

Mindfulness:

What Is It?

Where Does It Come From?

Ronald D. Siegel PsyD
Christopher K. Germer PhD
Andrew Olendzki, PhD

From Didonna, F. (Ed.) (2008).
Clinical Handbook of Mindfulness.
New York: Springer.

Distributed with permission by:
The National Institute for
the Clinical Application
of Behavioral Medicine

nicabm
www.nicabm.com

Mindfulness: What Is It? Where Did It Come From?

Ronald D. Siegel PsyD, Christopher K. Germer PhD, Andrew Olendzki, PhD

We can make our minds so like still water that beings gather about us, that they may see, it may be, their own images, and so live for a moment with a clearer, perhaps even with a fiercer life because of our quiet.

William Butler Yeats

Throughout history, human beings have sought to discover the causes of suffering and the means to alleviate it. Sooner or later, we all ask the same questions: “Why am I not feeling better?” “What can I do about it?” Inhabiting a physical body inevitably exposes us to pain associated with sickness, old age, and death. We also struggle emotionally when confronted with adverse circumstances, or with benign circumstances that we see as adverse. Even when our lives are relatively easy, we suffer when we don’t get what we want, when we lose what we once had, and when we have to deal with what we do not want. From birth until death, we are relentlessly trying to feel better.

As this book will show, mindfulness is a deceptively simple way of relating to all experience that can reduce suffering and set the stage for positive personal transformation. It is a core psychological process that can alter how we respond to the unavoidable difficulties in life—not only to everyday existential challenges, but also to severe psychological problems such as suicidal ideation (Linehan, 1993), chronic depression (Segal, Williams & Teasdale, 2002), and psychotic delusions (Bach and Hayes, 2002).

Mindfulness is not new. It’s part of what makes us human—the capacity to be fully conscious and aware. Unfortunately, we are usually only in this state for brief periods of time, and are soon reabsorbed into familiar daydreams and personal narratives. The capacity for sustained moment-to-moment awareness, especially in the midst of emotional turmoil, is a special skill. Fortunately, it is a skill that can be learned.

Mindfulness is an elusive, yet central, aspect of the 2500 year-old tradition of Buddhist psychology. We can talk about mindfulness or write at length about it, but to truly understand mindfulness we have to experience it directly. This is because mindfulness points to something intuitive and pre-conceptual. With committed practice, every person can gradually figure out how to become more and more mindful in life, even in the face of significant suffering. Cultivating mindfulness is, and has always been, a deeply personal journey of discovery.

Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com

The Ancient Meaning of Mindfulness

“Mindfulness,” as used in ancient texts, is an English translation of the Pali word, *sati*, which connotes awareness, attention, and remembering. (Pali is the language in which the teachings of the Buddha were originally recorded. The first dictionary translation of *sati* into “mindfulness” dates to 1921 (Davids & Stede, 1921/2001). As we shall see, the definition of “mindfulness” has been somewhat modified for its use in psychotherapy, and it now encompasses a broad range of ideas and practices.

Awareness is inherently powerful, and attention, which is focused awareness, is more powerful still. Just by becoming aware of what is occurring within and around us, we can begin to untangle ourselves from mental preoccupations and difficult emotions. Sometimes this can be quite simple, as in the case of a mentally retarded man who managed his anger

outbursts by shifting his attention to the “soles of the feet” whenever he noticed he was angry (Singh, Wahler, Adkins, & Myers, 2003). By redirecting attention, rather than trying to control or suppress intense emotions, we can regulate how we feel.

Just by becoming aware of what is occurring within and around us, we can begin to untangle ourselves from mental preoccupations and difficult emotions.

Another aspect of mindfulness is “remembering.” This does not refer to memory of past events. Rather, it means remembering to be aware and pay attention, highlighting the importance of *intention* in mindfulness practice. Each moment we remind ourselves: “Remember—be aware!”

But “mindfulness” means more than being *passively* aware, or being aware for

The mindfulness practitioner is actively working with states of mind in order to abide peacefully in the midst of whatever happens.

awareness’ sake. The Buddhist scholar, John Dunne (2007) has pointed out that awareness, attention, and remembering (*sati*) are present when a sniper, with malice in his heart, takes aim at an innocent victim. Obviously this is not what we’re trying to cultivate as psychotherapists, nor is it the goal of Buddhist psychology. Rather, the

purpose of mindfulness in its ancient context is to eliminate needless suffering by cultivating insight into the workings of the mind and the nature of the material world. The mindfulness

Mindfulness: What Is It? Where Did It Come From?

practitioner is actively working with states of mind in order to abide peacefully in the midst of whatever happens.

Through mindfulness, we develop “street smarts” to manage the mind (Bhikkhu, 2007). It helps us to recognize when we also need to cultivate other mental qualities—such as alertness, concentration, lovingkindness, and effort—to skillfully alleviate suffering. For example, if in meditation we are being self-critical, we may want to add a dose of compassion; if we are feeling lazy, we might want to try to raise the level of energy in the mind or body. Mindfulness alone is not sufficient to attain happiness, but it provides a solid foundation for the other necessary factors (Rapgay & Brystrisky, 2007). In the classical literature, mindfulness was usually discussed in terms of its *function*, not as a goal in itself. Mindfulness is ultimately part of a project designed to uproot entrenched habits of mind that cause unhappiness, such as the afflictive emotions of anger, envy, or greed, or behaviors that harm ourselves and others.

Mindfulness is ultimately part of a project designed to uproot entrenched habits of mind that cause unhappiness...

The recent focus on mindful awareness in psychotherapy is a strategic correction to some modern treatment trends. Many well-intentioned therapists prematurely attempt to “fix” a patient’s problems, unwittingly bypassing self-acceptance and self-understanding. As will be demonstrated throughout this volume, our emotional and behavioral problems can be amplified by our instinctive efforts to avoid discomfort by propelling ourselves into change-seeking activity. The approach of the new, mindfulness-oriented agenda is “awareness and acceptance first, change second.”

Therapeutic Mindfulness

As mindfulness is adopted by Western psychotherapy and migrates away from its ancient roots, its meaning is expanding. Most notably, mental qualities beyond *sati* (awareness, attention, and remembering) are being included in “mindfulness” as we adapt it to alleviate clinical conditions. These qualities include *non-judgment*, *acceptance*, and *compassion*

Jon Kabat-Zinn, the foremost pioneer in the therapeutic application of mindfulness, defines it as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment to moment” (Kabat-Zinn, 2003, p. 145). In 2004, Bishop et al offered a consensus paper on the definition of mindfulness: Mindfulness is “self-regulation of attention so that it is maintained on immediate experience,

Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com

thereby allowing for increased recognition of mental events in the present moment.” And, “adopting a particular orientation toward one’s experience that is characterized by curiosity, openness, and acceptance” (p. 232). The second part of this definition captures an essential emotional or intentional attitude of mindfulness in clinical settings.

