SIMPLIFY MAGAZINE

 \cdot A QUARTERLY, DIGITAL PUBLICATION FOR FAMILIES \cdot



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Letter from the Founder

Four years removed from the onset of a global pandemic, it seems our conversations are moving further and further away from physical health and focusing more and more on mental health.

This seems like a wise move. In our over-paced world, mental health has emerged as a crucial aspect of our overall well-being. And the statistics stress the urgency of our conversations.[1]

- An estimated one-third (31%) of US adults experience an anxiety disorder at some time in their lives.
- Approximately 20% of US adolescents (aged 12 to 17) had at least one major depressive episode.
- Suicide continues to rank as one of the leading causes of death around the world.

The complexities of our world, the stresses we face, and the emotions we navigate daily underline the importance of this topic. It's with this in mind that we've dedicated the latest issue of Simplify Magazine to exploring mental health.

This issue is not just about understanding mental health; it's about practical, everyday applications that can make a real difference. We

dive into how our learning processes impact our wellness, the significance of the words we use, the power of being present in the moment, and some of the myths surrounding self-care, among many other topics.

In this issue, we aim to provide a comprehensive look at mental health, with articles that range from the scientific to the deeply personal. Our contributors, including a renowned psychologist, a behavioral investigator, and some of today's most insightful writers, bring a wealth of knowledge and personal experience. They offer not just theories but real-life strategies—just like every issue of Simplify Magazine.

Mental health is a journey, and it's one we're all on together. Our hope is that this issue of Simplify Magazine serves as a guide, offering both insights and practical steps you can take to improve your mental well-being.

We're with you on this journey, every step of the way.

Joshua Becker

The Key to Life Success

Lawana Gladney, PhD



Over two decades ago I began a career in psychology to study and examine the human mind, brain, and behavior. Since that time, I have been writing, speaking, researching, counseling, and spreading the message about mental health and how it equates to quality of life. Although it seems that it took a global pandemic to emphasize to many the incredible significance of taking care of one's mind, I am just happy and relieved that people are finally paying attention to their mental state of being.

Let's look at what mental health really means.

The industry definition of mental health includes emotional, psychological, and social well-being, that is, categories of your life that affect how you feel, think, and act. Mental health also helps determine how you handle stress, relate to others, and make healthy choices. Everything that you want, dream, desire, achieve, miss, fail, or fumble starts with the stability of your mind.

Emotional Wellness

Since your mental well-being includes your emotions, allow me to give insights on how your emotions impact your daily living.

Research indicates that 75–90% of all your sickness and disease starts with how you manage your emotions and your stress.[1] That is a true indicator that how you feel, and the choices you make, dictate how healthy you are. Think about that for a moment: how you

manage your feelings can make you sick or keep you out of the hospital and off medication.

Your emotions are a part of the limbic system of your brain. Most decisions you make are driven by emotions. Your neocortex, or "rational brain," is where logic and reasoning are processed, but the limbic system (the "emotional brain") reacts to events first, before you can engage the rational brain. Logic and emotions don't work together; you are either logical or emotional.

Emotions can be tricky, because during the course of a day you can experience a whirlwind of emotions that range from very positive to very negative. Your thoughts, health, and life circumstances will send you on a roller coaster if you don't understand how to identify your feelings and learn how to control them.

Emotional intelligence as defined, by Peter Salovey and John Mayer, is "the ability to monitor one's own and other people's emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior." Emotional wellness, however, focuses on managing your own emotions. It is the result of deliberate effort put forth to become healthy in body, mind, spirit, and emotions. It is the complete recognition of your full range of feelings, both positive and negative.

In my work, I have focused on emotional wellness and have helped people to nurture, understand, and manage their own emotions. One thing I have noticed is that, before the social media era, it was easier to measure the social wellness of an individual based on social interactions, social acceptance, and social contribution. Now, because of social media platforms, individuals can have a false sense of friendship, acceptance from others, and the real meaning of contribution.

Social media has wreaked havoc on the mental wellbeing of younger generations. We still have work to do to ensure that these generations will develop healthy social interactions.

10 Ways to Improve Your Mental Health

So, how can we begin to look at our own individual mind and take control of our mental wellbeing? Allow me to share some simple steps and techniques that will help you to manage your emotions and stress and make a positive impact on your mental health.

1. Acknowledge that you are in control of your life and health. You must believe that your own thoughts, beliefs, choices, and actions determine where you are right now and how healthy you are. It is not because of your family genetics, where you grew up, your career, your kids, or your spouse. You are in control, and you can change your current circumstances.

- 2. Be aware of and respect your emotions. You know there are several emotions/feelings that you can experience in one day. Accept that you will have positive and negative feelings each day. Being aware of and accepting your feelings will help you increase your sensitivity to your own feelings.
- 3. Acknowledge your feelings and the causes. Recognize the emotion that you are feeling. Identify the emotion and then assign a reason for it. Think about what caused you to feel that way. Was something said or done that caused you to feel this way?
- 4. You don't have to act the way you feel. Even though you may be upset or angry with something or someone, it doesn't mean you must act on your feelings. It's possible to feel anger and express anger without being disrespectful, violent, or abusive.
- 5. Refocus your negative feelings on positive thoughts. When something negative happens, look for the unseen benefit. For example, if you're upset because you got passed over for a promotion, focus your energy on the fact that you still have a job, and start planning. Figure out how you can best position yourself for the next promotion or perhaps another job.
- 6. *Don't react when you're upset.* Whatever you have to say can and should wait until you calm down and are in control of your

- emotions. Otherwise, you run the risk of saying something that you'll regret and can't take back.
- 7. *Don't stress over things you can't control.* I am certain you have heard that before, but are you following the rule? Stop stressing over the state of the economy. You can't fix it, so don't waste your energy talking about it. If implemented in your life, this tip should alleviate most of your stress.
- 8. Focus your energy on what you can control. Since you only have a certain amount of energy each day, use it on the controllable things in your life, such as your health, finances, and relationships.
- 9. Don't sweat the small stuff. It is easy to get yourself all worked up over things that don't really matter. Someone took the seat you were saving at the theater. You don't like the fact that your son's shirt is wrinkled. Your brother didn't call you when he said he would. You must ask yourself, in the grand scheme of things, what's the big deal? If you learn how to let the small things go, you will save yourself a lot of stress.
- 10. Take time to smell the roses. We all are guilty of working hard and holding our noses to the grindstone. I know that there are times when I feel like I have worked 24 hours straight. We are so busy and caught up in living to work instead of working to live. Learn to stop and enjoy life and the things that you have

worked so hard to achieve. Sit in your backyard and take in the scenery. Take those needed vacation days. (That is what they are given to you for, not to store up.) Drive the car that is parked in the garage. Use those dishes that you are saving for something special. You deserve it.

These are just a few steps you can immediately implement to ensure mental wellness. Go ahead, it's your life. Determine that you are going to take the necessary steps to be healthy in your mind, body, and spirit, and I can guarantee that you will experience life, wealth, peace, and happiness—and that is *real* success.

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Lawana Gladney, PhD, is a success psychologist, speaker, podcaster, author, and media personality. Dr. Gladney has developed several programs and systems that, when applied, are guaranteed to change perspectives, attitudes, and behaviors of individuals. She is a media expert and TV show host and has been featured on national radio and TV programs and magazines and has reached over 35 million. She is the author of six books and co-author of four books.

The Mean Reds

Joy Clarkson, PhD



"You know those days when you get the mean reds?" asks Audrey Hepburn's character Holly Golightly in the classic film *Breakfast at Tiffany's*.

Confused, Paul Varjak (played by George Peppard) responds, "The mean reds? You mean, like the blues?" But this is not what Holly means.

"No. The blues are because you're getting fat, and maybe it's been raining too long. You're just sad, that's all. The mean reds are horrible. Suddenly you're afraid, and you don't know what you're afraid of. Do you ever get that feeling?"

Anyone who has ever experienced anxiety does know what Holly Golightly is talking about: a creeping, ambiguous but ominous feeling of impending doom, the fidgety nervous energy in search of an object. Indeed, many people will understand the feeling because the mean reds are an epidemic.

The Anxiety and Depression Association of America estimates that up to 19% of the adult population will experience an anxiety disorder at some point in their life, with 31.9% of adolescents currently struggling with anxiety disorders. The blues are having their day too, with Johns Hopkins reporting that nearly 10% of adults will be diagnosed with a depressive disorder at some point in their life. The label *mental illness* in these cases is a misnomer, because the symptoms are not merely mental. Their consequences are not either:

according to the CDC, suicide is the second highest cause of death among people 10 to 14 and 20 to 34.

It is perhaps no wonder that Holly Golightly describes her experience of anxiety as being one of enmity—the reds aren't just reds but *mean* reds. They have it out for her. They are her opponent, and they wish her harm.

How we choose to think about anxiety and depression can make a difference in how we respond when they come for us.

The Martial Metaphor

Metaphors of battle or combat are common when speaking of mental health. We find ourselves describing someone's *battle* or *struggle* with mental health, as though someone's depression wants to do hand-to-hand combat with them. A good therapist will help you find *strategies* and sometimes even a *battle plan* to cope with your struggle. Most tragically, we sometimes describe suicide as someone *losing their battle* with mental health.

In medicine, the metaphor of illness as enemy (referred to as the "martial metaphor") has a long and complicated history. The metaphor is so endemic, we often don't notice it: oncologists "target" cancer cells that "invade" the body, and patients "fight back." In his book *Medicine is War* (2021), Servitje Lorenzo observes that "the

martial metaphor is not natural; it emerged from a set of historical relations between actors, ideologues, and cultural productions."

Gary M. Reisfield and George R. Wilson observe that the martial metaphor can have deleterious effects on patients.

[The martial metaphor] creates a focus on the biomedical parameters of the disease (eg, the scans, the counts) to the exclusion of the other aspects—social, psychological, and existential—of the illness experience. The rest of a patient's life is often disregarded or put on hold because all resources must be marshaled for the war effort. This intense focus may serve as a barrier to alternate understandings of one's life in the context of profound illness.[1]

The martial metaphor makes sense for some facets of life with serious illness, but it can also encourage a defensive and violent posture that exhausts the already fatigued patient.

