



The Wise Brain Bulletin

News and Tools for Happiness, Love, and Wisdom

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Flow Machine: Hacking the Human Brain for Healing and Wellbeing

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How one scientist is blending ancient philosophy with modern neuroscience to fight addiction

Heart racing and fists shaking, I stood ready to fight. I was moments away from sparring with the top student in my karate class in Japan: a fast, coordinated monster who had defeated all challengers. But nanoseconds before the fight began, something shifted. Nervous anticipation disappeared and I snapped into total focus. The room, the other students, and everything else faded into irrelevance, leaving my awareness filled only with my opponent in his white *gi*. When the coach shouted, “Go!,” my body shot through the air like a lightning bolt, my fist connecting to my opponent’s ribs. Somehow I had scored a point against the best in the class, but paradoxically I didn’t care. All that mattered in that moment was that timeless flash when there was no sense of self, no me, just a body effortlessly flying through space toward the inevitable goal. That moment of *flow* remains one of the most powerful and beautiful things I have ever experienced.

Which is why, 25 years later, I find myself sitting in a tight blue cap with a 120 electrical leads wired to my head, while four scientists of the Therapeutic Neuroscience Lab scurry around me tweaking knobs, rattling keyboards, and testing gear. The clues these scientists hope to uncover are small steps in a massive project that could forever change the way we cure addiction, treat anxiety and depression, and even teach meditation—eventually

Greetings

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[Rick Hanson, PhD](#) edits the *Bulletin*. [Michelle Keane](#) is its managing editor, and it's designed and laid out by the design team at [MPK Consulting](#).

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making the flow state easily available to everyone, with potentially world-changing ramifications for the human race. I'm playing the role of lab rat in a groundbreaking test intended to teach us how to find that same state of flow *on call* using real time EEG brain scanning, state of the art signal processing, and theories from psychology, neuroscience, and Eastern religion. Those are the stakes, but getting there won't be easy.

Flow vs. Daydreaming

“Flow” means to be fully absorbed in an activity to the point of losing yourself in the joy that comes with doing it. Though it was first clinically defined by Hungarian psychologist Mihaly Csikszentmihalyi (Chik-zent-mee-hi) in the 1970s, we have known about the flow state for millennia. There is a wealth of colloquial terms we use to talk about flow: *being in the zone, on a roll, in the moment, in a groove, in tune, on fire, centered, in the now*. Flow feels good—smooth, masterful, concentrated calm—and at its peak, it can be intensely pleasurable. Flow is also associated with

the highest levels of human functioning and achievement. Top athletes and musicians, and even hackers, stockbrokers, and poker players all report taking advantage of this condition of peak performance, focus, and clarity. So why can't we be in a flow state all the time?

I learned the painful answer to this question during the months of clobberings that followed that one magical day in karate class. I had done so well in that bout that now the teacher and other students expected me to perform at that level every time, never mind that I expected it of myself. The pressure was on, but something was wrong. It seemed like no matter what I did, I just couldn't get back to that state of flow. Instead, I was over thinking every move,

second-guessing all my instincts, and found myself utterly unable to perform. It totally sucked: a classic experience of *choking*. The reason that we can't get into flow is because *we get in our own way*.

Getting in our own way, it turns out, is the condition of most people most of the time. A 2010 study^[1] by Harvard's Matthew Killingsworth and Daniel Gilbert sent participants text messages at random times throughout the day, asking them what they were doing and whether they were thinking about that activity or something else. In a sample of over 2000 participants, the researchers found that people were daydreaming almost *50 percent* of the time.

Daydreaming is the opposite of flow. In daydreaming—or “mind wandering,” as psychologists so aptly call it—we're caught up in our fantasies, self-reflection, fears and desires. In a flow state, on the other hand, we're totally focused on *just the present moment*.

We daydream so much that scientists call it the default mode—what the human brain is doing when it's not focused on something in particular. The brain network responsible for daydreaming is named the “default mode network” (DMN). And much like letting your car idle will burn your fuel reserves, this “idling” activity negatively affects our daily happiness. The Harvard study, for example, discovered that people were the *least happy* when daydreaming. As Killingsworth summed it up, “A wandering mind is an unhappy



mind.” Simply put, it feels good to be focused on the moment in a flow state and bad to be fantasizing about greener pastures, or the purple vistas of what might have been.

