To Burn Out or to Thrive?
Mindfulness: A prescription for the practitioner and the profession.

How to optimize emotional wellness and attention in 15 minutes a day.

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Introduction

In a 2022 survey nurses reported experiencing in the prior 14 days:

feeling stressed	68%
feeling overwhelmed	52%
feeling burnout	38%

(ANA Enterprise, August 2022, Mental Health and Well-Being bar chart)

Six in 10 NPS reported burnout in 2022, according to the *Medscape Nurse Practitioner Burnout & Depression Report 2022*.
(Robbins, 2022)

Our healthcare system is in crisis. It is beyond the scope of this presentation to explore the epidemiology and possible systemic prevention actions for the burnout epidemic, instead I will focus on how Mindfulness Practice, an empirical, evidence-based activity, can both treat and prevent burnout when instituted on an individual (practitioner) or small group (practice or hospital-based care unit) basis. Beyond the protective benefits of mindfulness practice, I'll highlight some positive benefits as well.

I will review a brief history of contemporary evidence-based mindfulness, explore the nature of Mindfulness and Mindfulness Practices and the mechanisms of action, review the benefits of mindfulness for the practitioner, the profession, and those we serve, and provide an experiential exercise to introduce you to a foundational mindfulness practice.

A Brief History of Mindfulness

500 BCE Siddartha Gautama "The Buddha" who was by his own words a human with no supernatural powers, encouraged his followers to test his teachings and accept them if their own experience demonstrated their *usefulness*. The earliest writings about mindfulness date to the teachings of the Buddha.

In 1979 Jon Kabat-Zinn, a biologist on the faculty at the University of Massachusetts Medical Center introduced a program of meditation which was originally intended for patients who had not received full satisfaction for standard medical treatments. Kabat-Zinn was a practitioner of meditation and yoga. He believed that mindfulness practice could benefit patients but recognized that, if taught in the traditional context of Buddhism there would be resistance and pushback from the medical community. He introduced the practice in plain language without reference to the traditional belief system of Buddhism. The earliest participants were people with chronic pain with a variety of medical problems, including, cancer, neurologic and orthopedic disorders. The response was positive, and Mindfulness Based Stress Reduction (MBSR) was born.

2002 Mindfulness Based Cognitive Therapy (MBCT), based on MBSR, was developed by Segal, Williams, and Teasdale at Oxford University as a therapy for relapse prevention of major depression.

(Holland, 2022)

2001 the discovery that blood oxygen levels, detected by functional MRI (fMRI), correlated with cognitive activity, began a revolution in neuroscience which is now demonstrating the neuroanatomical and functional mechanisms of attention and meditation.

(Weder 2022)

What is mindfulness?

A google search on the term “mindfulness” on April 5th retrieved “About 1,140,000,000 results “.

The term Mindfulness has different meanings to many people. My perspective is in this teaching lineage: The earliest teachings on mindfulness date to the time of the Buddha around 500 BCE. For more than 2000 years Buddhist teachings have been the foundation of mindfulness. Mindfulness was first taught *as a secular practice* in the 1980’s by Jon Kabat-Zinn. Since then, many research and teaching institutions around the world have collaborated to maintain a consistent and replicable body of work. (Holland, 2022)

The term “Mindfulness” may refer to formal meditation practices which include focused attention, open monitoring, the body scan, mindful walking, mindful yoga, and informal practices which intentionally bring mindful attention to routine daily activities such as eating, housework, driving, gardening, etc. (Kriakous et al. 2021). Mindfulness in the fullest sense refers to a way of encountering all aspects of life, pleasant and unpleasant, with a sense of curiosity, attentiveness, and equanimity. (Holland, 2022)

Descriptions of mindfulness stress the present moment, non-judgement, both internal and external experiencing, and are similar across sources.

> *“Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment.”* (Kabat-Zinn, 2003, p. 145)

> *"Mindfulness is characterized by full attention to internal and external experience of the present moment, with attention employed equanimously without judgment, elaboration, or emotional reaction."* (Jha et al., 2014, p. 351)

> *"Mindfulness is the intentional and nonjudgmental awareness of present-moment thoughts, feelings, and bodily sensations. Mindfulness is a state of consciousness that helps the mind and body find balance and harmony, which are key components of a state of well-being."* (Othman et al., 2023, p. 2)

To summarize: Mindfulness refers to both the practices, formal and informal, and to the resulting increased mindfulness in everyday life. There are several practices which are frequently mis-identified as mindfulness. (Jha, 2019; Holland, 2022)

Mindfulness is not:

- A relaxation technique
- A way of silencing thought or emptying the mind
- Deep beathing exercise
- Guided imagery
- Yoga
- A technique to induce a particular state of consciousness.