When it comes to physical illness, there are other metaphors we could use for illness, and perhaps other metaphors we *should* use. A similar thing, I think, could be said about "battling" the "mean reds."

Seeing mental health as a battle can be strangely alienating because the foe, it would seem, is your own mind. Being in an ongoing state of conflict with your own mind can encourage a state of hyper-vigilance and make you alienated from your own experience, exhausted, and distrustful of your own intuitions—all things that would themselves usually be seen as signs of declining mental health status.

Increasingly, the consensus on what is necessary for addressing the mental health crisis is not to *battle* but to *befriend* the emotions. Sarah Clarkson puts it well in realizing she needed to "love her enemy" (Matthew 5:43) even—and especially—when that enemy is her own mind:

My enemy mind was still intimately, irrevocably, bewilderingly ... me. It was part of myself, an agent capable of both goodness and torment, never to be untangled or separated from my entire being. My prayers for obliteration had been mercifully unanswered, but now I was filled with the realization that I might have to live with something that was both my treasure and my enemy for the rest of my life.[2]

How can we learn to love our enemy when our enemy is our mind? What do we do when battling the mean reds backfires (another metaphor) and isn't working anymore?

Metaphors give us words for our experiences by using tangible, visible things to describe intangible, invisible realities that shape our lives. Metaphors help us. But if they stop helping us, we can stop using those metaphors. Or, perhaps more helpfully, we can find and use different metaphors.

In place of the martial metaphor for mental health, I propose the metaphor of weather.

The Meteorological Metaphor

I come from a long line of people who were not entirely mentally well, people beset by the blues and the mean reds. I chalk it up to my Scotch-Irish heritage; we are a people of passionate feeling and long, undigested generational trauma, that can occasionally be given names like OCD, depression, and bipolar (and often at higher rates than other populations). Sometimes I think it must have just been the weather.

Although I am American by birth, I have lived in Scotland for nearly a decade. There are many wonderful things about this country—its music, its beauty, its whiskey—but its weather does not recommend it. It's dark and blustery eight months out of the year. In the summer it's fair and incandescent but prone to sudden, violent storms. In the depths of winter, with five hours of light a day, it's hard not to be depressed.

In the tempestuous climate of Scotland, I see a mirror of my own stormy disposition. Perhaps more of my days are internally rainy and dark than those of the average person. I enjoy radiant days, sensitive to all the beauty in the world, which can shatter in a sudden and violent sadness.

I think we all have our own interior landscape and emotional atmosphere. I know we all suffer in this life, but I do think some people have an interior landscape that is more like California than Scotland—for some people it barely rains, and for some people a bad inner storm can leave a path of destruction in its wake.

In contrast to warfare, weather gives us a more forgiving way to think about mental and emotional well-being. Weather, like, emotions can be dangerous—but weather is not an enemy. It's not morally weighted. Storms, like emotions, are just things that happen, things that can sometimes be predicted and sometimes come unexpectedly. Most importantly, weather is something that passes.

Weather is also something that can be prepared for. If you live in a cold place prone to storms, you get ready accordingly: you double-glaze your windows, you buy a good raincoat, you light a fire. Doing so is not a matter of shame but wisdom. And in a way it is a celebration of the unique nature of every environment, with its dangers and beauties.

If we spoke of our mental health like weather, we wouldn't speak of battling our enemy but preparing for life's inevitable storms and enjoying the moments of beauty.

The mean reds come for us all, but if we're prepared, we can weather them well.

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Joy Clarkson is the author of *You Are a Tree* and host of the popular podcast *Speaking with Joy*. She is the books editor for *Plough Quarterly* and a research associate in theology and literature at King's College London. Joy completed her PhD in theology at the University of St. Andrews, where she researched how art can be a resource of hope and consolation. Joy loves daffodils, birdwatching, and a well-brewed cup of Yorkshire Gold tea.

Start Living Now:

How to Find Happiness in the Middle of Chronic Illness

Tanya Johnson



"I take care of my body above all else. Diet, exercise, supplements, positive thinking. Scientists believe that the first human being who will live 150 years has already been born. I believe I am that human being."

—Chris Traeger, Parks and Recreation

I've recently been introducing my eldest son to the hilarious, sweet, and witty television series *Parks and Recreation*. I've loved this show for years because of the quirky characters and funny scenes, but also because it often, amid the ridiculous, points out the idiosyncrasies and faults of the human condition, and all with a laugh.

Chris Traeger's character is known most for overuse of the word "literally" and for his obsession with physical fitness and health, both mental and physical. He sees death coming for him in every ache or pain, and fights it with an intense regimen of vitamins, supplements, exercise, yoga, meditation, therapy, and positive thinking. While he's an overexaggerated version of a hypochondriac health nut, I see in his obsession a warning to be heeded.

I was diagnosed with ulcerative colitis, a form of chronic inflammatory bowel disease, when I was 18 years old, during my first year of college. While I was involved in sports and exercise before that, with my diagnoses came a whole new mindset and lifestyle I had to adopt. I still wanted to be healthy enough to continue doing

those things important to me: college classes, fun adventures with friends, exercise to stay fit, and being an upbeat and joyful person.

That was 24 years ago. Having been through the ups and downs of this disease since then, I've struggled and learned a few things about the journey of health. As I speak with others openly about my own experience, I've heard the same few questions and feelings expressed as they are struggling with their health. They question what treatments to try and how to sort through the endless amount of information and "cures" offered by online influencers, cookbook gurus, and conventional and naturopathic doctors.

"How do I know what to try?"

"This is so overwhelming. There are so many opinions and no one seems to agree."

"Trying to make these treatment decisions is the only thing I can think about."

"I just want to feel better so I can live again!"

When health spirals, or when old age creeps in, our first response is often "How do I fix this?" We want to find the quickest and surest route to return to feeling how we did before. Yet, in many circumstances such as chronic health conditions, cancer, cardiovascular disease, and mental health struggles, just to name a

few, there is no quick fix, no magic pill, and no end to how much brain space and time we could potentially devote to the often elusive "perfect health."

Even those who are in excellent physical and mental condition can become trapped in the "Chris Traeger syndrome" of biohacking (making endless changes to lifestyle, diet, supplementation, and treatments in trying to achieve better and better health). I have fallen victim to this mentality myself many times: Googling obsessively, changing my diet, ordering new supplements, and evaluating every gut twinge (and bowel movement in my case, sorry for the TMI) to see if the implemented changes are working or if I should tweak things more, even when my colitis is in remission!

We will all most likely experience poor health at some point in our lives. I'm in no way suggesting we just toss all hope of, or efforts at, feeling better aside. What we have to learn to balance, however, is how to tend to our health, both physical and mental, and how to make sure we're fully enjoying the one life we each have to live here on earth. We have to keep in clear sight the very thing we are wanting to be healthy for: living well.

This may mean that we engage in life, as fully as possible, even when we are ill. Even when we don't feel like it. Even when all the unanswered questions of how we're going to try to heal are still floating around in our brains. Because if we put off living, not only

will we exist only in stress, frustration, and pain, but we will be throwing away each precious day we do have in our possession.

The fact is that none of us know how long we'll be here, diagnosis or not. So living in as much joy and purpose as we can will not only help ease the out-of-control feeling we can often have with illness; it also helps us keep in perspective our mortality and all the gifts we've been given to enjoy today.

Foundations of Real Living

While there are many ways to fully engage in each day, the following six are themes I've embraced in my own journey. I am still affected when new things come my way, but these foundations help to keep my mind from becoming overwhelmed or my days only being filled with anxiety and stress.

1. Cultivate gratefulness.

Even in the midst of illness, chronic disease flares, or the degeneration of aging, we have so many things we can be grateful for: friends and family, the sunshine coming through the window or the sound of rain on the roof, hot water, the touch of a loved one, the sound of children's laughter, a hot cup of tea or coffee, or a good book. Grab a notebook and take up the habit of writing in it three specific things you are grateful for each morning and evening. Keep it

on your bedside table so you see it first thing in the morning and last thing before bed.

Take the three minutes per day it takes to develop this important habit of gratefulness. You'll likely be surprised how it shifts your mindset and how your internal dialogue will start focusing on other things you are thankful for during the rest of your day as well.

2. Incorporate movement.

I'm not a physician, and I'm certainly not yours, but my journey has taught me the value of physical movement, even when I'm feeling poorly or restricted from my usual workout routines. Gentle stretching can feel very good, especially if we are stuck in bed for long periods of time. Treat your body to a walk, short or long, fast or slow, whatever you can handle. Turn on some music and sway to the beat, clap your hands, stomp your feet, or bust out whatever dance moves will make you smile and get those endorphins going.[1]

3. Serve.

Look for ways you can serve others. When we get caught up in our own struggles, we can fall prey to self-pity and self-absorption. But humans thrive best when we are in community serving and caring for others.[2]

You may have to pull back from where you normally volunteer or the amount of hours you might otherwise put in when you have a flare or aren't feeling well, but that doesn't mean you can't serve in some capacity. Praying for others, writing notes of encouragement, making handcrafts to donate to charities, or making phone calls to those whom you know are struggling are all ways we can serve others and thus remind ourselves of our value and purpose even during physically difficult seasons.

4. Creating.

Humans have an innate need to create. This looks very different for different people, but we all have it. Creating beautiful spaces, writing, growing a garden or indoor plants, handcrafts, wood making, furniture restoration, even simply coloring a coloring sheet!

When we create, we have something to show for our efforts, and in an ever more virtual world, being able to survey something we've made with our hands brings satisfaction and value to our days. Doubly so when illness may be keeping us from other work or hobbies.

5. Stimulate and distract the mind.

When our minds get caught up cycling around a particular issue, question, or point of stress, finding something else to focus on for a while can bring, not only great relief for our thoughts, but also

relaxation for our bodies, as our mental stress can cause negative physical effects.

