

Quantum Units Education

Affordable. Dependable. Accredited.

www.quantumunitsed.com

Integrating Mindfulness Education for Clients in a Healthcare Setting



Section 1: Introduction	2
History of Mindfulness	2
Defining Mindfulness.....	3
Mindfulness and Meditation	3
Mindfulness Research	4
Benefits of Mindfulness.....	5
Mindfulness Interventions.....	6
Mindfulness Education in Healthcare Settings	8
Section 1 Key Terms.....	8
Section 1 Reflection Question	8
Section 2: Mindfulness Theories.....	8
Kabat-Zinn's Mindfulness Theory	9
Langer's Mindfulness Theory	14
Section 3: Mindfulness in the Healthcare Setting.....	17
The Nervous System.....	18
Section 3 Key Terms.....	21
Section 4: Mindfulness Frameworks.....	21
Recognize, Allow, Investigate, Non-Identification (RAIN)	21
The Five R's of Mindfulness - Recognize, Relax, Review, Respond, Return	22
Mindfulness-Based Stress Reduction (MBSR).....	23
Mindfulness-Based Cognitive Therapy (MBCT)	25
Section 5: Resources	27
Books	27
References	29

Section 1: Introduction

References: 2, 4, 5, 6, 9, 11, 12, 14, 17, 18, 19, 20, 22, 24, 28

History of Mindfulness

Mindfulness has origins in early Eastern traditions, including Hinduism and Buddhism. Hinduism has existed for over 4,000 years, with the early scriptures containing references to key components of mindfulness, including meditation, breath awareness, and other practices that promote a sound mind. Additional texts in Hinduism also describe living with focus, balance, and discipline, which are also components of mindfulness. Buddhism was founded about 1500 years after Hinduism, with core teachings that emphasize mindfulness as one of the steps on the Eightfold Path to reduce suffering, cultivate wisdom, and achieve spiritual enlightenment (The UK College of Mindfulness Meditation, n.d.). In Buddhism, mindfulness is also described as a way of life that encompasses three core aspects: memory and remembrance, present-moment awareness, and ethics (Chems-Maarif et al., 2025).

While mindfulness has been practiced in Eastern traditions for thousands of years, it was introduced to the Western World by Thich Nhat Hanh around the 1960s. He was a prominent leader in making mindfulness accessible and understandable outside of Buddhism (Chems-Maarif et al., 2025; The UK College of Mindfulness Meditation, n.d.). Since the 1970s, there have been two primary approaches to mindfulness: one from Jon Kabat-Zinn and one from Ellen Langer (Ivtzan & Hart, 2016).

Defining Mindfulness

Kabat-Zinn and colleagues (1994) initially defined mindfulness as “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally” (p. 4). More recently, in an interview with Mindful Direct, Kabat-Zinn stated that the working definition of mindfulness is “the awareness that arises through paying attention on purpose, in the present moment, and nonjudgmentally” (Mindful, 2015). In this interview, Kabat-Zinn also noted he sometimes adds “in the service of self-understanding and wisdom” to this definition (Mindful, 2015).

Langer and colleagues (n.d.) have researched mindfulness and mindlessness. They have proposed that mindfulness is the opposite of mindlessness and define it as “the process of actively noticing new things” (para. 1). They propose that when a person actively notices new things, they are in the present moment, sensitive to context, and engaged (Langer, n.d., para. 1).

Mindfulness and Meditation

Mindfulness is a form of meditation. According to the National Center for Complementary and Integrative Health (2022), meditation “refers to a variety of practices that focus on the mind and body integration and are used to calm the mind and enhance overall well-being” (para. 1). In addition to mindfulness, there are different types of meditation. Some of them include:

- Focused meditation (using one of the five senses to focus attention).
- Spiritual meditation (deepening an understanding of spiritual or religious meaning and connection with a higher power).
- Movement meditation (actively moving guides a deeper connection with the body and the present moment).

- Progressive relaxation or body scan meditation (focuses on reducing tension in the body by slowly tightening and releasing one muscle group in the body at a time).
- Loving-kindness meditation (promotes compassion and kindness by opening the mind to receive love and send love to others).
- Visualization meditation (uses visualization to imagine scenes, images, or figures to enhance feelings of relaxation) (Bertone, 2021).

It is important to note that regardless of the definition of mindfulness, similar practices to mindfulness meditation exist across many cultures, religions, and traditions, making it a “universal human capacity that can be nurtured in many different ways” (The UK College of Mindfulness Meditation, n.d., para. 11).

Both Kabat-Zinn’s and Langer’s mindfulness approaches have been studied at length and will be reviewed in this course.

Mindfulness Research

According to Pratt (2021), the mindfulness literature grew rapidly from 1966 to 2020 (para. 4). During this time period, approximately 16,500 journal articles on mindfulness were published, with the most growth occurring after 2006. Most of the research during this period has explored the effectiveness of mindfulness as a practice or therapy. However, newer research is examining the factors that make mindfulness practice more or less effective, such as gratitude, forgiveness, compassion, and acceptance. As research in this area has rapidly grown, trends in mindfulness have also been evolving, with recent developments including online interventions and mindfulness-based apps (Pratt, 2021).

