
Mindfulness training: student self-care and clinical practice

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Learning Objectives

- **To understand the principles and applications of mindfulness and mindful practice**
 - **To explore the role of mindfulness training for self-care in medical curricula.**
 - **To discuss the potential application of mindful practice to participants' educational programs.**
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What is Mindfulness?

**Moment to moment nonjudgmental awareness.
Includes the following features:**

“Clear”

Nonconceptual, nondiscriminatory

Flexibility

Empirical

Oriented to the present moment

Stability

Mindfulness-Based Interventions in Medicine and Medical Education

Well-being focused programs for patients, medical students, physician, health professionals

Clinical competence-focused programs for medical students

Mindfulness Based Stress Reduction Programs

Mindful Communication Programs

Medical humanities / mindfulness programs

Research:

Health outcomes

Medical Student Stress/Distress

Clinical performance?

Stress: Definition

Change needed, demand to be met (as appraised by the subject)

Perceived potential to overwhelm (or “stress”) the subject’s resources (the resources as appraised by the subject)

Stressor: Anything that causes this reaction in the subject.

Physiology of Stress

Sympathetic/Parasympathetic nervous system imbalance

Sympathetic Hyper-arousal, monoamine neurotransmitter excess/burnout

Low parasympathetic tone

Chronic stimulation of the HPA axis

Prefrontal Cortex inhibition

Amygdala activation/Hippocampus inhibition

Immune system activation/inhibition :

Acute phase stimulation

Specific immunity inhibition

Psychological Effects of Chronic Stress

Real or imagined threats induce the same stress response:

Imagined scenarios involving threat or failure

Perceived threat

Comparison of actual situation with ideal

Degradation of self or present situation

Recall of disturbing events

Self-criticism

Hostility

Rumination about a negative event

Emotional avoidance

Pessimism

Denial

Mindfulness-Based Stress Reduction

Through observation of physical sensations, thoughts and feelings, participants learn that they are more than these components of their experience, -- and that they can respond rather than react to life's circumstances -- by cultivating a quality of awareness that allows for more discernment in their appraisal of these circumstances.

Research on MBSR - examples

Physical illness - Psoriasis, chronic pain, cardiovascular disease

(Kabat-Zinn J; others)

Mental illness / psychological well-being – Depression, eating disorders, suicidal behavior

(Sigal Z; Teasdale J; Linehan M; Kristeller J)

Brain Structure/Function/Plasticity, and Immune Function

(Davidson J; Moynihan J; Krasner M)

Effects on Physical and Mental Health, and Professional Interpersonal Skills in Medical Students

(Hassed; Rosenzweig; Smith)

Mindfulness and quality of care

- **Data acquisition / knowledge**
 - Tacit - explicit (Polanyi)
 - Propositional - process - personal (Eraut)
 - “Top-down” cortical influences

 - **Reasoning / Judgment**
 - Pre-attentive processing (Triesman)
 - System 1 - System 2 (Kahnemann)
 - Fuzzy traces - “gist” (Reyna)
 - Pattern recognition - heuristics - scripts (Bordage)
 - “Hot” cognition – somatic markers – imagined outcomes (Damasio)
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“Uninvited Guests” in Medical Practice

- **Ambiguity and uncertainty**
- **Conflict between the needs of patients and clinicians**
- **Strong emotions: the patient’s and one’s own**
- **Technical errors**
- **Witnessing unbearable suffering**
- **Contradictory evidence**
- **Unanticipated serious illness**
- **Impermanence of knowledge**
- **Illusion of competence**
- **Lack of control**
- **Miscommunications and misunderstandings**

Our judgment is easily derailed

by:

- **Unexamined emotions**
 - **Failure of curiosity**
 - **Low-level heuristics**
 - **Over-concreteness / rigidity**
 - **Inability to reframe the encounter**
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Reacting and responding to patients' requests for medication