In extreme cases, this mental fantasizing can turn into rumination and recrimination, so it’s not surprising that DMN activity is significantly correlated with depression, anxiety, and other psychiatric disorders. It can also be dangerous. A recent study by the National Highway Traffic Safety Administration found that daydreaming causes twice as many fatal crashes as texting.[2] Of all the aspects of the DMN, however, the most compelling and medically significant may be its connection with addiction.

Default Craving

Could heroin junkies one day use flow to overcome their addiction? Judson Brewer, an MD-PhD who until recently ran an experimental addiction clinic at Yale, thinks so. Now in charge of the Therapeutic Neuroscience Lab at the UMass Medical Center, Brewer is a small, bearded man with a balding head and intense eyes behind wire-rimmed circular glasses. He is one of an elite cadre of neuroscientists attempting to find radical new medical interventions through the understanding of how the brain functions during the flow state.

Brewer’s research centers on a region of the brain known as the *posterior cingulate cortex* (PCC), which is a major node in the DMN. The PCC is one of the most active and densely connected areas of the brain, involved in emotion and memory processing. It also turns out to be very good at interfering with the flow state. In a 2013 paper published in the *Frontiers of Human Neuroscience*, Brewer noted that the PCC gears up when we are daydreaming and are caught up in DMN activity.[3] When the PCC calms down, on the other hand, we become more mindful of our immediate experience, making it easier to enter a flow state.

But here’s the real clincher. Numerous studies have linked PCC activity to the sensation of craving and have demonstrated the role it plays in addiction.[4] That is, daydreaming and addiction are linked. In fact, addicts who develop lesions in the PCC (thus rendering it ineffective) report an immediate loss of craving and addiction. Brewer noticed this correlation and wondered whether it might be possible to craft an intervention based on these findings. If he could teach addicts to voluntarily dial down activity in the PCC, would that give them a leg up in overcoming their addiction?



The answer from his experimental trials is a clear yes. The intervention Brewer found to deactivate the PCC was mindfulness meditation. Mindfulness, which simply involves bringing one's awareness to the sensations of his or her present-moment experience, seems like a natural way to bring us out of the mind wandering state. The whole point is to "be here now," as the saying goes, and Brewer had a hunch that doing just that might be able to reduce PCC activity in the brain.

Brewer's personal interest in mindfulness meditation began decades ago with a horrible breakup. In his early twenties, he thought his life was all set—he had just graduated from Princeton and was engaged to be married to his college sweetheart. But just before beginning medical school, his relationship fell apart. Upset and unable to sleep, Brewer started listening to Jon Kabat-Zinn's mindfulness meditation instruction tapes and found that they helped him do more than just pass the time. The training in concentration and relaxation he received helped him make it through his breakup, and subsequently get through medical school. After that, Brewer was hooked.

Having experienced the benefits of mindfulness firsthand, Brewer began to wonder if it could also influence the addicts he was working with. "During my residency, I noticed a correlation between how junkies talk about addiction and how Buddhists describe the

human condition. They were using the same language, which is all about craving, clinging, desiring. I thought that was interesting, so we did some trials to see if mindfulness meditation could help with addiction.”

Investigating this question wouldn’t be easy, but the difficulty of the challenge was matched by the enormity of its possible benefits. After some promising initial results with cocaine and alcohol dependence[5], in 2009 Brewer created an experiment at Yale’s Therapeutic Neuroscience Clinic using mindfulness practice to treat smoking addiction.[6] Since nicotine is harder to kick than even heroin, smokers made great guinea pigs.[7]

The study pitted the American Lung Association’s Freedom from Smoking program—the current gold standard in smoking cessation treatments—against simple mindfulness practice in a population of 88 smokers. After four weeks, only 15 percent of the FFS smokers had quit, versus 36 percent of the meditators. Mindfulness appeared to be twice as effective. After 17 weeks, the FFS group had dropped to six percent, while the meditators stayed at 31 percent.