Some reasons have been proposed for the increasing popularity of mindfulness. One reason is that people are seeking ways to manage stress without needing to

change their entire lifestyle, especially as rates of burnout, anxiety, and distraction are increasing. Research has shown that practicing mindfulness can help manage stress and benefit physical, mental, and emotional well-being. Another reason is that mindfulness offers approachable, practical, and customizable strategies for people to use in their everyday lives, reaching a broader audience than practices tied to a religion, belief system, or prior experience. Furthermore, technology has advanced, making mindfulness available at any time through apps, websites, and videos (Wormsley, 2025).

Benefits of Mindfulness

Research has shown that mindfulness may have the following physical and mental health benefits:

- Reducing stress, insomnia, and symptoms of anxiety, depression, and post-traumatic stress disorder.
- Managing symptoms of withdrawal from smoking, drinking alcohol, and taking opioids unsafely (by using the mindfulness-based relapse prevention approach).
- Decreasing pain, fatigue, and stress in people living with chronic pain.
- Reducing psychological distress, fatigue, sleep disturbance, pain, and symptoms of anxiety and depression in people with cancer (studies have primarily been done in women with breast cancer).
- Enhancing immunity and facilitating recovery from common viral infections, such as the common cold and influenza (American Psychological Association, 2019; National Center for Complementary and Integrative Health, 2022).

Mindfulness Interventions

In addition to significant growth in mindfulness research, there has been a growing demand for mindfulness interventions in clinical and non-clinical settings (Ivtzan & Hart, 2016).

Clinical Settings

In a first-of-its-kind study, Barnes and colleagues sought to capture the scope of mindfulness programs and activities in academic medical settings, including clinical ones. Among 140 accredited medical schools in the U.S., approximately 80% had incorporated mindfulness in some form, including research, wellness, patient programs, or curriculum. About 25% of medical schools were affiliated with a mindfulness center that offers evidence-based interventions and conducts research in this area (Berard, 2017). More than 60% of the medical schools offered a mindfulness program for students, residents, or providers. In comparison, about 34% of medical schools or affiliated academic hospitals offered interventions to patients in clinical settings (Berard, 2017, para. 10).

One reason for growth in the clinical setting could be that research has shown that mindfulness can benefit various aspects of physical and mental health (American Psychological Association, 2019; National Center for Complementary and Integrative Health, 2022). It is also an intervention that “has the power to minimize harm and improve people’s quality of life,” while helping many different circumstances, making it an appealing intervention (Mai, 2023, para. 10). Another reason may be that mindfulness offers healthcare providers another strategy to recommend to patients to improve their well-being, in addition to traditional medical and psychological care. In fact, one study of U.S. physicians found that more than half of those practicing in an office-based setting have recommended at least one complementary health approach to their patients, including mind-

body therapies such as mindfulness (National Center for Complementary and Integrative Health, 2019).

In addition to patients using mindfulness practices learned in clinical settings, healthcare providers are using mindfulness personally and professionally. It is a valuable tool for combating burnout, improving focus and attention, and allowing more presence with patients. Therefore, it helps healthcare providers cope with demands in the clinical setting and supports positive interactions with patients and colleagues. Mindfulness can also cultivate gratitude, a beneficial practice for healthcare providers who engage in physically and emotionally demanding work devoted to caring for others (Cording, 2024).

Non-Clinical Settings

Outside of the clinical setting, in the National Health Interview Survey (a nationally representative sample collected annually in the United States), the percentage of U.S. adults who practice mindfulness meditation more than doubled between 2002 and 2022, from 7.5% to 17.3%. The 2022 survey collected data on seven complementary health approaches used by people in the U.S., and mindfulness was the most popular, followed by yoga, chiropractic care, massage therapy, guided imagery/progressive muscle relaxation, acupuncture, and naturopathy.

In an earlier 2012 survey, while only a small percentage of respondents reported practicing mindfulness in the last 12 months, close to 75% reported doing so for general wellness and disease prevention. Additionally, just over 90% reported practicing mindfulness meditation to relax or reduce stress, and more than half of the respondents reported that their goal for practicing mindfulness was to improve their sleep (National Center for Complementary and Integrative Health, 2022).

Mindfulness Education in Healthcare Settings

Since mindfulness is an evidence-based intervention that has shown benefits for physical, mental, and emotional health, it is helpful for mental health professionals in healthcare settings to be equipped with the knowledge needed to fully grasp the concept of mindfulness and teach clients about it.

This course will examine mindfulness from theoretical and practical perspectives, helping mental health professionals translate mindfulness practices into tools patients can use to understand their nervous systems, cope with physical and mental health conditions, and experience its benefits.

Section 1 Key Terms

Mindfulness has been defined in various ways. However, it can be described as “the practice of being fully present in the moment, aware of one’s thoughts, feelings, and surroundings without judgment or reaction” (Cording, 2024, para. 2).

Section 1 Reflection Question

What has your experience been with mindfulness, both personally and professionally?

Section 2: Mindfulness Theories

References: 1, 11, 12, 14, 15, 18

Jon Kabat-Zinn and colleagues developed one of the primary mindfulness approaches, and Ellen Langer and colleagues developed the other.