Taking up a daily crossword puzzle or sudoku, doing a jigsaw puzzle, reading an engrossing book, learning a new language, or practicing a musical instrument can all focus our brains on something enjoyable and just plain different for a while. Besides a good distraction from stress or focus on our physical ailments, we are exercising our brains, which is recommended for mental acuity and youthfulness.[3]

6. Get some real rest.

No matter if you are struggling with a physical or mental disease or not, the American culture has lost the skill of true and deep rest. I don't just mean good sleep, though that is invaluable for healing and happiness. I mean that we tend to fill the hours when we aren't working with stressful activities, mainly social media. Scrolling social media has been proven to elicit a stress response in the body quite quickly, and I would argue is antithetical to healing.[4]

To really, truly rest your body, which is helpful for healing and your mindset, consider these options:

- Take up meditation.
- Engage in person with someone whom you thoroughly enjoy talking to.

- Read a book.
- Watch a show that makes you laugh out loud.
- Sit in stillness and watching the birds.
- Focus on breathing deeply (maybe find an app to help lead you through this if it's a new skill).
- Lie on your couch or bed and listening to some beautiful music.

Right Here, Right Now

Much like believing that we'll be happy when we one day have more friends, have more followers, graduate, move, get married, have kids, get that perfect job, make more money, lose weight, or get that dream house, we can forget that we can be happy right here, right now, even in the midst of illness.

It may be something we have to work, and even fight, for some days. It won't always come easy. However, we each have been given one valuable life to live, and in the end we won't want to have missed out on any seasons of living it as fully as possible.

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Tanya Johnson is a stay-at-home wife and mother of three residing in the Pacific Northwest. Having previously worked as a vascular ultrasound technologist, her interest in how the body best functions

and was designed continues. She is a lover of podcast book clubs, her church community, and learning the French language. Tanya delights in exploring new places, preferably on foot. She's a sucker for any historical re-enactments or tours with costumed guides, and functions best when there is an upcoming trip on her calendar and a cup of strong tea in her hand.

It's About Time:

On Which Track Is Your Mind Traveling?

Curt Thompson, MD



Humans have the capacity to experience time like no other creatures on the planet. We are the only ones who *are aware* that we have a past and a future; we have a *sense* of the passage of time in ways that an elk or a starling do not. Other creatures are able to recall where they buried their food, which requires the function of memory. But we don't have evidence that cattle are talking about last year's corn harvest in the way that the farmers are who planted and raised it. Unless, of course, those cattle are in a *Far Side* comic strip.

Most significantly, when we do consider the passage of time, we are not dispassionate bystanders. When we imagine our pasts or our futures, we experience emotional responses to them. And we know just how strong those emotional responses can be, depending on the events we are imagining. As it turns out, our engagement with time and the emotional tone that accompanies it play a far more crucial role than we are often aware of in shaping what our lives become.

One way to consider how we interact with our sense of time is to imagine that we have two possible tracks on which our mind can travel.

The Track of Disintegration

Track One involves what many of us encounter in much of our mind's activity. When we are traveling on Track One into our past, we sometimes, even often, do so with a general feeling of regret or disappointment. We find ourselves cognitively entertaining thoughts

like If I had only done this or that, or I should have been better at that, or If only this or that had been true or had or had not happened to me. You get the picture.

When it comes to the future, life on Track One is one of anxiety. Anxiety is a neurological signal pertaining to the future, be that five seconds or five years from now. We become anxious when we find ourselves anticipating any number of possible future states whose emotional environments are deeply distressing and from which we imagine no escape.

I don't need to list the worries—you know what they are and how many of them you have. I have them too. The ultimate emotional outcome when it comes to the future when riding on Track One, then, is that of dread, to a greater or lesser degree.

There are four additional features of life on Track One that are important to note.

First, it requires little to no effort for us to be on that train. We board and ride it virtually *automatically* and *non-consciously*, albeit willfully, like applying the brake to slow down your car. To ride on this track, we don't even have to buy a ticket. We simply find ourselves riding those rails. That's how little work it takes, so practiced, and therefore neurally wired and primed to be on it, we are. We wander into past choices we disdain, only to find ourselves zooming ahead to a future in which we worry we will never be happy

in our marriage, our child will forever be addicted to alcohol, or we will languish in our job for the rest of our lives.

It is possible to ride on Track One, because of the second additional quality of this track, that being our tendency to spend a great deal of time and energy on it *in isolation*. We ruminate about our past and worry about our future in the privacy of our own minds, which leaves us vulnerable to evil's capacity to take advantage of it. This is what happened when the serpent isolated the woman in Eden in order to speak with her, rather than waiting for God to show up for his afternoon walk so he could be included.

Third, Track One is defined by the emotional state of condemnation, or shame. The emotional colors related to regret, disappointment, and powerlessness all have their root in shame, and condemnation is the cognitive feature associated with it. (A feature, by the way, that is made more likely due to our isolation). It is often subtle and quiet in its manner, but condemning nonetheless. And because of its subtlety, we are often hoodwinked, left unaware of how disintegrating it becomes to ride on Track One over time.

It is, then, disintegration that is the fourth feature of Track One. When we focus our attention for extended periods of time on regret and disappointment, or on our anxiety-laden future, we find that we are ill positioned to create goodness and beauty. Our cognition follows our body's lead, not in considering gratitude and forming hope, but rather devolving into states in which we reinforce the very

shame that has us on this train in the first place. We only imagine broken, impossible futures when we consider our pasts, instead of the beauty and goodness that God imagines when he looks at those same histories and futures.

And so, to review: when on Track One, we move continually from the past of regret and disappointment into a future of anxiety, one end of the time spectrum fueling our return to the other, and then back again. We find ourselves on this track automatically, immersed in an emotional environment of condemnation, continually reinforcing a disintegrating posture toward life. Riding on Track One affects our families, our work, and our worshiping communities. For indeed, we quite effortlessly take it with us wherever we go.

The Track of Integration

Track Two is quite different.

First, when it comes to the past, we direct our attention to it, not with condemnation, but with *curiosity*, with the intention of reflecting on our past for the purpose of *learning from it*. We look to the past in order to discover wisdom, not to grovel in how awful have been the mistakes we have made or believe ourselves to be. We see the past as an opportunity for revelation that will unveil new ways of considering our stories in order for us to construct a very different future than the one we typically anticipate when riding on Track One.

Furthermore, when riding on Track Two we consider the future with the intention of *planning*. We consciously, and with consideration and intention, make plans to take actions that are integrating. This often requires great courage, for to form a different future than the one we anticipate while riding on Track One requires our taking risks without being able to guarantee good outcomes—which is, by the way, always our lot in life whether we know it or not. But because shame and its cognitive companion of condemnation are not on this track, we are able to anticipate a future in which we can consider the possibility of mistakes and still not be afraid.

Third, and of great significance, to ride on Track Two requires that we go to the train station and buy a ticket. To ride on Track One, one need not purchase a ticket, and there is no station. We simply find ourselves riding back and forth, quite automatically and unknowingly. To ride on Track Two entails that we do so on purpose, with intention. In fact, to stay on Track Two, we may find ourselves having to return to the ticket office multiple times. At first, this may feel maddening. Why does it take so much effort to be on this Track? The answer is simple, and challenging: because we are so practiced at riding Track One.

But the beauty of being willing to ride on Track Two—of purchasing a ticket at the train station, no matter how many times, and no matter how much energy it requires—is that it leads to integration. It creates the opportunity for beauty and goodness to emerge because

of the hard work involved in imagining a new story, one that takes the detritus of our past and, upon reflection, transforms it. But this is not something we can do on our own.

Hence, the final feature of being on Track Two is the role played by community. For indeed, the brain can do a great deal of hard work for a long period of time, as long as it doesn't have to do it by itself. It is the presence of others by whom we are being deeply known that we begin to step off Track One, walk to the train station, purchase a ticket, and board the train on Track Two.

This train reflects on the past with curiosity and the intention of lovingkindness for the purpose of planning a future of integration and wholeness by using the very broken parts of our lives that we have collected. In the context of vulnerable community, we step by step create beauty and goodness out of the last story from which we would ever have imagined them to emerge. And all of this reflects the presence of the God of the Bible, whose delight in us makes all of this possible, from our pasts to our futures.

All Aboard

On which track are you traveling? How will your life emerge differently, should you choose to step off the train running on Track One, a track of disintegration, and purchase a ticket to run on Track Two, traveling with intention to reflect with curiosity on your past for

the purpose of creating beauty and goodness in your integrated future?

If you haven't yet, I invite you to do so. It may be that it's about time you did.

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Anxiety as Imagination:

A Psychologist Explains How to Leverage Creativity to Reduce Worry and Fear

Allison Niebes-Davis, PhD



Years ago I read, "Anxiety is just imagination." As a psychologist, I initially dismissed the phrase, feeling a sense of disappointment. I know from my clinical training and practice that anxiety is an incredibly real and complex experience that affects millions of people worldwide. The phrase seemed to trivialize a painful human experience.

But for the next several days, my brain kept circling back to the phrase, and I challenged myself to give it another look. "Anxiety is just imagination."

Off the bat, I did away with the word "just." The word "just" is dismissive, and in the phrase "Anxiety is just imagination" the complexity and nuance of a serious mental health experience seemed lost. But once I removed the word "just," I saw something of value, and I decided to dig deeper.

If you struggle with anxiety, then you know what a *wild* imagination your brain can have. Your brain thinks up every possible negative outcome before it has even happened. Your brain gets creative with all the ways something could go wrong. And your brain is awesome at pretending it knows how to read minds, convincing you that person definitely thought you were weird.

Your boss sets up a meeting, and you're convinced you're in trouble or being reprimanded. Your kid who's away at college texts, "Can you talk?" and you're convinced they're in trouble. You have a new and

unusual health symptom, and you're convinced it's cancer. In each of these situations, your brain is imagining the worst possible outcome or explanation. It doesn't know for certain that's the way it will play out. Nonetheless, it imagines, predicts, and then feels nearly certain of this awful explanation.

It doesn't know. It imagines. Anxiety involves imagination.

It might seem odd to think of anxiety as a form of imagination, but when you think about it, it's striking. Anxiety is wildly creative, dreaming up super-specific outcomes and explanations for how things will go wrong. If you've got a big presentation coming up, your brain imagines all the ways it will go poorly. If you texted a friend and they never texted back, your brain imagines they're angry or annoyed with you.