Brewer explains this impressive result: “It’s not that the deactivation of the PCC directly reduces craving in the moment. The actual seat of craving is probably elsewhere, such as the nucleus accumbens or insula. The role of the PCC is to link that craving to a behavior, to translate the urge into an action.” In other words, when a craving arises, such as the desire to smoke, and you start to feel that “if I don’t have a smoke right now my head is going to explode!” the PCC automatically engages and launches you into a behavior, such as lighting up a cigarette. “Mindfulness training allows you to disengage the clutch, as it were, by deactivating the PCC. So you feel the craving, but don’t automatically do the behavior. Over time, this leads to a deconditioning of the behavior, and a reduction—maybe even extinction—of the craving itself.”

Neuroscientist and author of *Welcome to Your Brain*, Sandra Aamodt is not so sure about all this. “The idea that mindfulness training could reduce cravings is intriguing but preliminary. So far, it’s been tested in a relatively small number of people, and most studies have not been randomized, which is the gold standard for evaluating treatments.”

Clearly, Brewer is onto something when it comes to using flow to treat addiction and other conditions. But in following this thread, things go much further, and get much weirder, than that.

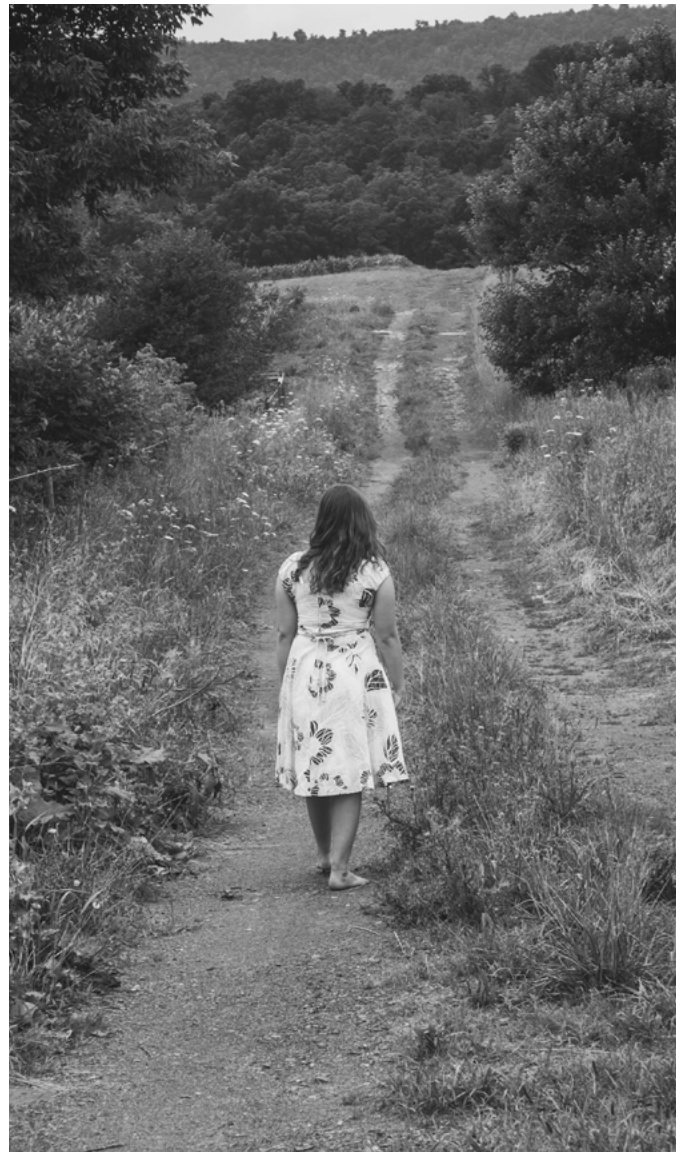
Losing Your Self

Csikszentmihalyi's classic definition of the flow state includes the possibility of a loss of reflective self-consciousness. The more involved you are in an activity, the more it feels like the activity is sort of *doing itself*, and "you" disappear into the easy bliss of flow.