Some of these techniques may be used as a component of mindfulness training, but mindfulness is simply paying attention, on purpose, to present moment experience, internal and external, with the intention to gain clear perception and understanding.

How does it work?

All definitions of Mindfulness include a central role of attention, indeed, mindfulness practices can be seen as “attention training”. (Gunsilius et al., 2024; Jha 2019)

The mechanisms of action of mindfulness practices are understood from a functional cognitive perspective and from a neuroplasticity perspective.

Williams et al. (2015) describes four core processes which work concurrently during mindfulness practice: Awareness, attention, acceptance, and reperceiving. **Awareness** is deep attention to present moment experience, internal and external. **Attention** is maintaining focus on the present moment experiences, returning attention to the focus when mind-wandering occurs. **Acceptance** is simply experiencing without judgement or internal commentary. **Reperceiving**, also known as **decentering**, is a shift in perception from the reference point of *self-as-experiencing* to *self-as-observing*.

I offer as a metaphor that ordinary experience is like being in the middle of a whirlpool of thoughts, sensations, and environmental stimuli - getting spun around and sucked down, while decentering is standing back and observing the whirlpool. Decentering supports a clearer and more objective understanding of what is experienced and may result in increased insight. (Holland, 2022)

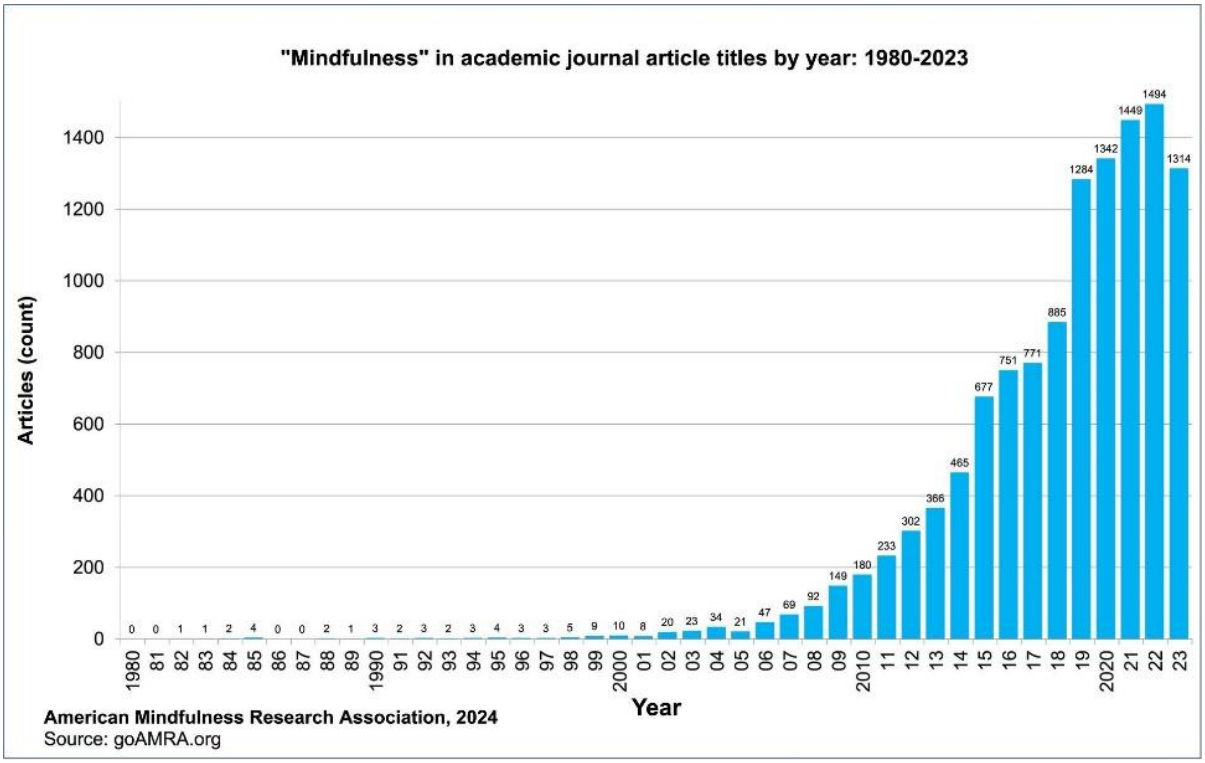
Jha (2019, at minutes 33:31) likens the repeated act during meditation of noticing the mind wandering and intentionally returning attention to a chosen sensory focus as “pushups for the brain” which contribute to improvement in ability to maintain attention. Jha reports that neuroimaging shows changes in the brain structures related to focused attention and intentional control of attention.