Your anxiety takes a tiny stimulus and imagines all sorts of negative and scary outcomes. So rather than fight this pattern of imagination, let's *embrace* it. Let's use it in our favor.

Meet the Boss

The same mental process that makes you anxious can be leveraged to help you feel less anxious.

Say your boss emails you and says they want to set up a meeting. Immediately, you think, *Crap, I'm in trouble.* Your anxiety tells you that you've done something wrong and are getting reprimanded. Your brain cycles through all the things they could be ready to point out, pick apart, and criticize. Unless you have a crystal ball, however, you don't *know* that your boss is upset; you don't *know* that you're in trouble. Your anxiety is imagining this.

Sure, maybe you *are* in trouble. Your anxiety is already imagining that, and I'll give it to you, it's a possibility.

But let's get creative. Let's imagine some other possible reasons your boss wants to meet. Maybe your boss wants to talk about a new project or task they're assigning to you. Maybe they want to follow up about something you turned in or presented earlier. Maybe they want to talk about duties being reassigned among your team. Maybe they want to ask your opinion on something. Maybe they want to talk about schedule changes. Maybe they're going to tell you that they're going on parental leave or that they're leaving the company. Maybe they want to ask for feedback about how they're doing as a boss. Maybe they want to tell you about an exciting, new development in the company. Maybe they want to give you kudos on the awesome work that you've been doing lately. Or maybe they want to give you a raise.

Your anxiety wants to imagine one terrible outcome or explanation, but you can harness that imagination to consider other possibilities and explanations. This is brainstorming at its best.

When you brainstorm a variety of possibilities, you take what feels certain and make it less certain. When you utilize your imagination to consider all the explanations, rather than just the negative and scary ones, your anxiety comes down. That awful feeling in your chest starts to dissipate, as you see a wider range of possibilities and outcomes.

Make a New Friend

Imagination involves creative thinking, identifying new and different ideas. It involves thinking outside of the box, stretching beyond your initial idea, and finding new ones.

Let's try another example.

Say you've recently met someone new, and you want to get to know them better. So you decide to invite them for coffee. But your anxiety is quick to chime in, assuring you that they'll say no and think you're weird for asking. And you know what? They could say no. They could think you're a weirdo. It's a possibility.

But now let's leverage your creativity. Let's brainstorm all the *other possible ways* that the invite could play out. They could say yes. They could say that they wanted to ask you the same thing. They could say, "Let me get back to you." They could make another suggestion. They could say yes and then invite you out next. They could say, "Forget

coffee, let's get margaritas!" Or they could squeal with excitement, because they'd been hoping you'd be their new best friend.

There are 20 different possibilities for how the invite could play out. And your anxiety? It just wants to imagine the worst. But if you get creative, and if you use this imagination to your advantage, you can imagine a whole lot more than the scary stuff.

Imagination Practice

If you're starting to feel excited reading this, thinking about all the ways you can leverage your imagination to reduce your anxiety and fear, I love that. And I also want to be transparent: Imagination isn't always easy. It doesn't always come naturally.

Sure, imagining what you'd do if you won the lottery—that's easy. Imagining all the places you'll travel to once your kids are older—that's a breeze. But imagining different outcomes, when your anxiety is trying to convince you that there's only one certain and awful possibility? That's *much* harder.

When it comes to using your imagination to combat anxiety, the process is effortful. It takes intention and work. It takes practice and repetition. It takes an active commitment to identifying nine *other*, potential explanations when your brain only wants to settle on one.

Often in my clinical practice, clients have the idea that this way of thinking is supposed to be automatic, easy, and effortless. And while I'd love that to be the case, that's not how it works for most of us. I often share with clients that, as a psychologist, I have so much knowledge and practice with this concept, and yet, when I see a missed call from my son's daycare, I immediately feel a flutter of anxiety, predicting the worst. But then I leverage my creativity to imagine ten possible explanations for why they're calling, not just the worst. And with practice, this process gets easier.

Do This

If you're anxious, it's easy for your brain to imagine the worst. But it's much harder for your brain to imagine the best or even just the inbetween options. So, when you find yourself predicting and imagining the worst, here's what I want you to do.

Let yourself acknowledge and imagine the worst. That's fine for a second. (After all, it is a possibility.) But after that, challenge yourself to imagine other explanations and outcomes. No matter how silly, small, or unlikely you might think it is, name it. Acknowledge it. Imagine it as a possibility.

That effort, that act of imagination is how you poke holes in your anxiety. It's how you cast doubt on negative outcomes that seem certain in your brain. By brainstorming, you challenge your brain's

anxious, default mode, widening the options and reducing your worry.

When you choose to see all the possibilities, things don't seem as awful and scary as your anxiety wants you to believe.

Anxiety involves imagination. Let's imagine together.

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The One Hour Each Week That Will Change Your Life for the Better— Every Time

Joshua Becker



Self-improvement and personal development are important pursuits. When we become the best versions of ourselves, everybody wins.

In this unending journey, we often overlook the simplest yet most profound practices. It's easy to get caught up in the latest productivity hacks, self-help seminars, or wellness trends that promise profound changes in our lives. Countless social media ads will promise you the next get-well-quick product. However, the key to a more fulfilling, well-adjusted life isn't always found in buying more or doing more.

The argument I'd like to make here is that the most important step to experiencing real, lasting, positive life change could be as simple as sitting quietly in a room by yourself.

Blaise Pascal, the renowned French mathematician, physicist, and philosopher, once observed, "All of humanity's problems stem from man's inability to sit quietly in a room alone." This statement, though centuries old, holds a timeless truth that is particularly relevant in today's fast-paced, always-connected world. I have known this truth to ring true in my life over and over again—and you will too.

The practice of solitude, of spending time alone with our thoughts without distractions, is a powerful tool for mental health and personal growth.

How I Learned the Importance of Solitude

I had many wonderful classes and assignments during my college years, but perhaps none had a more lasting impact on me than an assignment given to us during a personal development class taught by a thin, white-haired gentleman named Professor Johnson. Starting the first week of our eight-week class, we were given the requirement to sit quietly in a room, all alone, for one hour each week and submit a paper every Friday about our experience.

"Solitude," Professor Johnson said, "is where you will find life."

To this day, 30 years later, I can picture the room where I completed this assignment each week—the couch, the carpet, the lamp, even the hangings on the wall are seared into my memory. More important than the physical surroundings were the life lessons I learned about myself. This "one hour of solitude" practice forever altered the trajectory of my life.

Unlike meditation, prayer, or reading, solitude, as it was defined (and assigned) to us, involves sitting alone with no agenda. Our assignment was specific: no reading material, no music, no prayer list, no personal agenda or work problem that you were going to figure out. The practice was about allowing your mind the freedom to wander, to explore your heart, your soul, your motivations, and the path you were taking.

The Mental Health Benefits of Solitude

In solitude, we find a simple but profound way to support our mental health. Stepping away from the daily hustle, from the expectations tied to our roles at work, home, or social circles, we give ourselves permission to evaluate our deepest selves.

This quiet hour is not about isolation. It's about choosing to pause, to reflect, and to know ourselves better.

It's important to recognize the difference between solitude and loneliness. While loneliness can lead to feelings of disconnection and has been linked to depression, solitude is a chosen state of being alone that allows us to reconnect with ourselves in a positive and healing way.

Because of this, we can see why studies have shown that time alone can decrease anxiety, reduce stress and depressive thoughts. It can also boost our creativity and productivity, and help us regulate our emotions.[1]

But the personal benefits don't end there. This one hour each week can change your life in positive ways every time.

More Benefits of Solitude

Hans Margolius once said this: "Only in quiet waters do things mirror themselves undistorted. Only in a quiet mind is adequate perception of the world."

This quiet reflection is not just about seeing ourselves more clearly; it's about understanding our place in the world and our path forward.

Solitude offers a unique space where the influence and expectations of others are momentarily lifted from our shoulders. In this sacred hour, the voices that guide us are silenced, save for one: our own. It's here that we can truly hear our heart's voice. This voice, often drowned out by the demands and noise of everyday life, can offer insights into our deepest desires, fears, and joys.

Solitude brings with it a sense of rest and refreshment that is hard to find elsewhere. It's a pause in our all-too-busy lives, a break in our constant doing, allowing us to simply be. This rest is not just physical but deeply mental, emotional, and spiritual. It rejuvenates the soul and recharges the spirit, preparing us for the challenges and opportunities that lie ahead.

Interestingly, one of the most liberating aspects of solitude is the realization that others can indeed live without us, at least for a while. This realization can be both humbling and freeing, reminding us that the world does not rest on our shoulders. We learn to let go of the need to control, manage, and be involved in everything around us. It teaches us to trust others.

Solitude also provides a valuable perspective on our past and opportunity to chart our future. With the distractions of daily life set

aside, we can reflect more deeply on our experiences, learning from our mistakes and celebrating our victories.

Lastly, I have found the practice of solitude equips us with greater patience for others. When we understand ourselves better and feel more at peace with who we are, we naturally extend this grace to those around us. Our interactions become kinder, more empathetic, and more meaningful. We learn to listen and not just to respond but to understand, recognizing the value of different perspectives and the beauty of human connection.

In essence, the practice of solitude is a powerful antidote to the frenetic pace of modern life. It offers a sanctuary for the soul, a place where we can find clarity, peace, and a renewed sense of purpose. By embracing this practice, we open ourselves to a world of self-discovery and transformation, becoming better versions of ourselves for our own sake and for the sake of those around us.

Implementing the Practice of Solitude

Incorporating solitude into your life requires intentionality and patience. Here are some steps to help you begin:

1. *Be intentional.* Schedule a specific time for solitude, just as you would for any other important activity. This helps ensure that you won't be easily distracted or tempted to skip it.