Kabat-Zinn's approach has been categorized as an Eastern approach as it draws on Buddhist meditative practices. On the other hand, Langer's approach is considered a Western one (Ivtzan & Hart, 2016).

Both theories are reviewed in this section.

Kabat-Zinn's Mindfulness Theory

Kabat-Zinn's mindfulness theory was introduced and trialled in the West starting in the 1970s (Ivtzan & Hart, 2016). Kabat-Zinn (1994) initially defined mindfulness as "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (p. 4). In a more recent interview, Kabat-Zinn described the working definition of mindfulness as "the awareness that arises through paying attention on purpose, in the present moment, and nonjudgmentally" (Mindful, 2015). Kabat-Zinn also noted that he sometimes adds "in the service of self-understanding and wisdom" to this definition (Mindful, 2015).

Kabat-Zinn's (1994) approach notes that mindfulness is relevant to an individual's everyday life. He describes the relevance as:

"Nothing to do with Buddhism per se or with becoming a Buddhist, but it has everything to do with waking up and living in harmony with oneself and with the world. It has to do with examining who we are, with questioning our view of the world and our place in it, and with cultivating some appreciation for the fullness of each moment we are alive. Most of all, it has to do with being in touch" (Kabat-Zinn, 1994, p. 3).

One aspect of the Buddhist perspective is that an individual's waking state of consciousness is severely limited, and limiting, like a long dream, in which a person is not truly awake and moves through life in an automatic, unconscious

manner. Mindfulness wakes people up from living this way by opening the door to living life fully and accessing all of its possibilities (Kabat-Zinn, 1994).

Buddhists believe that mindfulness is the heart of meditation (Kabat-Zinn, 1994, p. 4). Kabat-Zinn (1994) writes that the power in mindfulness comes from practicing and applying it. When a person pays attention on purpose, in the present moment, and non-judgmentally, greater awareness, clarity, and acceptance of present moment reality are fostered. Paying attention in this way also helps a person understand that their life unfolds moment by moment, and that if they are not fully present, they may miss valuable experiences and fail to recognize their opportunities for growth and transformation (p. 4).

Not tuning in to the present moment can lead to problems. These problems can arise from performing unconscious, automatic behaviors driven by fear and insecurity. If these problems are not addressed, people often feel stuck, out of touch, and like they have lost their ability to be satisfied, happy, and healthy in their lives. However, by practicing mindfulness, people can reconnect with their wisdom and ability to take charge of their lives, including their relationships with themselves, others, work, and the world (Kabat-Zinn, 1994, p. 5). The essential thing about going down this positive path is “an appreciation for the present moment and the cultivation of an intimate relationship with it through the continual attending to it with care and discernment. It is the opposite of taking life for granted” (Kabat-Zinn, 1994, p. 5).

When an individual habitually ignores the present moment, they can lack awareness and understanding of their own mind and how it shapes perceptions and actions. The perspective on what it means to be human and the connection to others, as well as the world, can also become limited.

On the other hand, when an individual is committed to being open and paying attention in this way, without thinking about their opinions, likes and dislikes, and

expectations, new possibilities become available, and there is a chance to live free of unconsciousness or automatically (Kabat-Zinn, 1994, p. 6).

Kabat-Zinn (1994) writes:

"I like to think of mindfulness simply as the art of conscious living...being in touch with your own deepest nature and letting it flow out of you unimpeded...It is simply a practical way to be more in touch with the fullness of your being through a systematic process of self-observation, self-inquiry, and mindful action. There is nothing cold, analytical, or unfeeling about it. The overall tenor of mindfulness practice is gentle, appreciative, and nurturing. Another way to think of it would be 'heartfulness'" (p. 6-7).

According to Kabat-Zinn's theory, mindfulness is a simple concept, but it is not easy to practice. It takes discipline and effort and may lead to difficult emotions that are typically not within conscious awareness. Cultivating the ability to be present in the moment is referred to as "practice" or "meditation practice" (Kabat-Zinn, 1994, p. 9). The goal of this practice is "to develop the self-regulatory abilities of a disciplined mind" (Kabat-Zinn, 2005, as cited in Ivtzan & Hart, 2016, p. 4).

Ivtzan and Hart (2016) state that Kabat-Zinn's approach "is considered therapeutic in its orientation, since it uses mindfulness meditation practice as a means to alleviate physical and mental conditions" (p. 4).

Mindfulness Exercises for Beginners from Kabat-Zinn

One exercise to support starting a mindfulness practice is stopping. This exercise involves stopping, being present, and not doing. Kabat-Zinn refers to it as shifting into "being mode."

- Try watching a moment without trying to change it. What happens? What do you feel, see, and hear?
- Try stopping, sitting down, and paying attention to your breathing occasionally throughout your day. You can do this for a few seconds or a few minutes. In these moments, do not try to change anything, just breathe and accept how you are feeling and what you perceive is happening. Allow yourself to be as you are, and let the moment be what it is (Kabat-Zinn, 1994, pp. 12-13).