Williams et al (2015, p. 3 Mechanisms section) also reports neuroimaging findings that mindfulness practices "… influence neuro-cognitive pathways and brain morphology …" giving as an example the finding that following the eight-week MBSR course neuroimaging has identified "... increased cortical thickness and grey matter density in the posterior and anterior cingulate cortex, hippocampus, and insula …" and that "… Functional studies have demonstrated increased activation in these areas as well …".

Research demonstrated benefits

Research related to the benefits of mindfulness, the underlying mechanisms of the effects of mindfulness, and other issues related to mindfulness are extensive. This graphic from the American Mindfulness Research Association (Current, Library page) shows the growth of work published in scientific journals since 1980.

Figure 1. Count of journal publications by year with "mindfulness" in title, 1980-2023
Data obtained from ISI Web of Science search



American Mindfulness Research Association (AMRA)
https://goamra.org/Library

More than 9,000 scholarly and peer-reviewed articles have been written in just the last 5 years. "… it is now well documented that meditation and Mindfulness Based Interventions are associated with several positive outcomes including decreased mental health symptoms … and increasing positive states of well-being." (Owens et al., 2020, p.275 Mindfulness based interventions section)

Mindfulness Based Stress Reduction (MBSR) and Mindfulness Based Cognitive Therapy (MBCT) have become the standard for research into the benefits of mindfulness and as such provide a research basis for comparison of similar studies (Othman., et al. 2023).

MBSR and MBCT are eight-week courses with 2 ½ hour classes, one full day practice retreat, and 30 – 45 minutes of mindfulness practices daily. (Holland, 2022)

In addition to the health benefits of mindfulness there is also a strong protective and supporting effect on attention and working memory, which are foundational to all cognitive functioning. In a podcast by Oxford Mindfulness Foundation, neuroscientist and researcher into the brain's "attentional system", Amishi Jha (2020, minutes 7:54) asserts that "…mindfulness was found to be a repeatedly reliable and I would say exclusively effective technique. …" to protect attention and working memory from the degrading effects of stress, and to …" to bolster our sense of aliveness and our effectiveness in this world."

Advances in brain neuroscience demonstrate that the effects of mindfulness practices are at least partially mediated by changes in structural and functional brain organization. This is demonstrated in experiments demonstrating "…modified the pattern of neural activity …" which was associated with "… behavioral improvements in the functions of attention and emotion regulation …". (Jha et al., 2014, p. 353 para. 2 – p. 345)

One measure of the value placed on MBSR is its proliferation: More than 750 medical centers around the US offer *Mindfulness Based Stress Reduction* (MBSR) programs. (Jha et al., 2014)

Numerous studies have found MBSR to be beneficial for persons with a wide range of physical and psychological problems including:

- chronic pain
- skin-related diseases
- binge eating
- substance abuse
- fibromyalgia
- occupational burnout and compassion fatigue

"MBSR has been adapted to treat depression and anxiety by the inclusion of cognitive therapy to create Mindfulness Based Cognitive Therapy (MBCT)" (Jha et al., 2014)

Many studies use shorter mindfulness-based interventions as well, and there is a growing body of research which seeks to determine efficacy of "lower doses" than the eight-week MBSR and MBCT programs (Jha et al., 2014)

Jha (2014) states that attention and working memory can be degraded by prolonged stress but that mindfulness training can have a protective influence. To test this hypothesis Marine reservists beginning a high stress pre-deployment to Iraq training interval received a brief mindfulness training consisting of four weeks, two hours a week with "home practice" between classes. Participants who practiced *for an average of 12 minutes a day* (high practice) demonstrated significant results versus (low practice) participants.