As you might guess, the pleasurable loss of self that comes with flow hasn't gone unnoticed. Buddhism, Taoism, and Hinduism have traditionally put a lot of emphasis on the flow state, referring to it with phrases like "doing without doing," "becoming one with things," and "no-self." The main way to get into the flow state, according to these traditions, is the practice of meditation. As a practicing Buddhist, the idea that the experience of no-self could be linked to the flow state was irresistible to Brewer.

Brewer since has proven that this loss of reflective self-consciousness actually occurs in the flow state.

In a study, he asked 12 long-term meditators to engage in three different types of meditation while in an fMRI scanner. What Brewer found surprised him: meditation didn't seem to activate any particular region of the brain, but it clearly *deactivated* the PCC. Other researchers, such as Guiseppe Pagnoni and Veronique Taylor, have found very similar results in separate studies: long-term meditators were dialing down the activity of the PCC much more than normal subjects. While there is no single "self spot" in the brain, the PCC appears to be a vital node in the network that generates a sense of self. In other words, the more PCC activity, the more ego is happening in the moment.



Having found the fMRI signature associated with experiencing a strong sense of self, Brewer became interested in making this feedback easily available—both for addiction cessation and for meditation instruction. However, fMRI is costly, uncomfortable, and hard to pack up and move about, so it was a non-starter for a meditation app. Electroencephalography (EEG), on the other hand, is cheap, portable, and easy to use. Could EEG be used to detect the relative activation of the PCC? Brewer's team at the TNL is working to find out by isolating a useable EEG signal of the PCC, and they seem to be getting somewhere with it.

As a longtime meditator with over 10,000 hours of practice under my belt (and an amateur neuroscience fanatic), I'm fascinated by the search for the neural correlates of meditative states. Over the past ten years I've met an unlikely hodgepodge of philosophers, doctors, Buddhist monks, and lab geeks all attempting to hunt down the verifiable traces of deep meditative states in the brain. I thought I had seen it all, but when I learned what Brewer was doing, I realized he was onto something unique and incredibly important—a practical way to train people into the no-self state. I jumped at the chance to visit his lab, with no real idea what I was getting myself into.

The Therapeutic Neuroscience Lab had all the hallmarks of Silicon-Valley-style entrepreneurship: the tabletops were strewn with electronic gear, computer guts were lying outside the casing, and empty fast food cartons were everywhere. There were stand up desks and huge monitors galore, but almost no art, plants, photographs, or other decorative touches, excluding a hastily taped-up Buddha or two on the walls. Newly empty cardboard boxes were stuffed under every desk, and there were barely any chairs to be found. I was warmly greeted into this Spartan atelier by Dae Houlihan, a young neuroscience grad student newly moved to Massachusetts - just

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one of the several crack brain-research team members Brewer has assembled to crack the EEG puzzle. He offered me some fine herbal tea, which I eagerly sipped. Brewer, hearing that I hadn't eaten, opened a Tupperware tub and handed me a peanut butter sandwich, which must have been his own lunch.

The team quickly whisked me into one of the test rooms, sat me in a chair, fitted me for a cap, and put it on my head with what seemed like micrometer precision. It all happened so fast that I kept expecting someone to say, "This won't hurt a bit." I eyed the hammers, drills, and other power tools lying around nervously. However, the next step wasn't trepanation, but instead the application of glue, or something that felt like it, to my head. Actually, the substance was electrically-conductive gel, which they squirted with fat syringes (the kind found at hobby stores and usually loaded with epoxy) into each of the 120 holes in the cap. They then attached 120 leads to my head, which ran to their signal processing equipment.

We then spent several hours zeroing in on the EEG signal of reduced PCC activity. Their rig was impressive, and afterward I couldn't help wondering if someday in the near future I would be using an iPhone app based on this technology to deepen my meditation practice.

The possible applications of such a portable rig would be immense. Imagine a lightweight headset, something like a pair of headphones, that could plug into your smartphone and feed brainwave data into an app to give you real-time feedback about the amount of self-reflective consciousness (i.e. getting in your own way, non-flow, daydreaming) going on in your brain moment by moment. Because the device would actually measure the activation of the PCC, there would be no guessing about how much of a sense of self was present: it would be clear when the feedback was in the red versus the blue.