- 2. Start small. If an hour seems daunting, begin with 15 to 20 minutes and gradually increase the time, perhaps adding 5 to 10 minutes every week. This can make the practice more manageable and less intimidating.
- 3. *Find a calm location.* Your surroundings will make a big difference. Avoid "fast-paced" locations such as offices, kitchens, or any place that reminds you of work. Also keep in mind that you'll find solitude more fulfilling if your space is uncluttered.
- 4. *No agenda.* Resist the urge to bring books, music, or any other form of entertainment or distraction into your solitude. The goal is to be alone with your thoughts.
- 5. *Expect restlessness*. It's normal for your mind to race with thoughts initially. With time, you'll find that your thoughts begin to slow down, allowing deeper reflection. As a matter of fact, you'll notice that after every 15-minute increment your mind will slow down a bit more.
- 6. *If it helps, keep a notepad nearby.* Having a piece of paper and a pen handy can be useful for jotting down pressing to-do items that come to mind. Often, just writing down the task on a sheet of paper allows your mind to release it.
- 7. *Embrace whatever comes.* There are no right or wrong thoughts during solitude. As a matter of fact, if certain thoughts keep

popping up over and over again, it might be a sign this is a thought worth exploring further.

- 8. *Don't quit just because you don't like what you find.* The journey into our heart is not always a pretty one. Sometimes when we start pulling back the layers of our heart and realize our deepest motivations, we don't like what we see. This can be difficult for some and cause even more to stop altogether. But don't. A richer, fuller life is just around the corner.
- 9. *Practice makes perfect.* Like any skill, solitude gets easier with practice. Don't be discouraged by initial discomfort, perceived lack of productivity, or even having to give up early as you first begin.

Reflecting on my own journey, I can say that the periods in my life of greatest personal growth have coincided with regular practice of solitude. Conversely, the times of confusion and lack of direction often align with neglecting this discipline. It's a stark reminder to me of the transformative power of simply sitting alone with one's thoughts. And why it is a discipline and practice I continue to promote even 30 years after having it assigned to me.

If you try it, you will discover just as I did: It is one hour, each week, that will change your life for the better every time.

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Joshua Becker is the #1 *Wall Street Journal* bestselling author of *Things That Matter: Overcoming Distraction to Pursue a More Meaningful Life* and the founder of Simplify Magazine.

The 5 Myths of Self-Compassion:

What Keeps Us from Being Kinder to Ourselves?

Kristin Neff, PhD



Most people don't have any problem with seeing compassion as a thoroughly commendable quality. It seems to refer to an amalgam of unquestionably good qualities: kindness, mercy, tenderness, benevolence, understanding, empathy, sympathy, and fellow-feeling, along with an impulse to help other living creatures, human or animal, in distress.

But we seem less sure about self-compassion. For many, it carries the whiff of all those other bad "self" terms: self-pity, self-serving, self-indulgent, self-centered, just plain selfish.

Even many generations removed from our culture's Puritan origins, we still seem to believe that if we aren't blaming and punishing ourselves for something, we risk moral complacency, runaway egotism, and the sin of false pride.

Consider Rachel, a 39-year-old marketing executive with two kids and a loving husband. A deeply kind person, devoted wife, involved parent, supportive friend, and hard worker, she also finds time to volunteer for two local charities. In short, she appears to be an ideal role model. But Rachel's in therapy because her levels of stress are so high: she's tired all the time, depressed, unable to sleep. She experiences chronic low-level digestive problems and sometimes—to her horror—snaps at her husband and kids.

Through all this, she's incredibly hard on herself, always feeling that whatever she's done isn't good enough. Yet she'd never consider

trying to be compassionate to herself. In fact, the very idea of letting up on her self-attack, giving herself some kindness and understanding, strikes her as somehow childish and irresponsible.

And Rachel isn't alone. Many people in our culture have misgivings about the idea of self- compassion, perhaps because they don't really know what it looks like, much less how to practice it.

Often the practice of self-compassion is identified with the practice of mindfulness, now as ubiquitous as sushi in the West. But while mindfulness—with its emphasis on being experientially open to and aware of our own suffering without being caught up in it and swept away by aversive reactivity—is necessary for self-compassion, it leaves out an essential ingredient. What distinguishes self-compassion is that it goes beyond accepting our *experience* as it is and adds something more—embracing the *experiencer* (i.e., ourselves) with warmth and tenderness when our experience is painful.

Self-compassion also includes an element of wisdom—recognition of our common humanity. This means accepting the fact that, along with everyone else on the planet, we're flawed and imperfect individuals, just as likely as anyone else to be hit by the slings and arrows of outrageous (but perfectly normal) misfortune. This sounds obvious, but it's funny how easily we forget.

We fall into the trap of believing that things are "supposed" to go well and that when we make a mistake or some difficulty comes along, something must have gone terribly wrong. (Uh, excuse me. There must be some error. I signed up for the everything-will-go-swimmingly-until-the-day-I-die plan. Can I speak to the management, please?) The feeling that certain things "shouldn't" be happening makes us feel both shamed and isolated. At those times, remembering that we aren't really alone in our suffering—that hardship and struggle are deeply embedded in the human condition—can make a radical difference.

I remember being at the park with my son, Rowan, when he was about four years old, at the peak of his autism. I was sitting on the bench, watching all the happy children playing on the swings, chasing each other, and having fun while Rowan was just sitting on the top of the slide repeatedly banging his hand (something known as stimming).

Admittedly, I started to go down the path of self-pity: "Why can't I have a 'normal' child, like everyone else? Why am I the only one who's having such a hard time?" But years of self-compassion practice gave me enough presence of mind to catch myself, pause, take a deep breath, and become aware of the trap I was falling into.

With a little distance from my negative thoughts and feelings, I looked out at the other mothers and their children and thought to myself, *I'm assuming that these kids are going to grow up with*

carefree, unproblematic lives, that none of these mothers will have to struggle as they raise their children. But for all I know, some of these kids could grow up to develop serious mental or physical health issues, or just turn out to be not very nice people! There's no child who's perfect, and no parent who doesn't go through some form of hardship or challenge with their children at one time or another.

And at that moment my feelings of intense isolation turned into feelings of deep connection with the other mothers at the park, and with all parents everywhere. We love our kids, but it's tough sometimes!

As odd as it may sound, by practicing self-compassion as we muddle through, we don't feel so alone.

Fortunately, this isn't just wishful thinking about another self-help approach. In fact, there's now an impressive and growing body of research demonstrating that relating to ourselves in a kind, friendly manner is essential for emotional wellbeing. Not only does it help us avoid the inevitable consequences of harsh self-judgment—depression, anxiety, and stress—it also engenders a happier and more hopeful approach to life.

More pointedly, research proves false many of the common myths about self-compassion that keep us trapped in the prison of relentless self-criticism.

Myth 1: Self-compassion is a form of self-pity.

One of the biggest myths about self-compassion is that it means feeling sorry for yourself. In fact, as my own experience on the playground exemplifies, self-compassion is an *antidote* to self-pity and the tendency to whine about our bad luck.

This isn't because self-compassion allows you to tune out the bad stuff. In fact, it makes us more willing to accept, experience, and acknowledge difficult feelings with kindness—which paradoxically helps us process and let go of them more fully. Research shows that self-compassionate people are less likely to get swallowed up by self-pitying thoughts about how bad things are. That's one of the reasons self-compassionate people have better mental health.

A study by Filip Raes at the University of Leuven examined the association of self-compassion with ruminative thinking and mental health among undergraduates at his university.[1] He first assessed how participants were using the self-report Self-Compassion Scale I developed in 2003, which asks respondents to indicate how often they engage in behaviors corresponding to the main elements of self-compassion.[2] Examples include statements such as these:

• "I try to be understanding and patient toward aspects of my personality I don't like."

- "When things are going badly for me, I see the difficulties as part of life that everyone goes through."
- "When something painful happens, I try to take a balanced view of the situation."

Raes found that participants with higher levels of self-compassion tended to brood less about their misfortune. Moreover, he found that their reduced tendency to ruminate helped explain why self-compassionate participants reported fewer symptoms of anxiety and depression.

Myth 2: Self-compassion means weakness.

John had always considered himself a pillar of strength—an ideal husband and provider. So he was devastated when his wife left him for another man. Secretly racked with guilt for not doing more to meet her emotional needs before she sought comfort in someone else's arms, he didn't want to admit how hurt he still felt and how hard it was for him to move on with his life.

When his colleague suggested that he try being compassionate to himself about his divorce, his reaction was swift: "Don't give me that hearts-and-flowers stuff! Self-compassion is for sissies. I had to be hard as nails to get through the divorce with some semblance of self-respect, and I'm not about to let my guard down now."

What John didn't know is that researchers are discovering that self-compassion, instead of being a weakness, is one of the most powerful sources of coping and resilience available to us. When we go through major life crises, self-compassion appears to make all the difference in our ability to survive and even thrive.

David Sbarra and his colleagues at the University of Arizona examined whether self-compassion helps determine how well people adjust to a divorce.[3] The researchers invited more than 100 people recently separated from their spouses to come into the lab and make a four-minute stream-of-consciousness recording of their thoughts and feelings about the separation experience.

Four trained judges later coded how self-compassionate these discussions were, using a modified version of the Self-Compassion Scale. They gave low scores to participants who said things like "I don't know how I managed to do this. It was all my fault. I pushed him away for some reason. I needed him so much, still need him. What did I do? I know I did it all wrong." High scores were given to people who said things like "Looking back, you have to take the best out of it and move on from there. Just forgive yourself and your ex for everything you both did or didn't do."

The researchers found that participants who displayed more selfcompassion when talking about their breakup evidenced better psychological adjustment to the divorce at the time, and that this effect persisted nine months later. Results held even when controlling for other possible explanations, such as participants' initial levels of self-esteem, optimism, depression, or secure attachment.

Studies like this one suggest that it's not just what you face in life but how you relate to yourself when the going gets tough—as an inner ally or enemy—that determines your ability to cope successfully.

Myth 3: Self-compassion will make me complacent.

Perhaps the biggest block to self-compassion is the belief that it will undermine our motivation to push ourselves to do better. The idea is that if we don't criticize ourselves for failing to live up to our standards, we'll automatically succumb to slothful defeatism. But let's think for a moment how parents successfully motivate their children.

When Rachel's teenage son comes home one day with a failing English grade, she could look disgusted and hiss, "Stupid boy! You'll never amount to anything. I'm ashamed of you!" (Makes you cringe, doesn't it? Yet that's exactly the type of thing Rachel tells herself when she fails to meet her own high expectations.) But most likely, rather than motivating her son, this torrent of shame will just make him lose faith in himself, and eventually he'll stop trying altogether.