Another exercise is called “this is it.” Kabat-Zinn (1994) writes that human beings often start something in the hope of achieving a positive outcome from their efforts, but that the only exception to this is meditation. He states, “meditation is the only intentional, systematic, human activity which at bottom is about not trying to improve yourself or get anywhere else, but simply to realize where you already are. Maybe we all need to do one thing in our lives simply for its own sake” (Kabat-Zinn, 1994, p. 14). This exercise also encourages a “being” state instead of “doing.” It involves letting go of trying to get somewhere or do something and being where you already are.

- Say to yourself occasionally, “This is it.” Remind yourself that acceptance is not resigning to what is happening; it is acknowledging what is happening in the present moment. It does not need to be judged or acted upon, but you can choose what you want to do based on your understanding of the moment.
- As you practice this exercise over time, consider whether it impacts how you choose to respond (Kabat-Zinn, 1994, pp. 14-16).

“Capturing your moments” is another mindfulness exercise. This exercise is simply paying attention. It is knowing what you are doing and keeping your attention

focused on it. Kabat-Zinn (1994) writes, “You will find that to cultivate mindfulness, you may have to remember over and over again to be awake and aware” (p. 17).

- Remind yourself repeatedly to look, feel, and be.
- Check in from moment to moment.
- Start building your awareness by staying focused on objects, and try to add the amount of time you can maintain that focus.
- Ask yourself in moments: Am I awake? Where is my mind right now?
(Kabat-Zinn, 1994, p. 17)

Additionally, keep your breath in mind. Breath is considered an anchor that can tether people to the present moment and guide them back to it when the mind wanders. When people are aware of their breathing, they are reminded that they are alive, in the present moment, and they can be fully awake to what is happening.

- Tune into the feeling of your breath coming in and out of your body. Breathing does not have to be focused or deep; it is about the awareness that you are breathing. Awareness does not have to last long; it only requires a shift in attention.
- Stay with your breath as it comes in and goes out. Keep your mind open and free, and just breathe. Keep returning to the breath when the mind wanders, which will string together moments of mindfulness. This exercise can be done at any time throughout your day (Kabat-Zinn, 1994, pp. 18-19).

These are basic mindfulness exercises to get started with a practice. Kabat-Zinn (1994) encourages practice, not as rehearsing, but as being committed to each moment and being present. He writes, “the spirit of mindfulness is to practice for

its own sake, and just to take each moment as it comes - pleasant or unpleasant, good, bad, or ugly - and then work with that because it is what is present now. With this attitude, life itself becomes practice” (Kabat-Zinn, 1994, p. 23). He also encourages people not to go out of their way to practice, but to make a little time in their lives to be still and to tune in to their breathing (Zabat-Zinn, 1994).

Langer’s Mindfulness Theory

In the 1970s, as Kabat-Zinn did, Ellen Langer and colleagues introduced their mindfulness approach, known as the Western approach. This approach focuses on the cognitive process of mindfulness, including openness and novelty seeking, rather than on outcomes, such as achieving mindfulness through meditation or other interventions.

Langer (n.d.) defines mindfulness as “the process of actively noticing new things” (para. 2). This helps put people in the present, makes them sensitive to context, welcoming of new things, creates new ways of thinking and making new categories, allows the experience of engagement, and problem-solves from more than one perspective. All of this promotes openness (Langer & Moldoveanu, 2000).

Langer and colleagues’ theory “conceptualizes mindfulness as an active and effortful mode of conscious awareness, which entails a heightened state of involvement and wakefulness, in which a person attends to the present moment and to the events that occur” (Ivtzan & Hart, 2016, p. 14). From their perspective, being mindful means people observe the world around them as always changing, and, as a result, life is uncertain. Embracing this uncertainty allows people to be more present (Langer & Moldoveanu, 2000).

According to Langer and colleagues (as cited in Ivtzan & Hart, 2016), the purpose of mindfulness is to increase a person's control over their thoughts and behaviors,

enabling greater engagement with their environment (Ivtzan & Hart, 2016). This purpose is achieved through action rather than passivity.

Langer (n.d.) writes,

“The statement ‘be in the present’ is an empty instruction because you are not there, and you are not there to know you are not there. When you notice, you come to see that the things you thought you knew, you do not know very well. Everything is always changing, and everything looks different from different perspectives” (para. 3).

This approach is powerful because it shifts the idea of “emptying the mind to filling the mind with newness. It is positively activating your brain to come alive and be engaged” (Alidina, n.d., para. 14). In contrast to Kabat-Zinn and colleagues’ approach, this does not require people to slow down and be still; it allows people to bring curiosity and activity to the present moment (Alidina, n.d.).

Langer and colleagues have determined that mindfulness entails four components:

- **Engagement** - being aware of changes in the environment.
- **Seeking novelty** - being open to one’s environment.
- **Novelty producing** - noticing new things in one’s environment and constructing new meanings.
- **Flexibility** - adopting more than one perspective (Ivtzan & Hart, 2016).

Langer (n.d.) notes that to be mindful, people do not need to meditate. They need to be attentive. They can meditate if they wish, as she notes it is a way to become more mindful, but it can take people out of the world. She states that being attentive is something that people do all the time, and that it puts people into the

world. She agrees with Kabat-Zinn that it is a way of being, but her theory includes doing, as people practice engagement and novelty.