A stripped-down definition of “therapeutic mindfulness” that we and our colleagues at the Institute for Meditation and Psychotherapy find useful is *awareness, of present experience, with acceptance* (Germer, Siegel, & Fulton, 2005). These three elements can be found in most modern psychological literature on mindfulness. Although the “acceptance” component is implied in the classical Buddhist texts, it helps to make it explicit for clinical application. Other related shorthand expressions we might use for therapeutic mindfulness include “affectionate awareness,” “mindful acceptance,” “openhearted presence,” and “mindful compassion.”

The explicit addition of “acceptance” to the mindfulness formula makes sense to most psychotherapists. This is especially the case when our patients are confronted with overwhelming traumatic circumstances. Awareness without acceptance can be like looking at a scary scene under a bright floodlight. Sometimes we need softer light—like a candle—to approach difficult experience. The more intensely we suffer, it seems, the more we need acceptance and compassion to be able to work with what’s occurring in our lives. Conversely, kindness without clear awareness can lead to sugar coating the difficulties of life that need to be addressed. *Sans* awareness, acceptance could become a form of defensive avoidance.

When patients come to psychotherapy, they are often in dire distress, seeking a person who will take the time to understand who they are and why they suffer. They desperately want a strategy for relief. Compassion is the invisible matrix that holds the entire enterprise. The word “compassion” comes from the Latin roots, *com pati*, or to “suffer with.” That’s how we really come to understand what our patients are going through—we suffer *with* them. If we offer helpful advice to a patient without first providing acceptance and compassion, he or she simply feels misunderstood.

Similarly, in the *intrapersonal*, therapeutic relationship—the one we have with ourselves—compassion is also important. Self-compassion and self-acceptance are “skillful means” for being aware under trying circumstances. We need an open heart to have open eyes. When we practice mindfulness by ourselves, self-acceptance is hopefully part of our emotional landscape; in the therapy relationship, acceptance and compassion are essential for the process to be effective.

Mindfulness and Mindlessness

A psychotherapist needs to experience mindfulness in order to integrate it into his or her clinical practice. Learning meditation from an experienced teacher is the best way to begin and is strongly recommended. Psychotherapists also benefit from a conceptual road map to guide their work. To this end, we suggest using the definition of mindfulness just mentioned: *(1) awareness, (2) of present experience, (3) with acceptance* (Germer, Siegel, & Fulton, 2005). A moment of mindfulness contains these three intertwined elements. The mindfulness-oriented therapist may ask, moment to moment, “How do I cultivate awareness of present experience with acceptance, for myself and my patient?” This can be a touchstone for practice.

While its definition is easy to remember, the direct experience of mindfulness is more elusive. Sometimes mindfulness is easiest to understand by examining its opposite. Even casual self-examination reveals that our typical mental state is remarkably mindless. We spend most of our time lost in memories of the past and fantasies of the future. More often than not, we operate on “autopilot,” where our minds are in one place and our bodies are in another.

Psychotherapists also benefit from a conceptual road map to guide their work.

An embarrassing example of this happened to one of us recently while driving to present a workshop on mindfulness and psychotherapy:

I was in a rush and running late. Suddenly, a few minutes into my drive, I realized that I was heading in the wrong direction on the Massachusetts Turnpike—a toll road on which the exits can seem as though they are 50 miles apart. I wondered, “Who was driving the car?” “Who decided to head west? My mind was busy preparing my presentation, while my body was steering the car automatically, skillfully heading in the wrong direction.

Similar examples abound. Consider the leading cause of emergency room visits to New York hospitals on Sunday mornings: bagel-cutting accidents. While interacting with family members on the weekend, many people are so distracted by interpersonal events that their bodies cut bagels on automatic—and their bodies aren’t very good at this without guidance from the conscious mind.

Another, less painful, example of everyday mindlessness occurs in restaurants. Have you noticed how much restaurant conversation revolves around where you ate in the past, or where

you might eat in the future? Only occasionally do we actually taste the food that we're eating.

And then there are our deliberate efforts to escape the present moment—trying to get to the “good stuff.” Do you ever find yourself rushing through the dishes to get to your cup of tea, book, or television program? Have you ever had the thought, perhaps ten minutes into a psychotherapy session with a frustrating patient, “Darn, forty minutes to go!” When we reflect honestly, we notice that we're rushing through, or trying to get rid of much of our life experience.

You may notice this even in the present moment: As you read these sentences, where has your mind gone? Have you had thoughts such as, “I wonder if this book is going to be worthwhile?” “Maybe I should've gotten another one,” or “This is pretty interesting, I hope the rest of it is good too.” Perhaps your mind has left the book entirely, and you're thinking about what you'll do later, or what happened earlier today.

The pervasiveness of everyday mindlessness is particularly striking when we inquire into what really matters in our lives.

When we reflect honestly, we notice that we're rushing through, or trying to get rid of much of our life experience.

Take a few seconds to recall a moment in your life that you really valued. (Really, stop reading for a moment and think of one.) Perhaps it was a special time with someone you love, or a magical

experience in nature. During this moment, where was your mind? Was it focused on recalling the past, or imagining the future? Most people find that the moments they value the most are those in which they're fully present, noticing what is happening here and now.

These are moments of mindfulness. We notice the positions of our hands, and the sensations of holding a knife and bagel. We are aware of our bodies sitting in the car when we drive, and we notice the other cars, the road, the scenery. We taste the food we eat, and we actually experience the sight, sound, and emotional presence of our patients during psychotherapy. Right now, try noticing the position of your hands as you hold this book, the physical experience of sitting or lying down, and how your mind reacts to these words. Mindfulness involves being present to our lives.

While notoriously difficult to convey with words, the Zen Haiku tradition endeavors to capture moments of mindfulness. Here is a classic example from Matsuo Basho, a wandering Japanese poet of the 17th century:

An old pond!
A frog jumps in —
The sound of water.
(Toyomasu, 2001)

Mindfulness Practice

While it can be disturbing to notice how frequently we are mindless, and how much of our lives we wish away, there is also good news: mindfulness can be cultivated. Just as we can improve physical fitness through regular physical exercise, we can develop mindfulness through deliberate mental practices.

Mindfulness practices all involve some form of meditation. Especially in the West, misconceptions about meditation practice abound. It may therefore be helpful to examine some of the most common misunderstandings.