Alternatively, Rachel could adopt a compassionate approach by saying, "Oh, sweetheart, you must be so upset. Hey, give me a hug. It happens to all of us. But we need to get your English grades up

because I know you want to get into a good college. What can I do to help and support you? I believe in you." Notice that there's honest recognition of the failure, sympathy for her son's unhappiness, *and* encouragement to go beyond or around this momentary bump in the road.

This type of caring response helps us maintain our self-confidence and feel emotionally supported. Ironically, even though Rachel wouldn't dream of taking the former approach with her son, she unquestionably believes that self-flagellation is necessary for her to achieve her goals. She assumes that her anxiety, depression, and stress are a result of her not trying hard enough.

But there's now a good deal of research clearly showing that self-compassion is a far more effective force for personal motivation than self-punishment. For instance, a series of research experiments by Juliana Breines and Serena Chen of the University of California at Berkeley examined whether helping undergraduate students to be more self-compassionate would motivate them to engage in positive change.[4]

In one study, participants were asked to recall a recent action they felt guilty about—such as cheating on an exam, lying to a romantic partner, saying something harmful—that *still* made them feel bad about themselves when they thought about it.

Next, they were randomly assigned to one of three conditions. In the self-compassion condition, participants were instructed to write to themselves for three minutes from the perspective of a compassionate and understanding friend. In the second condition, participants were instructed to write about their own positive qualities. In the third, they wrote about a hobby they enjoyed. These latter two—the control conditions—helped differentiate self-compassion from positive self-talk and positive mood in general.

The researchers found that participants who were helped to be self-compassionate about their recent transgression reported being more motivated to apologize for the harm done and more committed to not repeating the behavior than those in the control conditions. Self-compassion, far from being a way to evade personal accountability, actually *strengthens* it.

If we can acknowledge our failures and misdeeds with kindness ("I really messed up when I got so mad at her, but I was stressed, and I guess all people overreact sometimes") rather than judgment ("I can't believe I said that; I'm such a horrible, mean person"), it's much safer to see ourselves clearly. When we can see beyond the distorting lens of harsh self-judgment, we get in touch with other parts of ourselves, the parts that care and want everyone, including ourselves, to be as healthy and happy as possible. This provides the encouragement and support needed to do our best and try again.

Myth 4: Self-compassion is narcissistic.

In American culture, high self-esteem requires standing out in a crowd—being special and above average. How do *you* feel when someone calls your work performance, or parenting skills, or intelligence level average? Ouch!

The problem, of course, is that—Garrison Keillor's Lake Wobegon notwithstanding—it's impossible for everyone to be above average at the same time. We may excel in some areas, but there's always someone more attractive, successful, and intelligent than we are—meaning we feel like failures whenever we compare ourselves to those "better" than us.

The desire to see ourselves as better than average, however, to get and *keep* that elusive feeling of high self-esteem, can lead to downright nasty behavior. Why do early adolescents begin to bully others? If I can be seen as the cool, tough kid in contrast to the wimpy nerd I just picked on, I get a self-esteem boost. Why are we so prejudiced? If I believe that my ethnic, gender, national, or political group is better than yours, I get a self-esteem boost.

Indeed, the emphasis placed on self-esteem in American society has led to a worrying trend: researchers Jean Twenge of San Diego State University and Keith Campbell of the University of Georgia, who've tracked the narcissism scores of college students since 1987, find that the narcissism of modern-day students is at the highest level ever recorded.[5] They attribute the rise in narcissism to well-meaning

but misguided parents and teachers, who tell kids how special and great they are in an attempt to raise their self-esteem.

But self-compassion is different from self-esteem. Although they're both strongly linked to psychological wellbeing, self-esteem is a positive evaluation of self-worth, while self- compassion isn't a judgment or an evaluation at all. Instead, self-compassion is a way of *relating* to the ever-changing landscape of who we are with kindness and acceptance, especially when we fail or feel inadequate.

In other words, self-esteem requires feeling better than others, whereas self-compassion requires acknowledging that we share the human condition of imperfection.

Self-esteem is also inherently fragile, bouncing up and down according to our latest success or failure.

I remember a time my self-esteem soared and then crashed within about five seconds. I was visiting an equestrian stable with friends, and the old Spanish riding instructor there apparently liked my Mediterranean looks. "You are veeerrry beautiful," he told me, as I felt myself glow with pleasure. Then he added, "Don't ever shave your moostache."

Self-esteem is a fair-weather friend, there for us in good times, deserting us when our luck heads south. But self-compassion is always there for us, a reliable source of support, even when our worldly stock has crashed. It still hurts when our pride is dashed, but we can be kind to ourselves precisely *because* it hurts. "Wow, that was pretty humiliating. I'm so sorry. It's okay, though. These things happen."

There's solid research for the idea that self-compassion helps us in good times and bad.

Mark Leary and colleagues at Wake Forest University conducted a study that asked participants to make a video that introduced and described themselves.[6] For instance, "Hi, I'm John, an environmental sciences major. I love to go fishing and spend time in nature. I want to work for the National Park Service when I graduate," and so on.

They were told that someone would watch their tape and then rate them on a seven-point scale in terms of how warm, friendly, intelligent, likeable, and mature they appeared. (The feedback was bogus, of course, given by a study confederate.) Half the participants received positive ratings and the others neutral ratings. The researchers wanted to examine whether participants' levels of self-compassion (as measured by scores on the Self-Compassion Scale) would predict reactions to the feedback differently from their levels of self-esteem (as measured by the Rosenberg Self-Esteem Scale).

They found that self-compassionate people reported similar emotional reactions in terms of how happy, sad, angry, or tense they were feeling, regardless of whether the feedback was positive or neutral. People with high levels of self-esteem, however, tended to get upset when they received neutral feedback. (What, I'm just *average*?) They were likelier to deny that the feedback was due to their own personality and blamed it on external factors, such as the observer's being in a bad mood.

This suggests that self-compassionate people are better able to remain emotionally stable, regardless of the degree of praise they receive from others. Self-esteem, in contrast, thrives only when the reviews are good, and it may lead to evasive tactics when there's a possibility of facing unpleasant truths about oneself.

Myth 5: Self-compassion is selfish.

Many people are suspicious of self-compassion because they conflate it with selfishness.

Rachel, for instance, spends a large portion of her days caring for her family and many of her nights and weekends volunteering for the charities she supports. Raised in a family that emphasized the importance of service to others, she assumes that spending time and energy being kind and caring toward herself automatically means she must be neglecting everybody else for her own selfish ends. Indeed, many people are like Rachel in this sense—good, generous, altruistic souls, who are perfectly awful to themselves while thinking this is necessary to their general goodness.

But is compassion really a zero-sum game?

Think about the times you've been lost in the throes of self-criticism. Are you self-focused or other-focused in the moment? Do you have more or fewer resources to give to others?

Most people find that when they're absorbed in self-judgment, they actually have little bandwidth left over to think about anything other than their inadequate, worthless selves. In fact, beating yourself up can be a paradoxical form of self-centeredness. When we can be kind and nurturing to ourselves, however, many of our emotional needs are met, leaving us in a better position to focus on others.

Unfortunately, the ideal of being modest, self-effacing, and caring for the welfare of others often comes with the corollary that we must treat ourselves badly. This is especially true for women, who, research indicates, tend to have slightly lower levels of self-compassion than men, even while they tend to be more caring, empathetic, and giving toward others.[7]

Perhaps this isn't so surprising, given that women are socialized to be caregivers—selflessly to open their hearts to their husbands, children, friends, and elderly parents—but aren't taught to care for themselves. While the feminist revolution helped expand the roles available to women, and we now see more female leaders in business and politics than ever before, the idea that women should be selfless caregivers hasn't really gone away. It's just that women are now supposed to be

successful at their careers in *addition* to being ultimate nurturers at home.

The irony is that being good to yourself actually helps you be good to others, while being bad to yourself only gets in the way. In fact, I recently conducted a study with my colleague Tasha Beretvas at the University of Texas at Austin that explored whether self-compassionate people were more giving relationship partners.[8] We recruited more than 100 couples who'd been in a romantic relationship for a year or longer. Participants rated their own level of self-compassion using the Self-Compassion Scale. They then described their partner's behavior in the relationship on a series of self-report measures, also indicating how satisfied they were with their partners.

We found that self-compassionate individuals were described by their partners as being more caring (e.g., "gentle and kind toward me"), accepting (e.g., "respects my opinions"), and autonomy supporting (e.g., "gives me as much freedom as I want") than their self-critical counterparts. These counterparts were described as being more detached (e.g., "doesn't think about me very much"), aggressive (e.g. "yells, stomps out of the room"), and controlling (e.g., "expects me to do everything his/her way").

Participants also reported being more satisfied and securely attached in their relationship with self-compassionate partners—which makes sense. If I'm withholding toward myself and relying on my partner to meet my emotional needs, I'm going to behave badly when they're not met. But if I can give myself care and support, to meet many of my own needs directly, I'll have more emotional resources available to give to my partner.

The research literature is unclear about whether self-compassion is actually necessary to be compassionate to others, given that many people do a pretty good job of caring for others while shortchanging themselves. However, a growing body of research indicates that self-compassion helps people sustain the act of caring for others. For instance, it appears that counselors and therapists who are self-compassionate are less likely to experience stress and caregiver burnout; they're more satisfied with their careers and feel more energized, happy, and grateful for being able to make a difference in the world.

Because we evolved as social beings, exposure to other people's tales of suffering activates the pain centers of our own brains through a process of empathetic resonance. When we witness the suffering of others on a daily basis, we can experience personal distress to the point of burning out, and caregivers who are especially sensitive and empathetic may be most at risk.

At the same time, when we give ourselves compassion, we create a protective buffer, allowing us to understand and feel for the suffering person without being drained by his or her suffering. The people we care for then pick up our compassion through their own process of

empathic resonance. In other words, the compassion we cultivate for ourselves directly transmits itself to others.

I know this firsthand through my experience of raising an autistic child. Rowan is now 13, and although he can be a grumpy adolescent, he's a loving kid, who poses few parenting challenges. But it wasn't always so. I often faced situations that I thought were beyond my ability to cope and sometimes had to rely on the power of self-compassion to get me through.