Mindfulness practice has been shown to have benefits for people with a wide variety of medical and mental health problems. Williams (2015. p. 8, Stress section) finds that:

> *"… Reductions in the response to stress are some of the most robust findings of MBSR."*

Benefits also include reductions in anxiety, and improvements in depression, pain perception, sleep and quality of life.
Williams (2015) further notes benefits for patients in family, adult, women's health, and psychiatric practices. In addition to benefits for patients:

> "*Moreover, research is beginning to demonstrate how health care providers can use MBSR to reduce stress, burnout, and medical errors.*" (Williams, 2015, p. 2 Introduction section)

Greeson and Chin (2019, p. 6 Conclusion section) find that …

> *"A preponderance of evidence shows that mindfulness … can reduce patient-reported symptoms and improve coping and [Quality of Life] across many physical health conditions. …Given the increasing prevalence of chronic, often comorbid conditions – from cardiovascular disease, diabetes and depression, to chronic pain, cancer, and anxiety – mindfulness can play an important role in increasing self-awareness and self-care, as part of an integrated approach to health promotion and prevention, irrespective of disease stage.*

The University of Massachusetts Medical Center's Center for Mindfulness website (current, FAQ's web page UMASS Medical Center's Center for Mindfulness: https://www.ummhealth.org/umass-memorial-medical-center/services-treatments/center-for-mindfulness/faqs) lists research on fifteen common medical problems which may benefit from MBSR.

The practices

Formal Mindfulness practices include the *body scan*, *sitting meditation*, *mindful walking* and *hatha yoga*. Informal practices bring mindful attention into everyday activities which are usually mindless tasks such as brushing teeth and washing dishes. (Kriakous et al., 2021)

Jha, et. al. (2014, p. 352 para. 2) describe the focused attention practice:

> "A foundational practice exercise offered in [mindfulness training] programs is known as sitting meditation. Participants are instructed to sit in a relaxed upright posture and to direct their full attention to the sensations of breathing. Whenever their attention wanders, they are instructed to return it to the breath."

In addition to training attention, mindfulness training…

> "…emphasizes the importance of repeatedly and intentionally bringing an affective quality of acceptance to present moment experience". (Jha et al., 2014, p. 352 para. 2)

Mindfulness Demonstrates Reduced Compassion Fatigue and Burnout in Hospital Nursing Staff

A three-minute practice done three times a day for four weeks in a group of nurses demonstrated significant improvements in Burnout and Secondary Traumatic Stress. (Owens, et al., 2020).

This study is selected for highlighting in this white paper because it involves nurses, it demonstrates the efficacy of a brief mindfulness intervention, and demonstrates benefits related to stress, compassion fatigue, and burnout.

The subjects were acute/critical care RNs in the New York City region from five New York City area hospitals. Thirty-two nurses participated over four weeks. The intervention demonstrated statistically significant reductions in compassion fatigue measures.

This study evaluated the impact on Compassion Fatigue, Burnout, Secondary Traumatic Stress of the Three Minute Breathing Space done three times a day for four weeks.

The study found significant improvements in Burnout and Secondary Traumatic Stress. Compassion Satisfaction scores which were high at baseline remained high, indicating that participants experienced professional satisfaction with their work. Participant retention (32 of 45 nurses recruited, or 71% completed the study) demonstrated the acceptability and feasibility of the intervention. The efficacy of the intervention was further demonstrated by adherence to the prescribed practice: Participants practiced on average two times per day, three days a week instead of the prescribed three times a day, seven days a

week. *That's a weekly average of six mindfulness practices versus twenty-one per week and still demonstrated statistically significant results.*

Noteworthy is the use of the "Three Minute Breathing Space", one of the briefest mindfulness practices which have been authored by experts in the mindfulness field and incorporated into evidence-based mindfulness courses. One author of the "Three Minute Breathing Space" which is taught in Mindfulness Based Cognitive Therapy (MBCT) is Dr Zindel Segal, one of the authors of the MBCT curriculum. A variation of the "Three Minute Breathing Space" – "The Three-Step Breathing Space" is included in the Introducing Mindfulness curriculum developed by Dr. Segal's colleagues at Oxford Mindfulness Foundation.

Importantly, Rebecca A. Owens, the principal investigator for this study, received formal training from Zindel Siegal and others. She in turn provided instructions and practice guidance to the study participants. Mindfulness practices are best taught by those who have been educated to teach mindfulness. Jon Kabat-Zinn (2003, p. 149. Some challenges section) stresses that authenticity is essential when teaching mindfulness which …

> "… cannot be taught to others in an authentic way without the instructor's practicing it in his or her own life. Mindfulness meditation is not simply a method that one encounters for a brief time at a professional seminar and then passes on to others for use as needed when they find themselves tense or stressed."

The Three Minute Breathing Space:

The Three Minute Breathing Space provides a practical brief exercise to stop and become mindful of whatever is happening in the present

moment. This is the shortest and one of the most practical practices from the MBCT curriculum, each step may take about one minute. This is especially beneficial when caught up in reactivity, stress, or overwhelm.