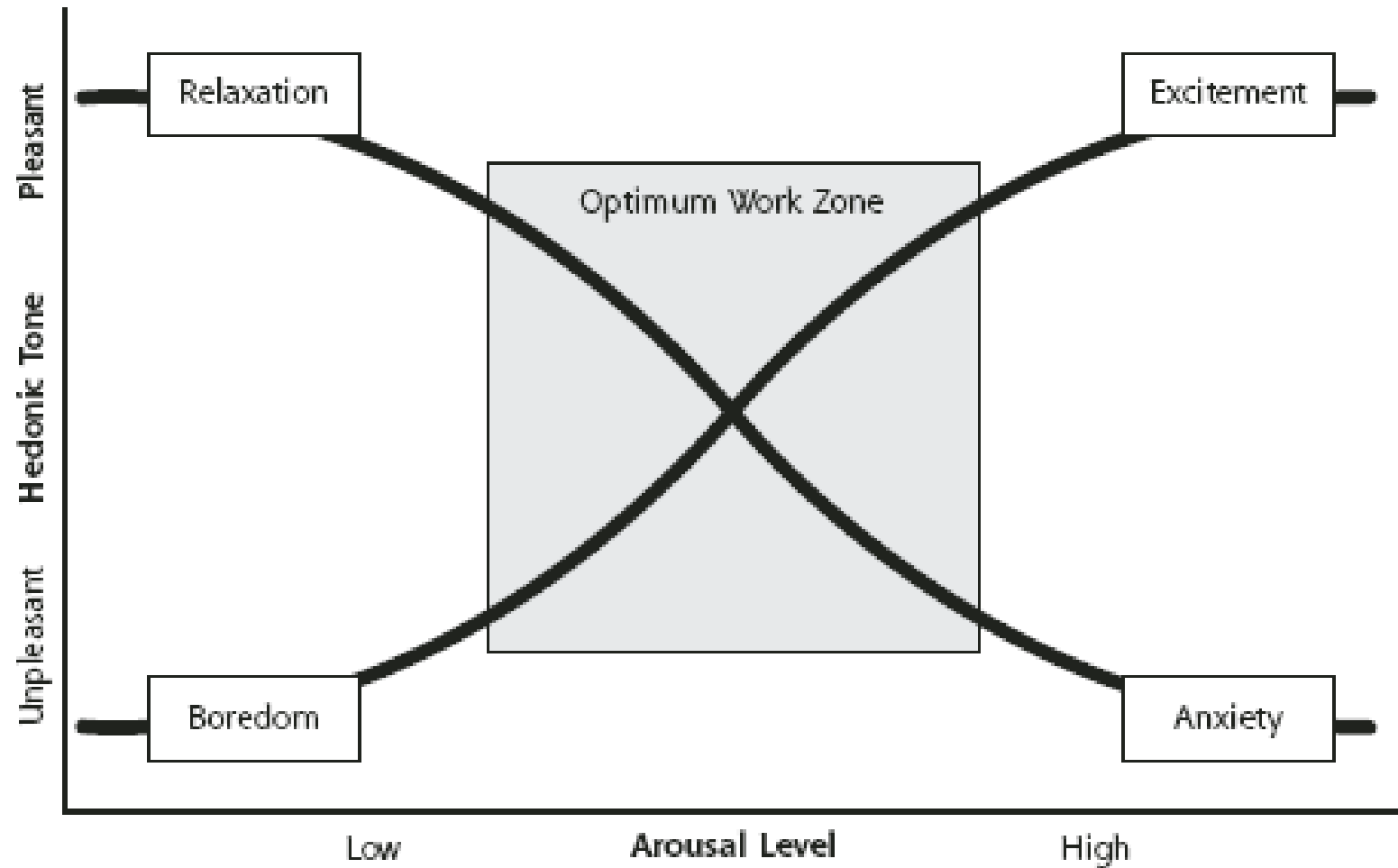
■ **Reacting**

- Interpreting request as “self-dx”
- Activating decision rules or “scripts” that lead to premature closure – acquiescence or conflict
- Affective and irrational responses: “he must be suffering”, “err on the side of overtreating”, obligation, ignoring, call to battle

■ **Responding**

- Noticing the patient concern
- Reconsideration of diagnosis or plan
- Active listening and validation
- ~~Transparency and patient involvement in decisions~~

Figure 3. Apter's model of emotional reversal theory.



The optimum work zone avoids extreme values in arousal and hedonic (pleasure) tone. Extreme positions make cognitive processes difficult.

Mindful Practice

Paying attention, on purpose, to one's own mental and physical processes during everyday tasks to act with clarity and insight.

... leads the mind back from theories, attitudes and abstractions to the experience itself

Mindful practice in action

- **Attentive observation**
 - Observing the observer observing the observed
 - Using peripheral vision and pre-attentive processing
 - **Critical curiosity**
 - Ability to hold contradictory ideas simultaneously (W James)
 - Avoiding premature resolution
 - **Beginner's mind**
 - Examining and setting aside categories/judgments (WJ)
 - Ability to tolerate not knowing
 - **Presence**
 - Willingness/ability to simply *be* there, undistracted
 - Moving from *reacting* to *responding*
 - Focusing on the task at hand, regardless of pleasant or unpleasant thoughts or feelings
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Goals of Mindfulness in Medicine

Mindful Practice

- Attentive observation
- Critical curiosity
- Beginner's mind
- Presence



- Clinical reasoning
 - Patient safety
 - Compassion
 - Technical skills
 - Healing relationships
 - Ethics
 - The clinician's well-being
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What Can One be Mindful Of?