If successful, such a device could not only help people suffering from anxiety, depression, and addiction, it could shave many years off the laborious process of learning meditation. Here would be concrete and easily accessible insight into the state of flow that's so hard for teachers to describe and for students to understand. A "no-self" app could set off a revolution in meditation instruction and practice worldwide. As Brewer recalls, "Some of our novice subjects were able to make their PCCs look like those of advanced meditators after only nine minutes of real-time neurofeedback. They would get out of the scanner and ask how soon they could come back and do it again. I wish I had that ten years ago when I was striving my butt off trying to learn to meditate."

Will applications like Brewer’s usher in an era of technologically-mediated neurofeedback allowing people on the street to walk around in a deep state of ecstatic absorption centered around their everyday activities? Will doctors and psychologists soon be prescribing a half hour a day with a “flow machine” app to people suffering with everything from alcohol dependency to severe depression? The answer isn’t yet clear, let’s just say that if it does come to pass, I will be first in line.

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Michael W. Taft is an author, editor, meditation teacher, and neuroscience junkie. He is currently a meditation coach specializing in secular, science-based meditation training in corporate settings and one-on-one sessions. Michael is the author of several books, including [*The Mindful Geek*](#), and [*Nondualism: A Brief History of a Timeless Concept, Ego*](#) (which he co-authored), as well as the editor of such books as *Hardwiring Happiness* by Rick Hanson and the upcoming *The Science of Enlightenment* by Shinzen Young.

He has taught at Google and worked on curriculum development for [SIYLI](#). Michael is also an official advisor to the [Therapeutic Neuroscience Lab](#). He was previously editor-in-chief of [Being Human](#), a site for exploring what evolution, neuroscience, biology, psychology, archeology, and technology can tell us about the human condition, and was editorial director of [Sounds True](#).

From Zen temples in Japan to yogi caves in India, Michael has been meditating for over thirty years and has extensive experience in both Buddhist and Hindu practice. Michael is a senior facilitator in Shinzen Young’s [Basic Mindfulness](#) system, and is a teacher at [Against the Stream](#) Buddhist Meditation Society. He currently lives in Berkeley, California, and is founding editor of the popular mindfulness meditation blog [Deconstructing Yourself](#).

Citations

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I now

Know

The weight of those

Hard hard lessons

Was perfectly

Balanced

By the gift

Of my learning



Impermanence: A Model of Mental Illness Based on Loss

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Mindfulness has become a revolutionary technique in therapy and is an essential part of several new wave cognitive therapies, such as Mindfulness-based Cognitive Therapy, Acceptance & Commitment Therapy, Compassion Focused Therapy and Dialectical Behavioural Therapy. Mindfulness itself is derived from Buddhism, which states that everything is impermanent, and attachment causes dissatisfaction and suffering, as described in the Four Noble Truths. The aim of this article is to make a link between cognitive theories of mental illness and the original Buddhist concepts that mindfulness practice is rooted in. To do this a cognitive model of mental illness will be proposed based on the concept of loss, the painful experience that results from being attached to an impermanent reality.

The basis of this model is outlined in the following question:

If you had nothing to lose would you ever get anxious or upset?

Loss in this model is defined in three areas: material loss (loss of life, health, property etc.), loss related to relationships (perhaps due to death, separation or conflict), and psychological loss (loss of esteem - from self or others, role, meaning, purpose, hope, dreams, etc.).

It is also defined as occurring in three temporal areas; the past - as negative events and regrets; the present - where we perceive what we don't have or lack rather than what we do; and in the future - where we worry about what we might lose.

There are multiple theories that show the importance of loss to the human psyche. Loss aversion is an economic theory, which states that humans are more sensitive to loss than gain and will therefore try to avoid loss in preference to acquiring gain. For example, when taking financial risks in general people will only take the risk if the gain significantly outweighs the loss.

Another theory used in economics, as well as psychology and conflict resolution, is that of game theory. This theory uses games of loss and gain to make predictions about human decision making. The mathematician, John Nash, the subject of the film *A Beautiful Mind*, won the Nobel Prize for his work on the theory.