Just as we can improve physical fitness through regular physical exercise, we can develop mindfulness through deliberate mental practices.

Not Having a Blank Mind: While some concentration practices are designed to empty the mind of thought, this is not an aim of mindfulness practice. Nor do we wish to become stupid, or lose our analytical abilities. Instead, mindfulness practice involves training the mind to be aware of what it is doing at all times, including being aware that we are thinking when we think.

Not Becoming Emotionless: Many people secretly hope that mindfulness practice will relieve them of the burden of emotion. Especially when in distress, the fantasy of becoming emotionless can be quite appealing. In reality, mindfulness practice often has quite the opposite effect. Because we practice noticing the contents of the mind, we come to notice our emotions more fully and vividly. Our ability to recognize how we feel increases as we relinquish normal defenses, such as distracting ourselves from discomfort with entertainment or eating.

Not Withdrawing from Life: Because most meditation practices were originally refined by monks, nuns, and hermits, people often assume that they involve withdrawing from living a full, interpersonally rich life. While there are certainly benefits to be derived from practicing mindfulness in a simplified environment, even in these settings one isn't exactly withdrawing. Instead, the vicissitudes of life are experienced more vividly, because we're taking the time to pay attention to our moment-to-moment experience.

Not Seeking Bliss: The image of the spiritual master blissfully smiling while the rest of us struggle with existential reality is very appealing. Early in their meditation careers, many people become distressed when they find that their minds wander and they feel agitated or unsettled. While exceptionally pleasant states of mind do occur, in mindfulness meditation we allow them to arise and pass—not clinging to blissful states nor rejecting unpleasant ones.

Not Escaping Pain: Rather than escaping pain, mindfulness practice helps us to increase our capacity to bear it. We deliberately abstain from automatic actions designed to make ourselves feel better. For example, if we are meditating and an itch arises, a typical instruction is to observe the itch and notice any impulses that arise (such as the urge to scratch)—but to not act on the urge. As a result, we actually experience pain and discomfort more vividly. This extends beyond itches and physical pain to include the full spectrum of emotional discomfort as well. As we explore and accept these unpleasant experiences, our capacity to bear them increases. We also discover that painful sensations are distinct from the suffering that accompanies them. We see that suffering arises when we react to pain with resistance, protest, or avoidance rather than moment-to-moment acceptance.

Rather than escaping pain, mindfulness practice helps us to increase our capacity to bear it.

Forms of Practice

There are many ways to cultivate awareness of current experience with acceptance. Not surprisingly, all of them involve repeated practice. If we want to improve our cardiovascular fitness, we might begin by integrating physical exercise into our everyday routine—taking the stairs instead of the elevator, or riding a bicycle instead of driving to work. If we want to become even more physically fit, we might set aside time to exercise formally, perhaps at a gym or health club. To really accelerate the process, we might go on a fitness-oriented vacation, in which much of the day is spent in vigorous exercise. Similar options are available for cultivating mindfulness.

Mindfulness: What Is It? Where Did It Come From?

Everyday Mindfulness: This involves reminding ourselves throughout the day to pay attention to what is happening in the moment without radically altering our routines. It means noticing the sensations of walking when we walk, the taste of our food when we eat, and the appearance of our surroundings as we pass through them. The Vietnamese Zen teacher Thich Nhat Hahn suggests a number of techniques to enhance everyday mindfulness. For example, when the telephone rings, try just listening at first, attending to the tone and rhythm of the sound as one might listen to a musical instrument. Or while driving, when the red tail lights of another vehicle appear, try appreciating their color and texture as one might in looking at a beautiful sunset.

Formal Meditation Practice: This involves setting aside time to go to the mental “gym.” We regularly dedicate a certain period to sit quietly in meditation. There are many types of meditation that can cultivate mindfulness. Most involve initially choosing an object of attention, such as the breath, and returning our attention to that object each time the mind wanders. This develops a degree of calmness which, in turn, enables us to better focus the mind on the chosen object. Once some concentration is established, mindfulness meditation entails directing the mind to whatever begins to predominate in the mind—usually centering on how the event is experienced in the body. These objects of attention can be physical sensations such as an itch, ache, or sound; or emotional experiences as they manifest in the body, such as the tightness in the chest associated with anger, or the lump in the throat that comes with sadness. Regardless of the chosen object of attention, we practice being aware of our present experience with acceptance.

Retreat Practice: This is the “vacation” that is dedicated entirely to cultivating mindfulness. There are many styles of meditation retreats. Most involve extended periods of formal practice, often alternating sitting meditation with walking meditation. They are usually conducted in silence, with very little interpersonal interaction, except for occasional interviews with teachers. All of the activities of the day—getting up, showering, brushing teeth, eating, doing chores—are done in silence, and used as opportunities to practice mindfulness. As one observer put it, the first few days of a retreat are “a little like being trapped in a phone booth with a lunatic.” We discover how difficult it is to be fully present. The mind is often alarmingly active and restless, spinning stories about how well we’re doing and how we compare to others. Memories of undigested emotional events enter, along with elaborate fantasies about the future. We get to vividly see how our minds create suffering in an environment where all of our needs are tended to. Many people find that the insights that occur—during even a single week-long intensive meditation retreat—are life transforming.

The effects of mindfulness practice seem to be dose-related.

Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com

The effects of mindfulness practice seem to be dose-related. If one does a little bit of everyday practice, a little bit of mindfulness is cultivated. If one does more everyday practice, and adds to this regular formal practice and retreat practice, the effects are more dramatic. While this has long been evident to meditators, it is beginning to be documented through scientific research (Lazar et al, 2005).

Why Mindfulness Now?

We are currently witnessing an explosion of interest in mindfulness among mental health professionals. In a recent survey of psychotherapists in the United States (Simon, 2007), the percentage of therapists who said that they do “mindfulness therapy” at least some of the time was 41.4%. In comparison, cognitive-behavioral therapy was the most popular model (68.8%), and psychodynamic/psychoanalytic therapy trailed mindfulness at 35.4%. Two years ago, we speculated that mindfulness could eventually become a model of psychotherapy in its own right (Germer, Siegel, & Fulton, 2005). That time is rapidly approaching.

...mindfulness may be a core perceptual process underlying all effective psychotherapy...

Why? One explanation is that the young people who were spiritual seekers and meditators in the 1960's and 70's are now senior clinical researchers and practitioners in the mental health field. They have been benefiting personally from mindfulness practice for many years and finally have the courage to share it with their patients.