Body / physical sensations / proprioception
Perceptions / intuitions
Thoughts / cognitions / judgments
Emotions / reactions
States of mind

Formal practice

The Monash program

Improving quality of care and reducing burnout

**The Mindful Practice curriculum at
the University of Rochester**

Goals of the mindful practice curriculum

- **To foster patient safety, caring attitudes and professionalism**
 - **by enhancing mindful practice in residents and students when encountering challenging situations in clinical medicine.**
 - **To foster elements of mindful practice (attentive observation, critical curiosity, informed flexibility and presence) in trainees at multiple levels.**
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Institutional Goals

- **To foster a mindful institutional culture**
 - **Vigilance, openness, resilience, flexibility**
 - **Teamwork and leadership**
 - **Physician health and well-being**

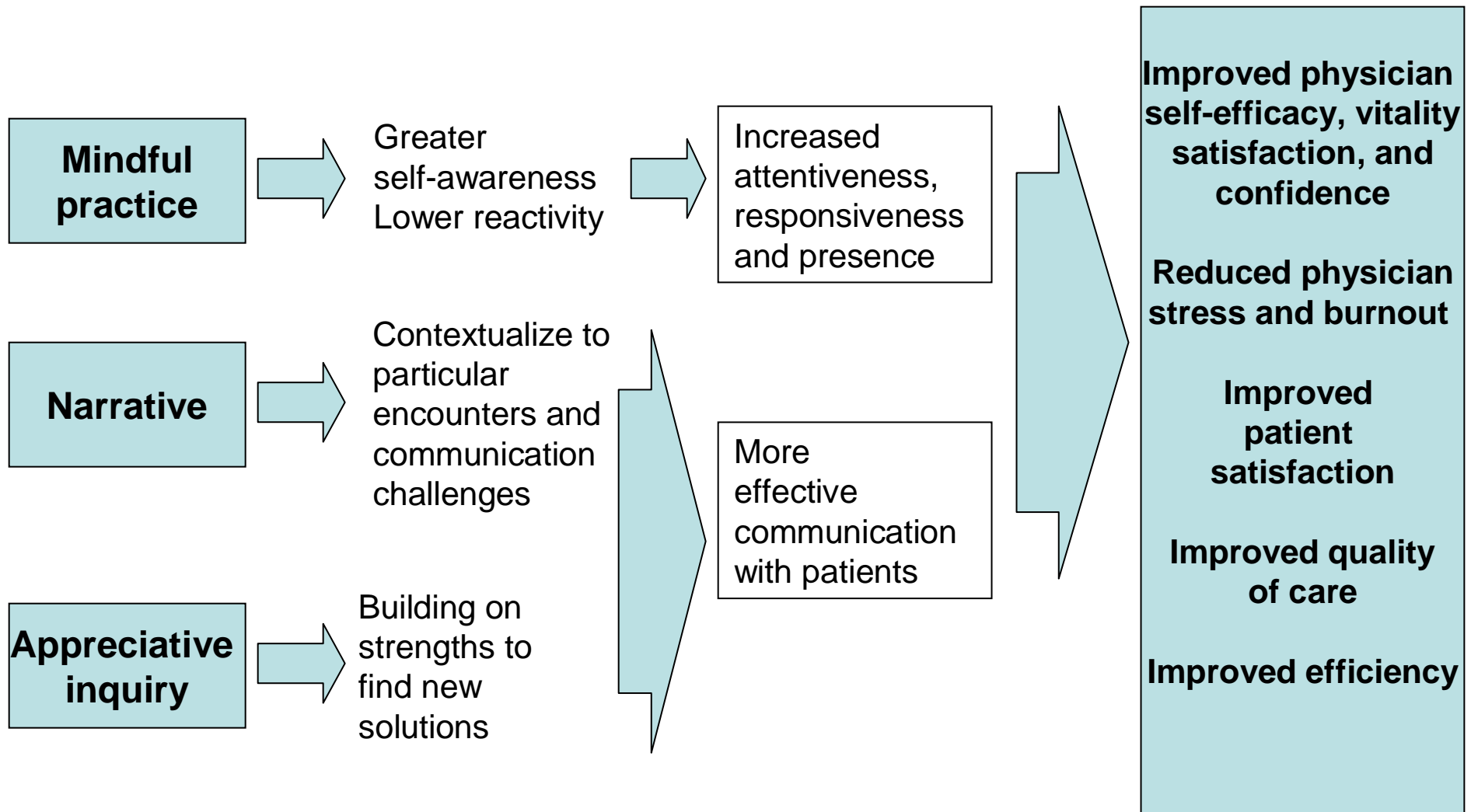
 - **To change the “informal curriculum” which influences professional development**
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Mindful practice “curriculum”: principles