Once, when Rowan was five, I took him to England to see his grandparents. In the middle of the transatlantic flight, he threw an almighty tantrum. I have no idea what set him off, but I suddenly found myself with a flailing, screaming child and a plane full of people looking at us with dagger eyes. What to do?

I tried taking him to the bathroom in hopes that the closed door would muffle his screams. But after I'd shuffled down the aisle, trying to keep him from accidentally hitting passengers along the way, I found the toilet was occupied.

Huddled with Rowan in the tiny space outside the toilet, I felt helpless and hopeless. But then I remembered self-compassion. *This is so hard for you, darling*, I said to myself. *I'm sorry this is happening. I'm here for you.* While making sure that Rowan was safe, 90 percent of my attention was on soothing and comforting myself.

My mind became flooded with compassion, to the point that it dominated my experience—far more than my screaming child. Furthermore, as I'd already discovered, when I was in a more peaceful and loving frame of mind, Rowan also calmed down. As I soothed myself, he was soothed as well.

A Gift to the World

When we care tenderly for ourselves in response to suffering, our heart opens. Compassion engages our capacity for love, wisdom, courage, and generosity. It's a mental and emotional state that's boundless and directionless, grounded in the great spiritual traditions of the world but available to every person simply by virtue of our being human.

In a surprising twist, the nurturing power of self-compassion is now being illuminated by the matter-of-fact, tough-minded methods of empirical science, and a growing body of research literature is demonstrating conclusively that self-compassion is not only central to mental health but also can be enriched through learning and practice, just like so many other good habits.

Therapists have known for a long time that being kind to ourselves isn't—as is too often believed—a selfish luxury, but the exercise of a gift that makes us happier. Now, finally, science is proving the point.

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How Lifestyle Contributes to Mental Health

Tommy Wood, MD



The topic of mental health is both incredibly broad and intimately personal. Beyond specific clinical diagnoses, what mental health means to each of us can be very different. The World Health Organization considers mental health to be a basic human right, defining it as "a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn and work well, and contribute to their community."[1] As such, mental health encompasses our resilience, cognitive function, and ability to express ourselves and interact with others. How we choose and wish to do these things is different from person to person, but this definition gives us an idea of what we each might aim for when thinking about our mental health.

As a neuroscientist, I like to think about complex brain-related processes in the context of simpler systems or frameworks that can help people identify individual factors that resonate with them and their health goals. For mental health, one framework I use is the six pillars of lifestyle medicine:

- healthy eating
- physical activity
- sleep
- minimizing harmful substances (e.g., smoking and alcohol)

- healthy relationships
- mental wellbeing

Lifestyle medicine is an increasingly evidence-based approach to chronic disease prevention and reversal that focuses on how our daily activities and exposures can affect our health.[2] You'll see from the list that mental health/wellbeing itself forms one of the pillars of lifestyle medicine. However, I prefer to think of the pillars as an interconnected network rather than separate entities. For instance, we know that alcohol can negatively impact sleep, while exercise generally improves it.[3,4] As part of this network of factors, mental wellbeing is often a result of the net effect of the other pillars, though other factors outside of our control (including social determinants of health) certainly play a role as well.[5]

In order to think about how mental health is connected to the other lifestyle pillars, it is worth highlighting that mental and physical health are intimately connected. In fact, researchers have recently suggested that one or more common health-related factors may underlie a wide range of both mental health conditions (e.g., anxiety, depression, and obsessive-compulsive disorder) and physical health conditions (e.g., chronic fatigue, asthma, arthritis, irritable bowel syndrome, diabetes, heart problems, high blood pressure, and cancer).[6]

Several common lifestyle factors are associated with both poorer mental and physical health, and these tend to map onto the six lifestyle medicine pillars outlined above. For instance, a recent analysis of data from nearly 300,000 people in the United Kingdom explored associations between lifestyle and depression, including how lifestyle interacted with genetics and effects on physical health.[7] They identified several factors that were all associated with lower depression risk, which can be grouped into five themes:

- regular physical activity and time being sedentary
- healthy sleep
- healthy diet
- moderate alcohol consumption and never smoking
- frequent social connection

If you're familiar with how these large studies are done, you'll know that asking people about their lifestyle and looking at their risk of depression, as done in this UK study, can't prove that these relationships are causal (e.g., that smoking directly causes depression). However, a range of studies, including randomized clinical trials, support most of these areas as possible contributors to overall mental health.

Sleep and excessive alcohol intake are critical contributors to our mental health, but if you are experiencing significant struggles with either of these, a good place to start is a conversation with your primary healthcare provider. Below, I will briefly go over each of the remaining areas/pillars (physical activity, diet and nutrition, social connection), describe why they might be important for mental health, and provide some tips for how to make changes if you think that a particular area might be negatively affecting your mental health.

Physical Activity

Physical activity is one of the most powerful ways in which we can improve our short-term and long-term mental and physical health. For example, in a large analysis of more than 1 million US adults, when comparing people with similar physical and socioeconomic characteristics, those who were more active had significantly better mental health.[8] Several large meta-analyses of randomized clinical trials have also found that exercise interventions significantly improve symptoms of depression, anxiety, and distress.[9,10]

There are many reasons why physical activity can support mental health. The first is that being more active automatically means we're spending less time being sedentary, which is its own risk factor for depression. While the opposite is also true (those who are depressed are less likely to be motivated to exercise), an increasing body of evidence suggests that spending long periods of time being sedentary

can directly contribute to chronic disease by promoting inflammation and impaired metabolic function.[11] Some researchers have even argued that exercise should not be considered an intervention, because it is such a core part of our evolution as a species that our physiology requires it in order to function properly.[12] We also know that our muscles act as organs when we exercise, releasing numerous factors, called "myokines," that act across the body to improve health, from decreasing inflammation to supporting brain health and function.[13] And as mentioned above, another way that physical activity helps to support mental health is by improving sleep.

If you're thinking about starting to increase your levels of physical activity, the good news is that it seems that any type of physical activity can support your mental health. In the study of US adults mentioned above, the greatest benefits were seen when people exercised for around 45 minutes at least three times per week.[8] Clinical trials suggest that moderate-to-vigorous activities (e.g., running, cycling, lifting weights) may have a greater effect on improving mental health,[9,10] but even time spent walking or doing household chores shows significant benefit on both mental health and cognitive function.[8,14]

One of the best ways to start increasing your movement is to add some walking to your day, outdoors if possible. This could be before or after work, or even in the middle of the day, which can help to decrease stress and improve focus.[15] Other options could be to take on "movement snacks," which are brief but vigorous snippets of movement every couple of hours, like running up a couple of flights of stairs or doing some squats. Even these small periods of movement can have significant benefits to overall health.[16] Finally, you could consider a weekly exercise group or class. Not only will this increase movement, but with the right group can provide the added benefit of social support and connection.

The most important principle for movement is that, for most people, any little bit more than you're doing now will result in health improvements. So don't worry about a certain lofty goal; instead, just think about adding small amounts when you can and building up from there.

Diet and Nutrition

Often we're told that one specific diet is optimal for a certain health goal, including mental health; however, one of the most important lessons from recent nutrition research is that human bodies are incredibly adaptable. That doesn't mean we can eat anything we want, but it does mean there's a wide range of ways we can eat to promote mental health.

There also do seem to be some commonalities across approaches and diets, particularly that the most consistently successful dietary patterns tend to rely on whole, nutrient dense, minimally processed foods. When examining the relationship between dietary patterns and mental and cognitive health, researchers will often look at how well people adhere to diets such as the Mediterranean diet or DASH (Dietary Approaches to Stop Hypertension) diet.[7,17] The details differ slightly across these dietary patterns, but generally they might include a greater intake of vegetables, fruits and berries, minimally processed whole grains, and lean meat and fish, while reducing heavily processed meats, carbohydrates, and fried foods.

While it's easy to get bogged down in the details of individual foods, it seems like the overall pattern is probably most important. When scientists recently examined components of the Mediterranean diet to look at the effect on cognitive function, they found that none of the individual foods was necessary to see a benefit. The overall *pattern*—largely based around whole foods—was most important.[18] Recent studies have found that, contrary to the original DASH recommendations, eating some unprocessed red meat is also associated with *lower* depression and anxiety risk.[19] This is probably at least partly because red meat contains some nutrients such as vitamin B12 and iron that are critical for brain health.

In addition to the importance of whole foods, minimizing the amount of ultra-processed foods we eat also appears to be beneficial. Ultra-processed foods are defined as "energy-dense, palatable, and ready-to-eat items" that are often "formulations of several ingredients with food additives not used in home preparations such as flavors,

colors, sweeteners, emulsifiers, and other substances used to disguise undesirable qualities of the final product." Multiple studies have suggested a link between ultraprocessed foods and worse mental health as well as decreased cognitive function and faster cognitive decline.[19,20,21]

It is worth noting that a lot of the research on dietary patterns and cognitive function is epidemiological, which means that it does not prove cause and effect. For instance, people who eat according to a healthier dietary pattern tend to do other health-promoting activities (like exercise). The types of foods that people have access to also differ based on several socioeconomic factors (income, education, etc.) that influence our mental health. On the whole, however, there is still very good evidence that health-promoting diets tend to include more whole minimally processed foods and fewer ultra-processed or refined foods.

In line with this, at least two small randomized clinical trials in patients with depression have found that changing diet can significantly improve symptoms. [22,23] For instance, in the SMILES trial, an intervention to improve diet quality based on a Mediterranean diet significantly improved symptoms in individuals with moderate or severe depression compared to a control group. [22]

If you're thinking about focusing on your diet for mental health, the recommendations from the SMILES trial provide some nice guidance. Perhaps you could focus on one or two of their

recommendations and build from there. Their recommendations primarily focused on improving diet quality (servings in brackets), by supporting the consumption of vegetables (6 per day); fruit (3 per day), legumes (3–4 per week); low-fat and unsweetened dairy foods (2–3 per day); raw and unsalted nuts (1 per day); fish (at least 2 per week); lean red meats (3–4 per week), chicken (2–3 per week); eggs (up to 6 per week); and olive oil (3 tablespoons per day), while reducing sweets, refined cereals, fried food, fast food, processed meats, sugary drinks, and no more than two alcoholic drinks per day.