Another explanation is that mindfulness may be a core perceptual process underlying all effective psychotherapy—a transtheoretical construct. Clinicians of all stripes are applying mindfulness to their work, whether they are psychodynamic psychotherapists who primarily work relationally, cognitive-behavioral therapists who are developing new, more effective,

...the soft science of contemplative practice is being validated by “hard” scientific research.

structured interventions, or humanistic psychotherapists encouraging their patients to enter deeply into their “felt experience.” The common therapeutic question is, “How can I help the patient to be more accepting and aware of his or her experience in the present moment?”

Perhaps the strongest argument for the newfound popularity of mindfulness is that

science is catching up with practice—the soft science of contemplative practice is being validated by “hard” scientific research. Meditation is now one of the most widely studied psychotherapeutic methods (Walsh and Shapiro, 2006)—although, admittedly, many of the studies have design limitations (Agency for Healthcare Research and Quality, 2007). Between 1994 and 2004, the preponderance of the research on meditation has switched from studies of concentration meditation (such as transcendental meditation and the relaxation response) to mindfulness meditation (Smith, 2004).

We are currently in a “third wave” of behavior therapy interventions (Hayes, Follette, & Linehan, 2004). The first wave focused on stimulus and response in classical and operant conditioning. The second wave was cognitive behavior therapy, which works to change the content of our thoughts to alter how we feel. The current “third wave” is mindfulness and acceptance-based therapy. Researchers such as Steven Hayes, the founder of Acceptance and Commitment Therapy, discovered mindfulness and acceptance-based treatment strategies while looking for novel solutions to intractable clinical dilemmas. Others, such as Marsha Linehan, who developed Dialectical Behavior Therapy, had a personal interest in Zen Buddhism and sought to integrate principles and techniques from that tradition into clinical practice. We are now in the midst of a fertile convergence of modern scientific psychology with the ancient Buddhist psychological tradition.

In the new mindfulness and acceptance-based approach, therapists help patients shift their relationship to personal experience rather than directly challenging maladaptive patterns of thought, feeling, or behavior. When patients come to therapy, they typically have an aversion to what they are feeling or how they are behaving—they want less anxiety or less depression, or want to drink or eat less. The therapist reshapes the patient’s relationship to the problem by cultivating curiosity and moment-to-moment acceptance of uncomfortable experience.

For example, a panic patient, Kaitlin, spent the previous five years white-knuckling the steering wheel of her car while driving to work. She was doing all the traditional behavioral strategies: she exposed herself to highways and bridges, she practiced relaxation, and she could effectively talk herself out of her fear of dying from a heart attack. Still, Kaitlin wondered aloud, “Why the heck do I still suffer from panic?” The answer is that Kaitlin never learned to really tolerate anxiety itself. She was always running away from it. She needed the missing link that the third generation of behavior therapies addresses—learning to accept inevitable discomfort as we

...the missing link that the third generation of behavior therapies addresses is learning to accept inevitable discomfort as we live our lives in a meaningful way.

live our lives in a meaningful way.

Another arena of research that is fueling interest in mindfulness is brain imaging and neuroplasticity. We know that “neurons that fire together, wire together” (Hebb, 1949 in Siegel, 2007), and that the mental activity of meditation activates specific regions of the brain. Sara Lazar and colleagues (2005) demonstrated that brain areas associated with introspection and attention enlarge with years of meditation practice. Davidson et al (2003) found increased activity in the left prefrontal cortex following only eight weeks of mindfulness training. The left prefrontal cortex is associated with feelings of well-being. Increased activity in this part of the brain also correlated with the strength of immune response to a flu vaccine. More dramatic changes could be found in the brains of Tibetan monks who had between 10,000 to 50,000 hours of meditation practice (Lutz et al, 2004).

The evidence from scientific studies is validating what meditators have long suspected, namely that training the mind changes the brain.

The evidence from scientific studies is validating what meditators have long suspected, namely that training the mind changes the brain (Begley, 2007). We are now beginning to see where and how much change is possible. Furthermore, the changes that occur in the brain when we are emotionally attuned to our own internal states in meditation seem to correlate with those brain areas that are active when we are feeling connected to others (Siegel, 2007)—suggesting that therapists can train their brains to be more effective therapeutically by practicing mindfulness meditation.

Practical Applications of Psychotherapy

Psychotherapists are incorporating mindfulness into their work in many ways. We might imagine these on a continuum, from implicit to explicit applications—from those hidden from view to those that are obvious to the patient.

...when a therapist begins personally practicing mindfulness, his or her capacity for emotional attunement seems to increase.

On the most implicit end is the practicing therapist. As just mentioned, when a therapist begins personally practicing mindfulness, his or her capacity for emotional attunement seems to increase. Regardless of theoretical orientation,

models of psychopathology, or modes of intervention, the therapist seems to be able to more carefully attend to and empathize with a patient's experience. The therapist's need to "fix" problems diminishes as he or she cultivates the capacity to be with another's pain. Therapists feel closer to their patients, developing compassion both by becoming aware of the universality of suffering, and by seeing more clearly their interconnection with others. Research in this area is just beginning (Grepmaier, Mitterlehner, Loew, & Nickel, 2006; Grepmaier, Mitterlehner, Loew, & Nickel, 2007)

Next along the continuum is the practice of mindfulness-informed psychotherapy (Germer, Siegel, & Fulton, 2005). This is treatment informed by the insights that derive from Buddhist psychology and mindfulness practice. The therapist's understanding of psychopathology and the causes of human suffering change as a result of observing his or her own mind in meditation practice. Insights such as understanding the arbitrary and conditioned nature of thought, seeing the counterproductive effects of trying to avoid difficult experience, and noticing the painful consequences of trying to buttress our sense of separate self, all have an impact on how we approach our patients' problems.

Finally, the most explicit application of mindfulness to psychotherapy is mindfulness-based psychotherapy (Germer, Siegel, & Fulton, 2005). Mindfulness-based therapists actually teach mindfulness practices to patients to help them work with their psychological difficulties. A host of mindfulness-based interventions are currently being developed for a wide range of clinical problems. Sometimes the patient is taught a traditional meditation practice, and other times that practice is customized for the patient's particular diagnosis, personality style, or life circumstances.

Untangling Terminology

As "mindfulness" is absorbed into modern psychology and Western culture, there is growing confusion about the term. It has come to cover a lot of ground. At least some of the confusion could be eliminated if we used Pali, rather than English, words. (The reader is referred to *Mindfulness in Plain English* by Bhante Gunaratna (2002) for a remarkably lucid exposition of Pali terms and how they relate to mindfulness practice.)