- Providing theory and evidence
 - Brief theme-based didactic sessions
 - Building skills
 - Experiential exercises to practice attentiveness, curiosity, beginner’s mind, presence
 - Making links to actual practice
 - Narrative
 - Maintaining a positive focus
 - Appreciative inquiry
 - Measuring clinical and personal growth outcomes
 - Decision-making
 - Empathy, burnout, mindfulness
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Theoretical Model: Mindful practice, narrative and appreciative inquiry

Proposed effects on physician well-being and quality of care



Curriculum Design: Students/Residents

- Required for all trainees in participating programs
 - 5 → 6 sessions per year
 - 90 minutes
 - When?
 - During 3rd year clerkships (4-yr med school) for students
 - Every 2-4 weeks for residents
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Faculty

- **2 faculty members from each department**
 - **Faculty development**
 - **Intensive MBSR training (6 weeks, 2.5h/wk plus all day retreat)**
 - **3-hr teaching MBSR workshop**
 - **3-hr narrative medicine workshop**
 - **3-hr appreciative inquiry workshop**
 - **3-hr run-through session**
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Session Structure

- **Introduction of the theme**
 - Didactic / brief discussion
 - **Brief experiential exercise**
 - Videos, meditation, observation exercise
 - **Narrative exercise (written or oral)**
 - Debriefed in pairs or large group
 - **Brief meditative or experiential exercise**
 - “Homework”
 - **Discussion**
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Primary care physician clinical trial

- **70 primary care physicians**
 - Immediate vs delayed intervention
 - **Eight 2.5-hr weekly evening sessions**
 - **Full-day Saturday retreat off-site**
 - **Ten monthly 2.5-hr sessions (ending Sept 08)**
 - **Outcome measures**
 - Well-being, empathy, mindfulness, burnout
 - Clinical efficiency, quality of disease management
 - Diagnosis of mental disorders
 - Evaluation of course
 - Stay tuned in 2009 for results
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Themes

- **“Noticing”**
 - **Healing and suffering**
 - **Professionalism: boundaries and self-interest**
 - **Thinking: clinical reasoning and premature closure**
 - **Relationship: connection and conflict**
 - **Self-care and burnout**
 - **Communication and misunderstandings**
 - **Reacting and responding to errors and bad outcomes**
 - **Death and dying**
 - **Others under development**
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Change blindness

Formal practice

- **Take a few minutes to notice your body, your thoughts, your feelings**
 - **What happened today that you noticed in particular?**
 - **What are your expectations around discussions about professionalism?**
 - **What thoughts, feelings and sensations are you experiencing at this time?**
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Paired interview exercise

- Find a partner
 - Think of ***“a time when you found yourself challenged about doing the right thing in a clinical situation.”***
 - ***Jot down a few notes before telling the story***
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Take 10 minutes

- **For the storyteller, address:**

- What happened?
- What helpful qualities did you bring to that moment?
- Who else was involved, and how did they contribute?
- What aspects of the context made a difference?
- **What lessons from this story**

are useful to you? *If you get done sooner, just be silent.*

We'll let you know when it is time to switch.

- **For the listener:**

- Be attentive, don't interrupt
- Ask questions to help your partner clarify and provide details
- Don't talk about your own ideas or experiences
- Use reflective questions and empathy when appropriate

Habits of self-questioning

■ Attentive Observation

- “If there were data that you ignored, what might they be?”
- “What did you notice?” What were you unable to see?”

■ Critical Curiosity

- “What are you assuming that might not be true?”
- “What was surprising or unexpected?”

■ Beginner’s Mind

- “What would a trusted peer say?”
- “Can you see the same situation/patient with new eyes?”

■ Presence

- “What do you notice about yourself when you are at your best?”
- “What moved you most about this situation?”

Debriefing:

Discuss your reactions

- **Now discuss your personal reactions to telling and hearing the story (3 min)**
 - **Thoughts**
 - **Feelings**
 - **Bodily sensations**
 - **What questions were helpful and why?**
 - **How did you react to the exercise and to each other?**
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Questions?

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