training Programs, Mindful Self-Compassion Training Programs
  - Free Guided Practices:
    - University-Based centers for mindfulness
    - Self-Compassion: Mindful Self-Compassion (non-profit)
    - Greater Good in Action (UC Berkeley Greater Good Science Center)
- Evidence Based Apps (Examples)
  - Healthy Minds:
    - University of Wisconsin, Madison Center for Healthy Minds

Thank You

Comments – Questions – Insights?

Contact:
asebren@asu.edu

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