Social Connection

One frequently overlooked but critical aspect of all human health, especially mental health, is the quality of our social support and interpersonal relationships. [24] Social isolation and poor social connection are significant risk factors for mental health conditions such as depression, as well as cognitive decline and dementia. [25,26] As you might expect, there is also a bi-directional relationship between mental health and social connection, as those who are experiencing depression or anxiety may be less likely to seek social interaction with others. Despite this, several studies suggest that those who frequently feel lonely have a higher risk of developing depression. [24] Poor social connection is also associated with a number of other chronic health conditions, which may then indirectly impact our mental health.

Perhaps surprisingly, social isolation and poor social support directly affect our physiology. This is thought to be due to an evolutionarily conserved survival mechanism that also depends on our individual genetics.[27] Simply put, when we feel alone or isolated, this activates certain pathways associated with increased activation of our immune system. Historically, this made sense; if you were isolated from your tribe or family, activating these pathways was associated with benefits such as improved wound healing and better likelihood that you would survive in the short term.[28] When activated for a long time, however, this increase in certain types of inflammation can contribute to increased chronic disease risk as well as decreased mental health.

In the more modern era, social media can certainly play a role as well. In particular, if we feel like our social environment, which includes social media, is threatening or unsafe, this contributes to the activation of those same pathways as when we are isolated or alone. Similarly, there is evidence to suggest that our perceived social "rank," which can be affected by how we compare ourselves to others we see on social media, can contribute to the same phenomenon. [27]

Though the importance of social connection is increasingly being appreciated (for instance, with this recent report from the US Surgeon General),[29] the answers are not always easy. It is clear from the research that the quality of your relationships is more important than the quantity, but this may also depend on individual

personality, some people gain greater wellbeing from a higher number of briefer interactions, whereas others find fulfillment in a smaller number of deeper interactions. The main takeaway, therefore, is that you should strive to generate more of the types of social connections and relationships that you find meaningful and that provide you with feelings of safety and support. Maybe this means actively reaching out to an old friend or family member and committing to spending more time with them. Or maybe this means joining a group based on a shared activity, such as a type of exercise or other skill. Other options include volunteering for a cause you believe in, because this supports feelings of meaning and purpose, as well as helping you to be part of a community with a shared interest. The act of helping others may also directly counteract some of the inflammatory pathways that are activated when we feel isolated.[28,30] Finally, though not a replacement for social connection, certain stress-reduction activities such as mindfulness, meditation, and controlled breathing practices have all been found to be potentially beneficial in this setting.[31, 32, 33]

Building New Habits

One or more of the areas described above may feel relevant to you, but (as mentioned several times) that will be different from person to person. Importantly, just because lifestyle is connected to mental health, that does not mean that struggling with mental health is anybody's "fault." I truly believe that each of us is doing the best we

can at any given moment, and while each of us can and should strive to improve over time, this is a gradual process of identifying specific areas we might want to change and slowly building new habits.

This involves acknowledging our struggles and setbacks, and celebrating even the small wins as we make positive changes. Importantly, active self-compassion appears to reduce both stress and anxiety as well as helping to support engagement in health-promoting behaviors and improving health outcomes.[34, 35] By identifying areas where we are willing and able to make changes, and being compassionate with ourselves along the way, there are several opportunities for use to improve our mental health through lifestyle.

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Cultivating the Mind's Garden:

How New Neurons Enhance Learning and Balance Mood

Barbara Oakley, PhD

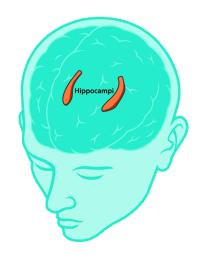


Our brains can have an astonishing, almost magical capacity to grow and change. This flexibility arises, at least in part, from the birth and growth of new neurons—a phenomenon called *neurogenesis*. Even in old age, neurogenesis continues, and it is a process that has rich implications for our lives. Everything from how we cope with stress, to improving our mood, to how easily we can learn may be profoundly shaped by neurogenesis. But it's a yin and yang process—the actions we consciously take can either encourage or discourage neurogenesis in the garden of our minds.

Discovering Our Neural Gardens

For decades, neurogenesis after birth was thought by many influential neuroscientists to be flat-out impossible.[1] This view eventually gave way as studies in songbirds and rodents revealed that new neurons *do* appear in adult animals. Then, in a 1998 breakthrough study, researchers demonstrated the human hippocampus retains the capacity for rejuvenation via neurogenesis into old age, identifying new neurons in brain samples across the lifespan.[2]

In humans, as in other mammals, the hippocampus is a central hub for processing memories and spatial information. Containing only a tiny fraction of the brain's 85 billion neurons, the hippocampus nonetheless packs a mighty cognitive punch. Its unique positioning and connections to many other brain



areas underpin the hippocampus's outsized contributions to everything from imagination to emotional regulation and stress adaptation.

There are two hippocampi—one on each side of the brain. Nestled toward the center of each hippocampus is the *dentate gyrus*, distinguished by its densely packed layer of neuronal nuclei. Here, in a ribbon-like niche bordering the dentate gyrus called the subgranular zone (SGZ), neural germination unfolds. Within the nurturing biochemical nest of the SGZ, neural stem cells divide and differentiate down neuronal pathways into young "neuronlings" that then migrate into the wider dentate gyrus.

Many of these fledgling neurons perish in the unforgiving process of selection and pruning that whittles down the new neuron pool over a four-week maturation journey. Of the fortunate neuronlings spared, perhaps some 1,400 new neurons per day become fully integrated

members of the hippocampal circuitry.[3] Their delicate filaments creep outward, expanding into complex dendritic branches that entwine with networks of both old and new neuronal neighbors.

Influencing Our Neural Gardens

Like any garden, many elements influence the fate of new neurons. Stress hormones like cortisol can act in differing ways, encouraging neurogenesis at low levels but aggressively pruning neurons when levels grow higher. Cognitive stimulation, such as social interactions or learning a new language or skill, along with activities like exercise, caloric restriction, or taking antidepressants, can function like fertilizers, enriching the neural soil as neurons take root.

One essential nutrient supporting neurogenesis is a protein called brain-derived neurotrophic factor (BDNF), which encourages neural sprouting and branching. Activities like learning and exercise may enhance neurogenesis because they boost BDNF expression. In contrast, chronic stress and mood disorders like depression can decrease BDNF while increasing neurogenesis-blunting cortisol. This double whammy may partly explain the hippocampal shrinking seen in cases of prolonged anxiety, depression, and post-traumatic stress disorder (PTSD).[4]

Neurogenesis is a possible common denominator underlying both cognitive sharpness and emotional resilience. Interestingly, studies show that antidepressants can increase low levels of BDNF even in the face of higher cortisol levels.[5] This may be why antidepressants often appear to enhance mood more quickly than talk therapies that teach stress management skills.

But neurogenesis may affect mood in another way. It seems new neurons may allow the "unlearning" of negative thought patterns. How? This allows for new pathways to be formed that can counteract stressful life events. New neurons aren't associated with previous traumatic experiences. In some sense, they can be like an impartial referee getting between two fighters—older neurons—in a ring. This can break up troubled memories and allow for "beneficial forgetting."[6,7] (As it turns out, remembering is not always a positive!)

Cognitive Fertilizer: Learning

Even routine activities like exercise can foster neurogenesis by stimulating neuron-nurturing BDNF and other neurotrophins—growth factors that support the survival, growth, and differentiation of neurons.[8] Social interactions can support cognitive health as well.[9]

However, research suggests that pushing ourselves cognitively in our learning by going beyond ordinary activities might be even more beneficial for neurogenesis. In one study, elderly subjects learning an intricate, cognitively demanding video game showed increased hippocampal gray matter density after training compared to control

subjects undergoing simpler computerized cognitive training.[10] Subsequent research found such learning promotes neurogenesis by increasing the survival rate of newborn neurons and accelerating their maturation into fully functional hippocampal cells.

It's almost as if learning something new and relatively demanding encourages new neurons to link to the rest of the hippocampal lattice. This, in turn, allows those new neurons to survive, thrive, and grow. Activities that push us outside our neural comfort zones may be most potent for pumping up neurogenesis. Learning a new language, instrument, craft, game, or computational skill can be powerful primers stoking our neural furnaces.

Promising Possibilities: Fostering Neurogenesis to Boost Mood and Resilience

Interventions aimed directly at stimulating neuron growth show potential for tackling depression that resists standard treatments. Compounds like baicalin boost production of neuron-nurturing proteins while eliminating threats to fledgling cells.[11,12] This hints that such compounds have the potential to rival Prozac's effects without the side effects. However, researchers still don't know whether neurogenesis can lift mood disorders without also being able to nestle in with other neurons. New cells seem to enable "beneficial forgetting" of trauma partly by disrupting pathological circuits—but they must wire into healthy networks as well.

This is where new learning challenges come in. These challenges seem to strengthen the connectivity between new and existing neurons. Perhaps the best approach is to use regimens that combine cell-growth promoters with stress reduction and cognitive training.

Everyday Ways to Cultivate Your Neural Garden

As a recap, research gives us practical starting points for growing our neural gardens through lifestyle changes. Varied activities like running, hiking, dancing, and team sports seem especially neuron-fertilizing when they incorporate learning new environments and skills. Caloric restriction also boosts BDNF while reducing threatening cortisol levels. Social interaction—especially in novel, engaging contexts—nurtures neuronal growth. Deliberately pushing beyond our cognitive comfort zone can reap neurogenic rewards, whether by studying new fields, taking music lessons, learning languages, playing strategic games, or simply cultivating a beginner's mind through curiosity about diverse topics.

Conquering a hiking trail, visiting and learning from a museum, mastering a melody, or achieving a checkmate help build personal agency while sculpting neural networks. Like gardeners nurturing their plots through sun and frost while enjoying occasionally harvested delights, we can care for our brains amid life's stresses. By wisely harnessing neuroscience and leaning into support from therapeutic communities as needed, we are progressively growing our capacity for emotional resilience, one neuron at a time.

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