Loss is hardwired into neurobiological systems - for example, the threat system in the brain and its famous fight-flight response is designed to avoid loss of life, and to preserve physical health, breeding rights, offspring, etc. The seeking/reward system is also strongly related to loss, as shown by negative re-enforcers in operant conditioning. For example, learning to not do something because of painful stimuli (such as burning yourself when you put your hand in a fire) leads to loss of physical well-being. These two systems have been argued as underlying psychological distress.

Loss is strongly related to breeding and survival strategies in humans and animals - for example, the drive to mate lest we lose the opportunity to pass on our genes is described in the evolutionary biologist's, Richard Dawkins, "selfish gene theory." Attachment theory is a major theory in developmental psychology based on the work of the psychiatrist and psychologist, John Bowlby, who noted the distress of infant primates when separated from their mother. He argued that strong bonds between an infant and their mother increased the infant's chance of survival.

Loss is also an integral part of cognitive models of mental illness and this model would argue that each of the major mental illnesses is a different pathological response to loss. Phobias are an example of where the response to a possible loss (eg. of life or physical health), is avoidance in line with the flight aspect of the flight-fight response. For example, an individual would respond to the phobic stimuli, such as a crowded place or a spider, by experiencing intense anxiety symptoms and a compulsion to remove themselves from the stimuli to feel safe again. In social phobia the fear is loss of esteem in the eyes of others – a fear of negative judgement, or of appearing foolish, incompetent or different.



Obsessional illness, such as Obsessive Compulsive Disorder (OCD) or Anorexia, would be seen as attempts to control loss. An individual might have a fear of contamination because of the potential for loss of physical well-being and would therefore try to limit risk by

being hyper-vigilant to possible contaminants, taking action to prevent contamination, such as excessively washing hands. Similar processes are found in Anorexia where there is hyper-vigilance of the calorie content of food and excessive limitation of the amount of calories consumed.

In Post-Traumatic Stress Disorder (PTSD) the loss is in the past but reimagined in the present as a traumatic memory, for example, of an accident or assault of some sort. This memory causes fear of loss in the present too because it is so distressing. Individuals with PTSD frequently fear that they are “going crazy” and have strong feelings of guilt or shame about the traumatic incident, perhaps believing they should have been able to prevent it, which leads to loss of self-esteem.

In Depression the response to a loss, such as death, the ending of a relationship, becoming disabled, losing a job etc. is to become hopeless and lose motivation.

Personality Disorder presents a very complex set of disorders, where there are multiple types, such as Avoidant, Narcissistic, and Histrionic. Two of the most well-known types are Anti-Social and Borderline/Emotionally Unstable. People with these disorders present with challenging behavior such as threats to harm themselves or others. In the context of this model these would be seen as responses of the fight part of the flight-fight reaction, designed to avoid unwanted outcomes, such as abandonment or loss of control.

Psychotic illnesses, such as schizophrenia and bipolar, where individuals experience delusional beliefs, hallucinations and altered mood states, do not have clearly identified mechanisms. Some have argued that they are psychological rather than biomedical in origin and, if this is true, then based on the premise of this model the psychological causes for these illnesses would be loss based.

Low self-esteem has been found to be a common feature for many people with mental health problems and is essentially defined as lack of self-worth. This can only make sense in the context of loss, as you lose whatever you are not good enough for (e.g., love, success etc.).

Individuals with low self-esteem have been shown to be excessively sensitive to failure - this relates to loss because success and failure can be translated into winning and losing (loss). Fear of failure can become pathological and result in perfectionism.

Comorbidity has been shown to be a common feature of mental illness and a criticism of the validity of mental health diagnoses, as individuals will present with a variety of symptoms that do not fit with one disorder. This model would try to address this issue by stating that an individual could have multiple responses to loss that would cause different presentations. For example, an individual may have OCD but also depression, as they would be trying to control loss but feel hopeless that their attempts were not successful.

Trauma has been argued to be a significant factor in the development of mental illness and has been used as the basis of models that try to explain mental illness in a trans-diagnostic manner. Trauma has been defined as exposure to death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence – in other words, loss of life or physical and/or psychological well-being.