In addition to studying mindfulness, Langer and colleagues have studied mindlessness, defined as “an ‘automatic-pilot’ cognitive mode in which a person relies on habitual behavioural scripts to perform routine tasks in an automatic and superficial manner” (Ivtzan & Hart, 2016, p. 14). They note that performing tasks automatically, mindlessly, has its benefits: it can enable higher-level functioning by freeing the mind. However, being on “autopilot” for long periods of time can negatively affect performance, cognitive functioning, psychological well-being, physical health, and longevity.

Mindfulness Exercises for Beginners from Langer

One way to begin practicing Langer’s approach to mindfulness is to notice five new things.

- In any situation or environment, take a moment to list 5 things you have not noticed before. This practice can open you up to new possibilities and help you bring your attention to the present. It also makes you an active participant in your life and the world around you.

Another exercise is seeing familiar tasks as novel.

- When doing a routine task, approach it as if you have never done it before. See if you can find something new in the experience. This exercise will help with novelty and openness when doing tasks that could be considered mindless.

Curiosity also supports mindfulness, according to Langer’s perspective.

- When you are having conversations with another person, try to be curious rather than expectant. Let go of your ideas about what the other person will

say or how they will act, and stay open to how the conversation unfolds (Alidina, n.d.).

Additionally, challenging assumptions is a helpful exercise.

- As you are going throughout your day, check in with yourself to see if you are making any assumptions - about people, situations, or yourself - and question them. Ask yourself whether there are different ways you can view the assumptions you make, which may help you see a situation differently (Alidina, n.d.).

Furthermore, using “could be” language can help you become more flexible.

- When you find yourself making a definitive statement, try to soften it by saying that it is something that “could be.” For example, instead of saying that you cannot do something, try saying that it could be a challenge. This language promotes openness, adaptability, and humbleness (Alidina, n.d.).

There are other ways to practice mindfulness, from Langer’s approach and others, but these are a few exercises to help people get started.

Section 3: Mindfulness in the Healthcare Setting

References: 3, 8, 10, 27

Though there are different ways to approach and practice mindfulness, they all involve the mind and body. Since the nervous system is a significant part of the body and affects many aspects of an individual’s life, including their physical health, it is natural for mindfulness-based interventions to be implemented in healthcare settings.

The Nervous System

The body's nervous system can be thought of as a command center. It includes the brain, spinal cord, and nerves (Cleveland Clinic, 2023). The nervous system enables an individual to communicate with the outside world and to control many body functions. Information enters the nervous system through the senses, is processed, and triggers reactions (Institute for Quality and Efficiency in Health Care, 2023). The nervous system uses nerve cells, or neurons, to send messages throughout the body, and from the body back to the brain. There are three primary types of neurons:

- Motor neurons move messages from the brain and spinal cord to the muscles. These messages support movement, breathing, speaking, and swallowing.
- Sensory neurons transmit information from the senses (sight, smell, touch, taste, and hearing) to the brain.
- Interneurons communicate between these two types of neurons. They regulate movement in response to sensory information. They also help with learning, thinking, and remembering.

The nervous system monitors what happens outside the body and decides how to respond to each situation. The nervous system also performs complex internal functions, regulating thoughts and memories, while performing automatic functions such as blinking, blushing, sweating, and breathing.

The central nervous system and the peripheral nervous system are the two main parts of the nervous system. The peripheral nervous system also has two parts: the somatic nervous system and the autonomic nervous system. Additionally, the autonomic nervous system has two branches: the sympathetic and parasympathetic nervous systems.

- The central nervous system includes the brain and spinal cord. The brain receives signals from nerves to regulate thinking, movement, and feelings.
- The peripheral nervous system is the network of nerves that branch out from the spinal cord. The system moves information from the brain and spinal cord to organs, arms, fingers, legs, and toes.
 - The somatic nervous system is responsible for voluntary movements people are aware of, such as walking, talking, and other movements.
 - The autonomic nervous system regulates involuntary functions, such as heart rate, digestion, breathing, and body temperature (Cleveland Clinic, 2023; Institute for Quality and Efficiency in Health Care, 2023).
 - ◆ The sympathetic nervous system regulates the fight, flight, or freeze response during stressful situations.
 - ◆ The parasympathetic nervous system is the calming response (University of Utah Health, n.d.).

When an individual is in a stressful situation, experiencing strong emotions, and/or their body is under strain, a pattern can occur in which their sympathetic nervous system is activated, leading to enlarged pupils, fast, shallow breathing, a faster heart rate, and slower digestion. These functions can be helpful when a person needs to think or act quickly, but when they persist for a longer period, they can affect health due to an ongoing imbalance in the nervous system.

Some common conditions that affect the sympathetic nervous system include:

- Type 2 diabetes
- Anxiety disorders
- Chronic stress

- Cancer
- Genetic conditions, such as amyloidosis
- Infections
- Multiple system atrophy
- Trauma

It is important to note that the sympathetic nervous system will take the lead for as long as needed to help a person get through a period of danger or threat. However, when it has subsided, the parasympathetic nervous system becomes activated, returning the body to normal.