The following is an effort to tease apart the different meanings of mindfulness currently used in modern psychology.

Classical Concept: As discussed earlier, the Pali term *sati*, which is often translated as “mindfulness,” denotes “awareness,” “attention,” and “remembering.” In the Buddhist tradition, *sati* is cultivated as a tool for observing how the mind creates suffering moment by moment. It is practiced to develop wisdom and insight, which ultimately alleviates suffering.

Psychological Process: Process definitions have an instructional aspect—they indicate what we should do with our awareness. Two process definitions of mindfulness in clinical settings are “moment-to-moment, nonjudgmental awareness” (Kabat-Zinn, 1990, 2006) and “awareness, of present experience, with acceptance” (Germer, Siegel, & Fulton, 2005). These process definitions suggest, “Look at your moment-to-moment experience, and try to do it with a spirit of acceptance.” Another process definition of therapeutic mindfulness, “attentional control” (Teasdale, Segal, & Williams, 1995), suggests redirecting attention to manage emotional distress.

Process definitions are especially valuable because they identify processes of change or mechanisms of action that may help particular patients. In therapy, “mindfulness” in general is considered a change process, and so are the individual elements that constitute therapeutic mindfulness—acceptance, present experience, and awareness. Different patients might require more emphasis on one element or another. For example, self-critical persons might benefit most from “acceptance,” obsessive patients might be helped by focusing on “present moment sensations,” and people with impulse control disorders might benefit most from greater “awareness”—observing the precursors to problem behaviors such as drinking, gambling, or overeating.

We can break down the processes even further to fine-tune treatment for particular individuals. For example, there are different styles of awareness that can benefit certain patients: metacognitive awareness (“thoughts are not facts”) helps chronically depressed people disentangle from depressive ruminations (Teasdale et al, 2002), while people with a schizoid or detached style of relating to their feelings might benefit from a more participatory observational style—intimately observing feelings as they arise in the body.

There are three key meditation skills often subsumed under the heading of “mindfulness meditation:”

Meditation Practice: When someone says, “I do mindfulness meditation,” what is he or she actually doing? There are three key meditation skills often subsumed under the heading of “mindfulness meditation:”

Concentration Meditation: This technique has a focal object, such as the breath or a mantra. The instruction is, “When you notice that your mind has wandered, gently bring it back

to [the object].” Concentration meditation produces a feeling of calmness. The Pali word most associated with concentration practice is samatha, while the traditional word for meditation is bhavana, which means “developing.” “Concentration meditation” is a translation of samatha bhavana, the cultivation of concentration. The “relaxation response” (Benson & Klipper, 2000) is well-known example of this meditation approach.

Mindfulness Meditation: The instruction for mindfulness meditation is, “Notice whatever predominates in awareness, moment to moment.” Here the intention is not to choose a single object of focus, but rather to explore changing experience. The skill of mindfulness cultivates insight into the nature of one’s personal conditioning (e.g., “fear of disapproval,” “anger at authority”) and the nature of mental reality (“it’s changing,” “it’s often unsatisfactory,” “the ‘self’ is fluid”).

This is primarily what distinguishes “mindfulness meditation” from other forms of meditation, such as concentration meditation and various forms of visualization meditation, and it is a unique contribution of Buddhist psychology. The Pali words for mindfulness meditation are vipassana bhavana, which translates well as the cultivation of insight or “insight meditation.” Western researchers and clinicians usually use the expression “mindfulness meditation” to refer to this practice.

Making matters a bit more complicated, sati is actually cultivated by, and necessary for, both concentration and mindfulness meditation techniques. That is, we need to know where the mind is to concentrate on either a single object or many arising objects. Since the mind is actively engaged with a wider range of experiences during mindfulness meditation, it can be said that sati is more deliberately developed in this particular practice.

During mindfulness or insight meditation, the meditator can always return to concentration practice to stabilize attention if he or she becomes lost in daydreams and discursive thinking. In this regard, concentration practice (samatha) facilitates mindfulness or insight (vipassana) practice.

Lovingkindness Meditation: Lovingkindness is the emotional quality associated with mindfulness. Translated from the Pali word, metta, lovingkindness meditation can be a form of concentration meditation. The practitioner returns attention again and again to phrases such as “May I and all beings be safe, happy, healthy, and live with ease.” This technique allows the person to soften into and allow arising experience to be just as it is. It is cultivating the intention to be loving and kind, rather than superimposing warm feelings on our moment-to-moment experience. The emotional flavor of affectionate awareness typically follows our kindly

Mindfulness: What Is It? Where Did It Come From?

intentions. Lovingkindness (feeling safe, peaceful, healthy, and free from suffering) keeps the function of mindfulness practice clear in the mind of the practitioner. It is a quality of mind that ideally pervades the other meditation practices. Therefore, while practicing concentration meditation, we work to receive mental distractions with openheartedness rather than sternness; when practicing mindfulness or insight meditation, we greet all mental contents like welcome visitors.

...when practicing mindfulness or insight meditation, we greet all mental contents like welcome visitors.

When our sati (mindfulness) is strong, we can choose to switch fluidly among metta (lovingkindness), samatha (concentration), or vipassana (mindfulness or insight) practices, as needed, even in a single sitting of meditation. For example, if dealing with psychological trauma, we can notice when we are overwhelmed and can choose to redirect attention to the breath or external sights and sounds (samatha). We can also add some lovingkindness (metta) to our experience to reestablish a measure of calmness. When we feel more stable, we can open up the field of awareness again to observe how the trauma memories are experienced in the mind and body (vipassana). In other words, the three skills—concentration, mindfulness, and lovingkindness—can be selectively emphasized in meditation and daily life to reduce suffering and increase happiness.

Common Usage: To make matters even more confusing, the general public in Western culture uses the term “mindfulness” loosely to refer to every variety of formal and informal secular Buddhist practice. Under this label, we not only have the different meditation skills just mentioned—lovingkindness, concentration, and mindfulness or insight—but also visualization techniques and innumerable, informal meditation strategies to deal with everyday life. Visualization meditations include practices that cultivate equanimity, such as imagining oneself as a solid mountain unaffected by the wind and weather, or as a deep pond unperturbed by the waves.

As mindfulness is incorporated into diverse fields such as health care, education, and business, the term will probably continue to accrue an increasing array of meanings. Within clinical psychology, “mindfulness” is already used interchangeably with “acceptance” to describe the third wave of behavioral treatments. In the field of education, Ellen Langer (1989) describes “mindfulness” as a cognitive process that implies openness, curiosity, and awareness of more than one perspective. In the business world, Richard Boyatzis and Annie McKee (2005) encourage “mindfulness practice” to “observe emotional reality” (p.124) in an organization and “avoid narrow focus and constant multitasking” (p.131).

Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com

Despite the recent proliferation of interest in mindfulness and its multiplying meanings, the various uses of the term still have much in common. Only time will tell what happens to “mindfulness” as the theory and practices that began in Buddhist psychology move into new, heretofore unimaginable domains.

Radical Roots

The cultivation of mindfulness in a rigorous way comes from a tradition with ancient roots and lofty goals. These origins are important to understand so that modern clinicians don’t inadvertently miss its profound potential for psychological transformation.

As far back as four thousand years ago, we find images of yogis in ancient India sitting cross-legged in meditation, gazing inward with eyes half closed. Training the mind was understood as the principle means of achieving mental and physical health, emotional equanimity, and perfecting the human condition.

Mindfulness, as we are coming to know it in the West, was most clearly described in ancient times in the teachings of the historical Buddha. According to tradition, he was born a prince some 2500 years ago. At the age of 29, he renounced a life of comfort and privilege to undertake rigorous mental and physical disciplines for seven years. Finally, at age 36, he experienced a breakthrough of understanding that profoundly re-ordered his mind. He wandered from place to place for the next 40 years exhibiting behaviors devoid of the usual human propensities toward attachment, aversion or delusion. The psychological teachings he left behind—including how to cultivate mindfulness—are still accessible to us today.

...in the Buddha’s view, the body and mind can be the vehicle for a profound experience of transcendence.

For the Buddha, the mind and body are seen as the product of material causes, lacking the divine essence that was assumed by the Indo-European religions of his time. Nonetheless, in the Buddha’s view, the body and mind can be the vehicle for a profound experience of transcendence. Rather than breaking through to something divine, however, this experience results from a radical transformation of the mind. Consciousness itself, though conditioned, can be purified to such an extent that it entirely understands itself and its conditioning. The result is not only a deep sense of personal well-being, but also the possibility of a more evolved way of being human.

The primary interest of this tradition is the quality of consciousness in the present moment. How exactly is the mind and body manifesting here and now? Consciousness arises from a whole network of interdependent factors, including all of the details of our genetic makeup and personal history. Each moment of consciousness, in turn, has an impact upon our subsequent beliefs, feelings, and behaviors. Knowing both the causes and the effects of a moment of consciousness allows us to participate intentionally in the process of living; to steer a course away from suffering and toward healthier states.

What the Buddha saw with great lucidity on the night of his awakening was the workings of his own mind. His insights have profound implications for modern psychotherapy, as they reveal how our minds construct our experience moment by moment, and how these constructions can lead to suffering. The following description is not for the faint-hearted—it is a radically new psychology for many readers, and somewhat complicated, so we encourage you to consider it slowly.

How We Construct Our Experience

The Buddha saw that all experience involves a process in which the raw data streaming into the mind through the sensory organs or “sense doors” is compiled and synthesized into a virtual world of meaning. There are six sense doors in all: the eye, ear, nose, tongue, body, with the mind itself viewed as the sixth. There are also five primary categories, or systems, whereby the information flowing through these sense doors is processed.

The first category is *material form*, which acknowledges that the mind and body have a material, biological foundation. The next is *consciousness*, or the act of becoming aware of an object by means of one of the six sense organs (again with the mind as the sixth organ). At this stage the eye sees, the ear hears, the tongue tastes, etc. The third and fourth systems, which shape how consciousness manifests, are *perception* and *feeling*. Perception identifies what is experienced through a series of associations, interpreting incoming data in the light of historically learned patterns of recognition. For example, you can recognize just two dots and a curved line to be a face 😊, or identify the object in your hands to be a book. “Feeling” provides an affect tone for each moment of cognition, either pleasant, unpleasant or neutral. This is a hedonic assessment of each object’s value to the organism. In every moment, we either like, dislike, or aren’t interested in what we perceive.

The fifth and final component of the construction of experience is called formations and

Mindfulness: What Is It? Where Did It Come From?

reflects the intentional stance we take toward all objects that we perceive and toward which we have feelings. Volition or intention is the executive function of the mind which initiates conscious or unconscious choices. Whereas the first four systems yield a sense of what is happening at any given moment, the fifth decides what we are going to do about it.

How do these processes unfold together? Imagine that you're hungry, and you open the refrigerator door. The eye sees patterns of light, dark, and color in the visual field, which are quickly organized by the brain and perceived as a freshly made sandwich. Instantaneously a positive feeling toward the sandwich arises, and an intention forms to pick it up and eat it. This is soon followed by the behavior of actually taking a bite. Consciousness creates and responds to our reality so quickly that the process is usually unconscious.

Intentions and the behaviors that follow from them tend to become habitual and turn into dispositions. Dispositions are the residue of previous decisions, stored in memory as habits, learned behaviors, personality traits, etc., and provide historical precedents for how to respond to each newly arising moment. Feedback loops develop, whereby one's present response to any situation is both shaped by previous experience and goes on to mold the dispositions that will influence future responses. If we enjoyed this and other sandwiches in the past, we may develop the habit of reflexively picking up and eating sandwiches, even when we're not really hungry.

Putting this all together, the six sense doors and five systems interact simultaneously to form a dynamic interdependently arising process of mind and body, constructing meaning from an ever-changing barrage of environmental information. In each moment, which can be measured in milliseconds, all this arises concurrently, organizes around a particular bit of data, and then passes away.

One unique feature of Buddhist psychology is that consciousness is regarded as an unfolding process, or an occurring event, rather than as an existing entity. Nothing permanent abides (and there is no enduring "me" to be found) because every "thing" is a series of interrelated events. The everyday sense that we (and other beings) have separate existence comes from the fact that each moment of cognition is followed by another moment of cognition, yielding the subjective sense of a stream of consciousness. We have simply learned to connect the snapshots together into a coherent narrative. This is like the illusion of continuous action that our minds create out of separate frames in a movie. Among the great insights of the Buddhist tradition is not only that this is all happening below the threshold of ordinary awareness, but also that this process can unfold in either healthy and unhealthy ways, depending on the skills of its handler.

Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com

This analysis of human experience has important and radical clinical implications. It suggests that our reality, including the sense of “self” around which so much personal psychology is centered, is based on a fundamental misunderstanding. It is as though we believed that a powerful automobile like a Ferrari was a living being—until we saw it disassembled on the floor of a workshop. When we know the component parts and how they’re put together, we can never look at a Ferrari in quite the same way. Similarly, seeing the way the “self” is constructed can help both us and our patients loosen our identification with the changing kaleidoscope of thoughts and feelings that arise in the mind, allowing us to live more flexible, adaptive, happier, productive lives.