A key feature of this model is that a person can experience a loss when they “do not know.” A semantic proof of this would be when a person does not know something and feels “lost.” There can be a pathological need to know, as demonstrated by the concept of intolerance of uncertainty in Generalized Anxiety Disorder. This is an illness where the main symptom is excessive worrying, which is fuelled by the need for mental reassurance that something won’t go wrong (in other words, that a loss of some kind won’t occur). An example of this might be an over-protective mother who won’t allow their child to be exposed to any risks in case something bad happens that could cause them loss of physical and/or psychological well-being.



Cognitive heuristics are mental shortcuts to understanding situations that are designed to occur automatically and unconsciously, so you can react quickly without excessive thought. One of the most common forms of these is stereotyping, where generalized information is related to similar categories of beings, events etc. For example, someone with a fear of dogs would believe that all dogs are dangerous. Heuristics can be activated by strong emotions, such as anxiety and anger, and can create the illusion of certainty, which reduces anxiety by increasing the sense of control an individual has. However, they can lead to inaccurate understandings (*all* dogs are dangerous), rather than the more accurate belief that *some* dogs are dangerous. Based on this idea, the model would predict that if loss triggers strong emotions, an individual may develop inaccurate beliefs as a preference to feeling “lost.” For example, “everything is my fault,” “you can’t trust anyone,” “going outside is dangerous” or a myriad of other generalized beliefs maintain mental health difficulties.

There are several implications with regards to mindfulness practice in therapy based on this model. For example, showing that an individual is over-focused on loss in one, two, or all three of the temporal areas detailed before (past, present and future) that they lose their enjoyment of the “now,” would fit with current mindfulness practice and its focus on the importance of the present moment. It would explain why people may find it so difficult to be present because human beings are designed to be sensitive to loss and can therefore feel trapped by their thoughts. Showing a person that they ultimately lose more by being over focused may allow them to break a habit more easily.

Another area is the concept of acceptance. The psychiatrist, Elizabeth Kubler-Ross, famously proposed that loss is responded to in 5 stages; denial, anger, bargaining, depression, and acceptance. The first four stages are unhealthy but natural responses and

Perspectives on Self-Care

Be careful with all self-help methods (including those presented in this *Bulletin*), which are no substitute for working with a licensed healthcare practitioner. People vary, and what works for someone else may not be a good fit for you. When you try something, start slowly and carefully, and stop immediately if it feels bad or makes things worse.

could be shown to fit with types of mental illness. The denial stage could be seen as avoidance of loss and would fit with phobia. The anger stage would fit with personality disorder as the fight part of the flight-fight response. The bargaining stage would be seen as an attempt to limit loss in line with obsessional illness, and the depression stage with depressive



illness. The acceptance stage would therefore be the healthiest and most adaptive response and achieving it would be a focus of treatment based on these principles.

As Kubler-Ross states, an individual goes through the stages in a variety of ways, which would fit with the comorbidity problems outlined before. For example, an individual may be having difficulties with agoraphobia and anger. This could be translated as them trying to avoid or deny loss by not going out but being angry as a result due to lost opportunities to enjoy their life because they are so limited.

The model would also show how strong emotions can lead to inaccurate beliefs and would recommend the use of mindfulness to mitigate these beliefs.

Cognitive restructuring is a key technique in cognitive therapy that involves altering potentially harmful beliefs in order to increase psychological well-being (such as altering thoughts arising from loss to ones that do not). For example, with regards to low self-esteem, unconstructive attitudes to failure (such as seeing it as catastrophic), would be changed to constructive ones (such as seeing it as part of a learning process).

Buddhism is based on the idea of impermanence and that this leads to suffering due to attachment. A key concept in Buddhism is “emptiness” which has a number of meanings, but in relation to this model would be described as a state of inner peace based on non-attachment. Interestingly, in mental illness “emptiness” is referred to as a negative state (for example, part of the definition for borderline personality disorder is someone who experiences chronic feelings of emptiness). Loss has also been shown to trigger strong feelings of emptiness. Therefore this model would propose that when an individual experiences emptiness they maybe experiencing a similar state as that described in

Buddhism, but viewed as negative rather than positive. This may relate to mindfulness practice by encouraging an individual to reach an acceptance of inner emptiness rather than being fearful of it. This would also relate to not being attached to the “need to know,” as in Zen Buddhism and its focus on non-conceptual states of being.