> **"Step 1. Becoming Aware**
> Become more aware of how things are in this moment by deliberately adopting an upright, even and dignified posture, whether sitting or standing and, if possible, closing your eyes. Then bringing your awareness to your inner experience and acknowledging it, asking yourself:
> - Noticing any body sensations here right now?
> - Any emotions here?
> - Perhaps some thoughts passing through the mind?
>
> **Step 2. Gathering**
> Then redirecting your attention to focus on physical sensations associated with breathing. Bringing the mind to settle on the breath, wherever you feel it most vividly. Tuning into these sensations for the full length of the in-breath and the full length of the out-breath. Remember: if resting attention on sensations of breathing is not comfortable, feel free to choose another anchor (maybe sensations of contact – feet on floor, body on seat, hands resting in the lap etc.), and tuning into these sensations as they shift and change.
> **Step 3. Expanding**
> Then expanding the field of awareness around the breath, so that it includes a sense of the body as a whole, your posture, and facial expression. As best you can, bring this wider awareness to the next moments of your day.."
>
> (Oxford Mindfulness Foundation 2023, p. 25 Practice: The breathing space section)

(Oxford Mindfulness Foundation 2023, p. 25 Practice: The breathing space section)

Note the similarities of the "Three Minute Breathing Space" to this Mindfulness of Breathing Focused Attention Practice used by Amishi Jha (2019, time stamp 33:29) in a presentation at the Pentagon:
" …

1. Sit in a comfortable, upright, and alert posture. Focus all of your attention to the sensations of breathing.
2. **Select** a region of the body to focus on.
   Ex. The coolness of air on your nostrils
   Ex. The movement of your abdomen, in and out.

3. Maintain attention to the sensations of breathing. You are not controlling the breath, but instead, observing it in this very particular way.
4. When you notice that your mind has **wandered** from the sensations of breathing to other topics, thoughts, memories, or sensations, gently return it to the sensations of breathing. [underscores and color in the original] …"

Both practices are simple, brief and easy to teach to subjects with no prior meditation experience. Instructions are concrete, presented in simple form, and avoid jargon. Both practices are easy to learn. Research demonstrates that both practices are effective at eliciting mindful attention.

An experiential Introduction to the “Sitting Meditation” practice

The invitation now is to participate in a brief focused attention mindfulness practice. Learning about mindfulness in a conceptual intellectual mode of learning may be essential to deciding to investigate the benefits of mindfulness practices, but it is only through experiencing a mindfulness practice that one can move beyond the purely abstract intellectual mode and learn what it means to be mindful.
Instructions for this practice are typical of mindfulness practice standards. The specific wording is the authors’
and follows accepted standards. (Crane et al., 2018; Holland, 2022; Koerbel & Mitcheom, 2022)

The guided practice recording can be accessed through this link:
https://www.invitemindfulness.com/wp-content/uploads/2024/07/5-minute-guided-mindfulness-meditation.mp3

Conclusion

Although mindfulness practices may seem simple, just as physical exercises may seem simple, they are powerful and can show measurable results when practiced regularly, even for "… as little as 12 minutes a day, three to five days a week … it very much is like physical exercise, where the more you do, the more you benefit. Of course, if you don't do it at all or discontinue, you're not going to receive the benefits." (Jha, current, time stamp 43:54 – 43: 59).

The recommendation in the MBSR curriculum is for thirty to forty-five minutes a day formal practice, using audio recordings for guidance, with eventual progression to practice without recorded guidance. For beginners shorter practice sessions of five to ten minutes duration are suggested. Many mindfulness practitioners aim for a daily thirty minutes of formal practice.

Mindfulness practices have been repeatedly shown to benefit both clinical populations dealing with a broad range of health issues as well as providing stress-protective and life-enhancing benefits to well-people in many occupational settings.

The intention of this whitepaper is to convey more than facts – it is to persuade the reader that Mindfulness practices have a lot to offer us – as individual practitioners and as a profession, and as a treatment option for those we serve**.**

If you have learned something, even more importantly – if you have become curious and *want to learn more*, I will offer a few resources for you to look at.

1) If you send the author of this whitepaper an email, questions will be promptly answered TDowling@InviteMindfulness.com
2) For training (and information) google:
    a. Mindfulness and Health Institute
    b. Oxford Mindfulness Foundation
    c. UMASS Mindfulness Center
3) Or find “Mindfulness for Beginners” by Jon Kabat-Zinn in YouTube
4) Three apps:
    a. Headspace
    b. Jon Kabat-Zinn App
    c. Plum Village

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