...our reality, including the sense of “self” around which so much personal psychology is centered, is based on a fundamental misunderstanding.

A Physician of the Mind

The Buddha sometimes refers to himself as a physician, and to his teaching as a kind of medicine. The illness he is treating is the fact that consciousness is continually influenced by patterns of conditioning that inevitably result in unhappiness, frustration, and disappointment. This is certainly an observation familiar to the modern psychotherapist. Rather than changing brain chemistry by pharmaceuticals or probing past traumas arresting normal development, however, the Buddha’s approach is to help the patient gain direct insight into the nature of experience. This takes many forms.

...we continuously delude ourselves into believing that we can hold onto what we want and get rid of what we don’t want, despite considerable evidence to the contrary.

One track is to notice the extent to which the patterns of conditioning we acquire, through learned behaviors, conditioned responses, or cultural osmosis, are for the most part built upon certain illusions or even delusions. Foremost of these are our remarkably robust habit of taking what is impermanent and subject to change

to be stable or reliable; believing that the satisfaction or gratification of desires is sustainable for longer than a few moments when, because of the former point, it is not; and projecting again and again onto the field of experience the notion of a person or agent that owns, controls, or consists

Mindfulness: What Is It? Where Did It Come From?

of what is happening. In other words, we continuously delude ourselves into believing that we can hold onto what we want and get rid of what we don't want, despite considerable evidence to the contrary. And on top of this, we delude ourselves into believing that a stable, independent "I" or "me" is running this show. To the extent these misperceptions can be gradually uncovered and corrected, considerable healing can occur.

For example, there is the story of a monk who complained to his Zen teacher that he was an angry person. The teacher said, "Show me." Since the student was not angry at the moment, he could not show it, whereupon the teacher said, "See, you are not an angry person because you are not angry all the time." Such insight into the fluidity of experience and insubstantiality of identity can be enormously helpful to patients who have core beliefs about being unworthy, unlovable, unintelligent, and so forth.

Another approach is to recognize the fact that behavior is driven by desire, both conscious and unconscious, and to use that knowledge to diminish and eventually eliminate the role of desire in the moment-to-moment functioning of mind and body. The

impulse to like some things and dislike others leads to pulling some objects of experience closer and pushing others farther away from a sense of self that sets itself apart from what is actually happening. Ironically, say the Buddhists, the very strategies we employ to

Ironically, say the Buddhists, the very strategies we employ to overcome the perceived shortcomings of the world as we find it...have the result of causing and perpetuating greater suffering.

overcome the perceived shortcomings of the world as we find it—embracing what offers pleasure and rejecting what brings pain—have the result of causing and perpetuating greater suffering. The solution is to practice letting go of desire itself, which can be replaced by an attitude of equanimity or acceptance. In clinical practice, we see countless examples that "what we resist persists," and how patients suffer terribly from wishing that things would be other than they are, i.e., from not facing "reality."

The underlying tendencies of both delusion and desire are deeply embedded in human nature, but can be successfully diminished and even eliminated. The word "Buddha" actually means "awake," and the historical Buddha was a man who undertook a program of transformation that resulted in his "awakening" from the misconceptions of delusion and the addictions of desire.

Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com

Bottom-Up Vs. Top-Down Processing

Modern cognitive scientists distinguish between bottom-up and top-down information processing (Eysenck & Keane, 2000). At the heart of mindfulness meditation is an emphasis upon bottom-up, rather than top-down, functions of the mind. That is to say, mindfulness seeks to bring attention directly to the stream of sensory data entering experience through each of the sense doors: the visual forms, sounds, smells, tastes, and bodily sensations, as well as to the arising of thoughts and images in the mind. In doing so, it steers attention away from the many “upper level” schemas, narratives, beliefs, and other conceptual maps we normally use to guide our way through a day’s experience. This is cognitive behavioral therapy on steroids—bringing attention to subtle sensory experience, and in so doing, coming to see all thoughts and their associated feelings as arbitrary, conditioned events. While ordinary consciousness tends to overlook the details of sensory experience (usually we are just trying to extract from it what is of interest to achieve our goals), mindfulness practice instead focuses upon the sensory data itself, for its own sake, and invites the practitioner to consistently abandon conceptual judgments and narrative stories. Such a method has the effect of depriving the mind of much of the energy that fuels its stories and delusions, and transfers our awareness to the areas that will directly reveal the transient, constructed, and selfless nature of experience.

Mindfulness in Context

As mentioned earlier, mindfulness is part of a project designed to uproot harmful habits of mind. In the traditional Buddhist context, mindfulness is embedded in an eight-fold path to alleviate suffering; mindfulness is guided and directed by seven other factors. They are: 1) the view one has of what is real, important valuable, and useful; 2) how intention is used to initiate and sustain action in skillful ways; 3) the nature of speech that can be either harmful or beneficial; 4) the quality of action as it relates to ethical principles; 5) one’s means of sustaining oneself in the world as livelihood; 6) the degree and quality of effort employed to bring about change; 7) and concentration as a focusing and supporting factor to mindfulness. When mindfulness is taken out of this broader context, its power may be limited. For example, it is difficult to sustain mindful awareness if we are causing harm to ourselves or others, or if we do not have the concentration and beneficial intentions to focus our efforts. In other words, it’s hard to have a good meditation session after a busy day of cheating, stealing, and killing.

...mindfulness is part of a project designed to uproot harmful habits of mind.

The Buddhist tradition has focused on universal challenges in human life, such as the

problem of suffering in general. Many aspects of Buddhist psychology are therefore as applicable today as they were in ancient India. As this book demonstrates, psychotherapy is harnessing the power of mindfulness and acceptance to bring relief to intractable psychological conditions. However, the proposed outcome of dedicated Buddhist practice is radically different: the complete cessation of suffering. In modern terms, this means envisioning a life without a trace of psychological symptoms found in our diagnostic manuals. Such an “awakened” person lives naturally, with a full range of physical, emotional and intellectual capacities, but without needing events to be other than they are in order to feel fulfilled. By practicing mindfulness, we can learn to lead a peaceful, balanced, loving, life, all the while working for the benefit of others. There is no need to wait for another time, place, or condition for this to occur—we can begin where we are, therapists and patients alike.