This model may also relate to existential philosophy. According to such thinkers as Kiergaard and Satre, life is about the search for meaning and therefore life without meaning would be experienced as a loss. This would fit with the author’s own profession - occupational therapy - and its focus on meaningful occupation.

This article has proposed a model, which is an attempt to show how loss may be a common and defining factor in mental illness and how this may relate to the Buddhist concept of impermanence and mindfulness practice in therapy. It will only be relevant if it is found valid by clinicians and patients but it may demonstrate how the secular practice of mindfulness in therapy could still relate to the Buddhist concepts it’s derived from. It may therefore add to any theoretical debate about mindfulness and its treatment of mental illness.

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Ben Read is an occupational therapist who works in a community mental health team in the UK. He practices CBT as part of his clinical work and is interested in philosophy, particularly Eastern philosophy. He has meditated for many years and found this very beneficial.

Skillful Means

[Your Skillful Means](#), sponsored by the Wellspring Institute, is designed to be a comprehensive resource for people interested in personal growth, overcoming inner obstacles, being helpful to others, and expanding consciousness. It includes instructions in everything from common psychological tools for dealing with negative self talk, to physical exercises for opening the body and clearing the mind, to meditation techniques for clarifying inner experience and connecting to deeper aspects of awareness, and much more.

Mindful Pause

Purpose/Effects

Throughout our day it is easy to get wrapped up in bouncing from task to task, becoming highly stressed, exhausted or emotional without even being aware of it. By taking a moment to stop what we are doing and mindfully pause we can become more focused, aware, and direct our attention where we want it to be. Pausing mindfully can also help us regulate our emotions so that we do not further exacerbate our stress or destructive mind states.

Method

Summary

Throughout the day at various times, stop and take a moment to check in with yourself and how you are feeling.

Long Version

- Begin by designating three times a day that you will pause mindfully and check in with yourself.
- For each mindful pause begin by stopping what you are doing.
- Take three mindful breaths, placing your full attention on each in-breath and each out-breath.
- Proceed to shift your awareness and attention to what is going on internally.
 - Become aware of any and all physical sensations throughout your body.
 - If you come across areas of tension, invite them to soften.
 - Become aware of any emotions that may be present and see if you can greet them with a curious and compassionate attention.
 - Become aware of any thoughts that might be present in the moment.

- See if you can observe these thoughts, emotions and sensations as passing events and refrain from engaging in their content or pull.
- After you have become aware of your internal experience, bring your attention back to your breath and follow your breathing for a few rounds, allowing all thoughts, sensations, and emotions to be however they are.
- When you are ready, with awareness, set your intention for how you want to proceed in the next moments of your life and what you want to focus on.
- Return to whatever you were doing with greater awareness.
- After practicing at regular times for a few days, also begin to use the mindful pause whenever you are experiencing a distressing emotion or difficult situation to respond to it mindfully instead of reacting in an automatic, possibly destructive manner.

History

Many Buddhist meditation teachers recommend mindfully checking in with yourself throughout the day to become aware of your experience. The method presented here was adapted from a variety of sources including the Breathing Space meditation by psychologist Zindel Segal, the Mindful Check-in and STOP practices by MBSR instructors Bob Stahl and Elisha Goldstein, and practices from Pema Chodron's book *Taking the Leap: Freeing Ourselves From Old Habits and Fears*.

See Also

Books

[*The Mindful Way Through Depression: Freeing Yourself From Chronic Unhappiness*](#) by Mark Williams, PhD, John Teasdale, PhD, Zindel Segal, PhD, and Jon Kabat-Zinn, PhD.

[*Taking the Leap: Freeing Ourselves From Old Habits and Fears*](#) by Pema Chodron.

[*A Mindfulness-Based Stress Reduction Workbook*](#) by Bob Stahl, PhD and Elisha Goldstein, PhD.

External Links

Video

Guided STOP method: https://youtu.be/PhwQvEGmF_I

Fare Well

May you and all beings be happy, loving, and wise.