Another way to activate the parasympathetic nervous system is to practice mindfulness techniques, such as breathing, becoming more aware and present in the moment, and witnessing thoughts, emotions, and physical sensations without becoming engulfed by them. These techniques allow the parasympathetic nervous system to signal the sympathetic nervous system to relax and rest (Cleveland Clinic, 2022). When this happens, pupils shrink, breathing slows and becomes deeper, the heart rate drops, and muscles relax (University of Utah Health, n.d.). This helps balance the body's internal experience (Cleveland Clinic, 2022).

Mindfulness practices, including Mindfulness-Based Stress Reduction (MBSR) techniques, have been shown to lower stress hormones and help people become more mindful and self-aware. When people are more aware of their physical and/or mental state, they can respond more thoughtfully to what their body and/or mind may need (Australian & New Zealand Mental Health Association, 2022).

Section 3 Key Terms

The nervous system can be thought of as a command center. It includes the brain, spinal cord, and nerves. The nervous system enables an individual to communicate with the outside world and to control many body functions. The central nervous system and the peripheral nervous system are the two main parts of the nervous system. The peripheral nervous system also has two parts: the somatic nervous system (responsible for voluntary movements) and the autonomic nervous system (responsible for involuntary movements). Additionally, the autonomic nervous system has two branches: the sympathetic nervous system (which regulates the fight-or-flight response during stressful situations) and the parasympathetic nervous system (which triggers the calming response) (Cleveland Clinic, 2023; Institute for Quality and Efficiency in Health Care, 2023; University of Utah Health, n.d.).

Section 4: Mindfulness Frameworks

References: 13, 16, 21, 23, 25, 26

There are several mindfulness frameworks for patients. This section will focus on a few of them, including RAIN, the 5 R's of Mindfulness, Mindfulness-Based Stress Reduction (MBSR), and Mindfulness-Based Cognitive Therapy.

Recognize, Allow, Investigate, Non-Identification (RAIN)

Michele McDonald developed RAIN as a tool to practice mindfulness when feeling overwhelmed by thoughts and emotions.

- **First, recognize** - Pause to acknowledge what is happening and label thoughts and emotions. Labeling can help open up and understand what is being experienced.

- **Next, allow** - Let thoughts and feelings be present rather than trying to change them or label them as good or bad. It is better to experience thoughts and feelings rather than resist them.
- **Then, investigate** - Use curiosity to assess how emotions present themselves, such as where they are being felt in the body. Also, think about why these feelings are coming up.
- **Lastly, non-identification** - Observe thoughts and feelings without being overwhelmed by them. This observation is a way to gain awareness and not take things personally. It also allows things to unfold as thoughts and feelings come and go. When negative emotions arise, use self-compassion to offer comfort and remember that thoughts are transitory (Lewis-Duarte, 2021).

The Five R's of Mindfulness - Recognize, Relax, Review, Respond, Return

The Five R's of Mindfulness provide an accessible way to practice mindfulness daily.

- **Recognize** - Practice noticing thoughts and internal dialogue when negative thinking arises.
- **Relax** - Implement a way to slow down, connect with the breath, and relax the body and mind. For example, box breathing (inhale for 4 seconds, hold for 4 seconds, exhale for 4 seconds, and hold empty for 4 seconds).
- **Review** - Ask yourself how to respond to the difficult situation and review options. This includes looking at what is within control, what can be changed, and whether there is a choice.

- **Respond** - Decide how to respond based on the review. Let go of fear or worry about outcomes.
- **Return** - Check in with yourself and bring yourself back to present moment awareness with openness and curiosity (Pace, 2014).

Mindfulness-Based Stress Reduction (MBSR)

MBSR is a program developed by Kabat-Zinn and colleagues in the 1970s to train people to practice mindfulness. It has been offered at the Stress Reduction Clinic and the University of Massachusetts Medical Center since 1979. According to Kabat-Zinn (2013), there are over 700 mindfulness-based programs in hospitals, medical centers, and clinics in the United States and internationally that use MBSR as their foundation.

MBSR is an 8-week evidence-based program that “can complement traditional medical and psychological treatments, offering valuable support for a wide range of conditions” (University of Massachusetts Memorial Health, n.d.b, para. 2). It is typically done in a group setting, but can be done individually. MBSR can help people:

- Improve how they manage stress, anxiety, and other life challenges.
- Develop skills to respond to difficult situations with greater awareness rather than automatic reactions.
- Live with greater calm, clarity, energy, and enthusiasm.
- Change their relationship with pain.
- Maintain a meditation practice that will continue to grow (University of Massachusetts Memorial Health, n.d.b).

Kabat-Zinn (2013) writes that in MBSR, the idea is to begin where people are in their lives. They are given “permission to live their moments fully and completely with some tools for going about it systematically” (p. 5). They are taught ways to listen to their minds and bodies, which allows them to start to trust their own experience more. They learn the way of being, also called the way of awareness or mindfulness. This provides them with a way to look at problems and come to terms with a catastrophe, such as a life-changing illness, that makes life more joyful and meaningful.

The way of being is actively practiced in the program. People practice the strategies of purposefully stopping, relaxing into the present without filling it with thoughts and feelings, allowing the mind and body to rest, no matter how they feel, and learning to be exactly as they are without trying to change anything (Kabat-Zinn, 2013, p. 6).