References

- Agency for Healthcare Research and Quality (2007). Meditation practices for health: State of the research. *U.S. Department of Health and Human Services, Evidence Report/Technology Assessment, Number 155.*
- Bach, P., & Hayes, S. (2002) The use of acceptance and commitment therapy to prevent the rehospitalization of psychotic patients: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 70(5), 1129-1139.*
- Begley, S. (2007). *Train you mind, change your brain.* New York: Ballantine Books.
- Benson, H., & Klipper, M. (2000). *The relaxation response.* New York: Avon Books.
- Bhikkhu, T. (2007). Bhikkhu, T. (2007). *Mindfulness defined.* Retrieved November 30, 2007, from <http://www.dhammatalks.org/Archive/Writings/CrossIndexed/Uncollected/MiscEssays/Mindfulness%20Defined.pdf>
- Bishop, S., Lau, M., Shapiro, S., Carlson, L., Anderson, N., Carmody, J., et al. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and*

practice, 11(3), 230-241.

Boyatzis, R. & McKee, A. (2005). *Resonant leadership: Renewing yourself and connecting with others through mindfulness, hope, and compassion*. Boston, MA: Harvard Business School Press.

Davids, T. & Stede, W. (Eds.) (1921/2001). *Pali-English Dictionary*. New Delhi, India: Munshiram Manoharlal Publishers Pvt, Ltd.

Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S., et al. (2003). Alterations in brain and immune function produced by mindfulness meditation. *Psychosomatic Medicine*, 65(4), 564-570.

Dunne, J. D. (2007, March). *Mindfulness & Buddhist contemplative theory*. Poster presented at the 2007 annual conference, Integrating Mindfulness-Based Approaches & Interventions into Medicine, Health Care, and Society, Worcester, MA.

Eysenck, M.W., Keane, M. T. (2000). *Cognitive Psychology: A Student's Handbook*. New York: Psychology Press.

Germer, C., Siegel, R., & Fulton, P. (Eds.) (2005). *Mindfulness and psychotherapy*. New York: Guilford Press.

Grepmaier, L., Mitterlehner, F., Loew, T., & Nickel, M. (2007) Promotion of mindfulness in psychotherapists in training: preliminary study. *European Psychiatry* (22), 485-489.

Grepmaier, L., Mitterlehner, F., Loew, T., & Nickel, M. (2006) Promotion of mindfulness in psychotherapists in training and treatment results of their patients. *Journal of Psychosomatic Research* 60(6), 649-50.

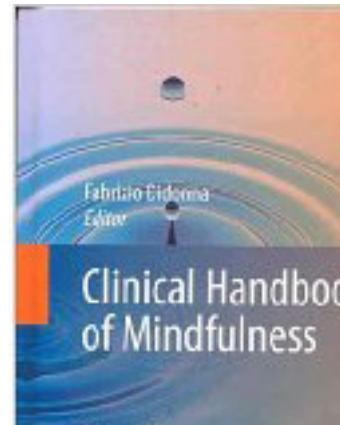
Gunaratana, B. (2002). *Mindfulness in plain English*. Somerville, MA: Wisdom Publications.

Hayes, S., Follette, V., & Linehan, M. (Eds.). (2004). *Mindfulness and acceptance: Expanding*

- the cognitive-behavioral tradition*. New York: Guilford Press.
- Hebb, D. (1949). *The organization of behavior: A neuropsychological theory*. New York: Bantam Books.
- Kabat-Zinn, J. (1990). *Full Catastrophe Living*. New York: Delacorte Press.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144-156.
- Kabat-Zinn, J. (2006, June). Some clinical applications of mindfulness in medical and mental health practice. In *Meditation in Psychotherapy*. Conference conducted by Harvard Medical School, Boston, MA.
- Langer, E. (1989). *Mindfulness*. Cambridge, MA: Da Capo Press.
- Lazar, S., Kerr, C., Wasserman, R., Gray, J., Greve, D., Treadway, M., et al. (2005). Meditation experience is associated with increased cortical thickness. *NeuroReport*, 16(17), 1893-1897.
- Linehan, M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.
- Lutz, A., Grelschar, L., Rawlings, N., Richard, M., & Davidson, R. (2004). Long-term meditators self-induce high-amplitude gamma synchrony during mental practice. *Proceedings of the National Academy of Sciences*, 101(46), 16369-16373.
- Rapgay, L. & Bystrisky, A. (in press). Classical mindfulness: an introduction to its theory and practice for clinical application. In *Longevity and Optimal Health: Integrating Eastern and Western Perspectives*. *Annals of the New York Academy of Sciences*.
- Segal, Z., Williams, J., & Teasdale, J. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guilford Press.

- Siegel, D. (2007). *The mindful brain*. New York: W.W. Norton.
- Simon, R. (2007). The top ten. *Psychotherapy Networker*, March/April, pp. 24,25,37.
- Singh, N., Wahler, R., Adkins, A., & Myers, R. (2003). Soles of the feet: a mindfulness-based self-control intervention for aggression by an individual with mild mental retardation and mental illness. *Research in Developmental Disabilities*, 24(3), 158-169.
- Smith, J. (2004). Alterations in brain and immune function produced by mindfulness meditation: three caveats. *Psychosomatic Medicine*, 66, 148-152.
- Teasdale, J., Moore, R., Hayhurst, H., Pope, M., Williams, S., & Segal, Z. (2002). Metacognitive awareness and prevention of relapse in depression: Empirical evidence. *Journal of Consulting and Clinical Psychology*, 70(2), 275-287.
- Teasdale, J., Segal, Z., & Williams, J. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy*, 33, 25-39.
- Toyomasu, K. G. (2001, January 10). Haiku for People. Retrieved July 20, 2007 from <http://www.toyomasu.com/haiku/#basho>
- Walsh, R. & Shapiro, S. (2006). The Meeting of Meditative Disciplines and Western Psychology: A Mutually Enriching Dialogue. *American Psychologist*, 61(3), 227-239.

From Didonna, F. (Ed.)(2008)
Clinical Handbook of Mindfulness.
New York: Springer.
Distributed with permission.



Purchase at www.Amazon.com

Stay tuned to www.NICABM.com for a free telesimar series: *New Perspectives on Change*, including a special session on Mindfulness and Psychotherapy along with other related topics.

Take Your Work to a Deeper Level

Click [HERE](#) for a fully interactive 8-week distance learning course on *Mindfulness and Psychotherapy* with the coauthor of this chapter, Ronald D. Siegel.

[Earn 24 CE/CME credits.](#)



Ronald D. Siegel, PsyD • Christopher K. Germer, PhD • Andrew Olendzki, PhD

Distributed with permission by
The National Institute for the Clinical Application of Behavioral Medicine
www.nicabm.com