Kabat-Zinn (2013) has identified several attitudinal factors that serve as the major pillars of mindfulness practice as taught in MBSR.

- **Non-judging** - Paying close attention to each moment without getting caught up in ideas, opinions, likes, and dislikes.
- **Patience** - Understanding that some things unfold in their own time and that moments do not need to be filled with activity and thinking to be meaningful. It is more about being open to each moment, accepting its fullness, and knowing things unfold in their own time.
- **Beginner's Mind** - A willingness to see everything as it is for the first time. This allows people to be free of expectations, receptive to new experiences, and to avoid getting stuck in their own experiences or expertise.

- **Trust** - Developing trust in oneself. Learning to trust one's intuition and one's authority, accepting that it is impossible to be another person, and leaning into becoming fully oneself.
- **Non-striving** - Mindfulness is non-doing, which can go against human nature to do something for a purpose, to get something, or to go somewhere. It is being in the moment and not trying to do anything with what is happening.
- **Acceptance** - Seeing things as they actually are in the present, which can come after a natural progression of coming to terms with what is being experienced. Acceptance does not mean passivity, liking everything, or taking a positive attitude all the time; it means being willing to see things as they are and being open to emotions, thoughts, and what is present.
- **Letting go** - Learning to let things be as they are.

In MBSR, people learn about attitudinal factors, breathing techniques, yoga, body scanning, and ways of meditating (such as sitting or walking), among other practices. People are also taught to maintain these practices in their daily lives to manage stress, pain, or illness better (Kabat-Zinn, 2013).

Mindfulness-Based Cognitive Therapy (MBCT)

MBCT is a form of therapy that integrates aspects of cognitive-behavioral therapy with mindfulness practices. It was developed based on the work of Kabat-Zinn by Segal, Teasdale, and Williams.

MBCT was developed to help prevent relapse of depressive episodes (University of Massachusetts Memorial Health, n.d.a). It has been proven to be effective in people with major depressive disorder who have experienced at least three

depressive episodes. It may also be helpful for people who are experiencing the following physical and mental health conditions:

- Vascular disease
- Traumatic brain injury
- Chronic pain
- Generalized anxiety disorders
- Bipolar disorder
- Emotional distress
- Addiction

MBCT is typically delivered in a group setting over 8 sessions. People learn meditation techniques alongside basic principles of cognition, such as how thoughts and feelings influence behavior. People are given homework between meetings to help them learn strategies to practice mindfulness in their daily lives.

MBCT teaches people not to avoid sadness or negative emotions, but to try to change their relationship with them. This allows them to see that there are other ways to respond to difficult situations and to learn that their thoughts are not their own, which can help rebalance the automatic negative responses in their nervous system. As they practice meditation, they can better deal with negative thoughts instead of becoming overwhelmed by them, and they have tools to manage triggers of depression relapses (Psychology Today, 2022).

Section 5: Resources

Books

While there are several books, resources, videos, podcasts, and apps on mindfulness, the following are resources based on the two theories discussed in this course. Some no-cost options are also included.

[John Kabat-Zinn:](#)

- Wherever You Go, There You Are
- Mindfulness for Beginners: Reclaiming the Present Moment - And Your Life
- The Coming to Our Senses Series
- Letting Everything Become Your Teacher: 100 Lessons in Mindfulness
- Coming to Our Senses: Healing Ourselves and the World Through Mindfulness
- For physical and mental health conditions:
 - Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness
 - The Mindful Way through Depression: Freeing Yourself from Chronic Unhappiness

[Ellen Langer:](#)

- Mindfulness
- The Art of Noticing
- The Mindful Body

- Counterclockwise: Mindful Health and the Power of Possibility
- The Power of Mindful Learning

Free Resources:

- [The Free Mindfulness Project](#)
- [UCLA Mindful](#)
- [Mindful](#)
- [Insight Timer](#)
- [The Free Healthy Minds Program](#)

Quantum Units
Education
Affordable. Dependable. Accredited.
www.quantumunitsed.com

References

1. Alidina, S. (n.d.). *Powerful Mindfulness without Meditation? Insights from Mother of Mindfulness, Ellen Langer*. <https://www.shamashalidina.com/blog/ellen-langer>.
2. American Psychological Association. (2019). *Mindfulness meditation: A research-proven way to reduce stress*. <https://www.apa.org/topics/mindfulness/meditation>.
3. Australian & New Zealand Mental Health Association (2022). *5 Reasons Why Meditation is Beneficial to Your Nervous System*. <https://anzmh.asn.au/blog/5-reasons-why-meditation-is-beneficial-to-your-nervous-system>.
4. Berard, P. (2017). Study: mindfulness programs prevalent. *New England Psychologist*. <https://www.nepsy.com/articles/leading-stories/study-mindfulness-programs-prevalent>.
5. Bertone, H. J. (2021). *Which Type of Meditation is Right for Me?* Healthline. <https://www.healthline.com/health/mental-health/types-of-meditation>.
6. Chems-Maarif, R., Cavanagh, K., Baer, R., Gu, J., & Strauss, C. (2025). Defining Mindfulness: A Review of Existing Definitions and Suggested Refinements. *Mindfulness* 16, 1–20. <https://doi.org/10.1007/s12671-024-02507-2>.
7. Cleveland Clinic. (2022). *Sympathetic Nervous System*. <https://my.clevelandclinic.org/health/body/23262-sympathetic-nervous-system-sns-fight-or-flight>.

8. Cleveland Clinic. (2023). Nervous System. <https://my.clevelandclinic.org/health/body/21202-nervous-system>.
9. Cording, J. (2024). *Why Mindfulness Matters for Healthcare Professionals*. Forbes. <https://www.forbes.com/sites/jesscording/2024/08/29/why-mindfulness-matters-for-healthcare-professionals/>.
10. Institute for Quality and Efficiency in Health Care. (2023, May 4). *How does the nervous system work?* National Library of Medicine; Institute for Quality and Efficiency in Health Care (IQWiG). <https://www.ncbi.nlm.nih.gov/books/NBK279390/>.
11. Ivtzan, I. & Hart, R. (2016). Mindfulness Scholarship and Interventions: A Review. In Baltzell, A. (Ed.). *Mindfulness and Performance* (pp. 3-28). Cambridge University Press.
12. Kabat-Zinn, J. (1994). *Wherever You Go There You Are: Mindfulness Meditation in Everyday Life*. Hyperion.
13. Kabat-Zinn, J. (2013). *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*. Bantam Books.
14. Langer, E. (n.d.). *Mindfulness for Everyday Life: Expert Answers by Dr. Ellen Langer*. Psychwire. <https://psychwire.com/free-resources/q-and-a/1bhpwam/mindfulness-for-everyday-life>.
15. Langer, E. J. & Moldoveanu, M. (2000). The Construct of Mindfulness. *Journal of Social Issues*, 56(1), 1–9. <https://doi.org/10.1111/0022-4537.00148>.
16. Lewis-Duarte, M. (2021). *RAIN: A Mindful Framework for Addressing Anxious Thoughts*. Anxiety and Depression Association of America. <https://>

adaa.org/living-with-anxiety/personal-stories/rain-mindful-framework-addressing-anxious-thoughts.

17. Mai, T. (2023). *Prescribing Mindfulness in Clinical Settings*. University of Utah Health. <https://healthcare.utah.edu/integrative-health/resiliency-center/news/2023/01/prescribing-mindfulness-clinical-settings>.
18. Mindful. (2015, May 28). Jon Kabat-Zinn Me Me Me [Video]. Youtube. <https://youtu.be/ULJSacYFzzQ?si=meuthHX8cleVNgcGA>.
19. National Center for Complementary and Integrative Health. (2019). *Analysis of Data Gives Insight Into Complementary Health Recommendations From U.S. Physicians*. <https://www.nccih.nih.gov/research/research-results/analysis-of-data-gives-insight-into-complementary-health-recommendations-from-us-physicians>.
20. National Center for Complementary and Integrative Health. (2022). *Meditation and Mindfulness: Effectiveness and Safety*. <https://www.nccih.nih.gov/health/meditation-and-mindfulness-effectiveness-and-safety>.
21. Pace, K. (2014). *The 5 R's of Mindfulness: Incorporating mindfulness into everyday life*. Michigan State University. https://www.canr.msu.edu/news/the_5_rs_of_mindfulness_incorporating_mindfulness_into_everyday_life.
22. Pratt, M. (2021). *Trends in Mindfulness Research Over the Past 55 Years*. Mindful. <https://www.mindful.org/trends-in-mindfulness-research-over-the-past-55-years/>.
23. Psychology Today. (2022). *Mindfulness-Based Cognitive Therapy*. <https://www.psychologytoday.com/us/therapy-types/mindfulness-based-cognitive-therapy>.

24. The UK College of Mindfulness Meditation. (n.d.). *The History and Origins of Mindfulness*. Mindfulness Now. <https://mindfulnessnow.org.uk/history-of-mindfulness-and-its-origins/>.
25. University of Massachusetts Memorial Health. (n.d.a). *Mindfulness-Based Cognitive Therapy (MBCT)*. <https://www.ummhealth.org/services-treatments/center-mindfulness/mindfulness-programs/mbct>.
26. University of Massachusetts Memorial Health. (n.d.b). *Mindfulness-Based Stress Reduction (MBSR)*. <https://www.ummhealth.org/services-treatments/center-mindfulness/mindfulness-programs/mbsr>.
27. University of Utah Health. (n.d.). *Why Meditation?: How Does It Work?* <https://medicine.utah.edu/students/wellness/what-is-wellness/mindful-meditation/how-does-it-work>.
28. Wormsley, C. (2025). *How mindfulness became mainstream*. The Mind Company. <https://themindcompany.com/blog/history-of-mindfulness>.

Quantum Units Education

Affordable. Dependable. Accredited.

www.quantumunitsed.com

The material contained herein was created by EdCompass, LLC ("EdCompass") for the purpose of preparing users for course examinations on websites owned by EdCompass, and is intended for use only by users for those exams. The material is owned or licensed by EdCompass and is protected under the copyright laws of the United States and under applicable international treaties and conventions. Copyright 2026 EdCompass. All rights reserved. Any reproduction, retransmission, or republication of all or part of this material is expressly prohibited, unless specifically authorized by EdCompass in writing.