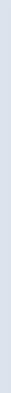




# The Science of Self-Love

*How to Use Brain Science to  
Improve Your Relationship  
With Yourself*

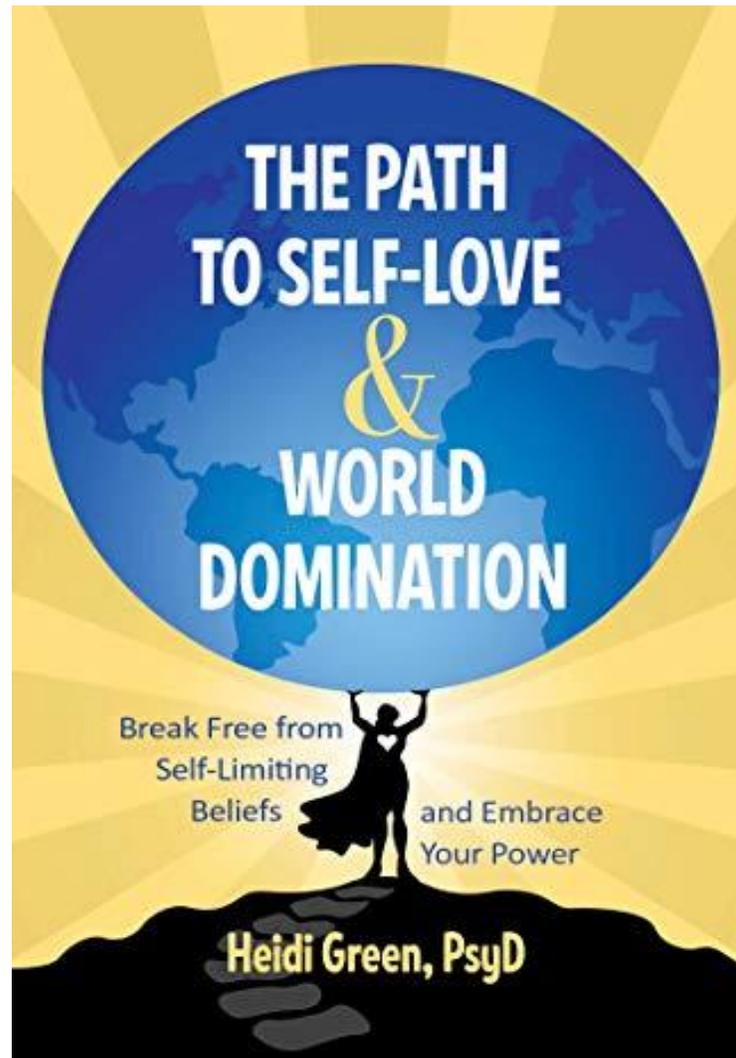


Dr. Heidi Green  
Clinical Psychologist

[drheidigreen.com](http://drheidigreen.com)

[@drheidigreen](https://www.instagram.com/drheidigreen)

2022 EDITION



This ebook pairs well with my paperback book, [\*The Path to Self-Love and Word Domination\*](#) available on Amazon and through most online book retailers.

If you find this ebook helpful, I also recommend my [\*120-Day Self-Love Program\*](#) available by texting “SUBSCRIBE” to 1-877-966-5585.

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# Got Negative Self-Talk?

**In this book we will explore the following:**

1. Why do you have an inner critic/negative self-talk? Where did it come from? What purpose does it serve?
2. I will introduce the biology and neuroscience concepts that will allow you to gain mastery and control of your thoughts. Over time, this will change the way your brain functions to be kinder and more helpful towards itself.
3. I will provide you with practices and exercises to promote self-love, self-kindness, and positive emotional health.

# The Negativity Bias



Your brain has one overarching objective that it's always focused on:

**KEEPING YOU ALIVE.**

Your brain is scanning for danger every minute you are awake. This is a good thing from a survival standpoint and was very helpful in the early years of human existence, when threats to our physical safety were common.

In today's modern world, we usually do not face a threat to our physical safety daily, but our brains have not evolved enough to understand this. Our brains keep scanning for threats and paying more attention to the bad than the good because it's the bad stuff we need to watch out for if we want to stay alive.

By focusing on the bad, the negativity bias helps us find threats and solve problems. We are generally good at learning from our mistakes and applying a lesson learned in one situation to a new situation (like if I touch a hot stove and I burn my hand, I will learn to be careful around all hot objects).

So, what's the problem? There are a few. First, your brain can't tell the difference between a physical threat and an emotional threat. This means it is going to respond the same way to your boss reprimanding you as it would if you were being mugged. All the brain understands is **I AM UNDER THREAT.**

Next, your brain wants to believe *you* are in control of the problem. Ambiguity and non-control are terrifying to a brain who is just trying to keep you alive. This means when the brain can't figure out what's going on or how to solve the problem, it decides the problem is YOU. By blaming you, the brain feels a sense of control. Basically, your brain says, "If your boss is upset with you, it must be your fault. So just figure out what's wrong with you and fix it so we can be safe again."

This is where the inner critic is born. It wants to help us avoid threats and solve problems, but it just makes us self-critical and self-blaming. It's the result of our brains evolving slower than our environment, and when we understand this, we can use the power of our thinking mind to shift out of primitive brain responses.

The big myth we humans believe is that we need our inner critic to motivate us, to keep us from being lazy good-for-nothings who never amount to anything. This belief can come from experiences when we are hard on ourselves as “motivation” and then something gets accomplished, so we falsely attribute the self-criticism to the success. The truth is, we often succeed despite our self-criticism, not because of it.

What researchers know about human learning is that we learn best when we are relaxed, when we feel safe, and when we are kindly encouraged. Think about a time when you learned a new skill. Remember the teachers and mentors you’ve had in your life who made the biggest impact on you. It’s always the people who taught us with patience and love who we remember fondly for the rest of our lives. The teachers, bosses, and mentors who believe in us and encourage us when we are insecure and self-doubting help us become the best versions of ourselves.

Even though we usually apply this logic when we are teaching and guiding someone else, our negativity bias gets in the way of us applying the same concept to ourselves. We must stay aware of this bias and intentionally reject it when our inner critic shows up. Let’s discover how.



Examples of Negative Beliefs:	
I am defective	I am a failure
I am bad	I must be perfect
I am inadequate/worthless	I am not lovable
I am not good enough	I am stupid/insignificant
I should have known better	I am a disappointment
I cannot trust myself/anyone	I should have done something
I cannot protect myself	I did something wrong
It's not ok to show emotion	I can't stand up for myself
I am weak/powerless	I am not in control/trapped

None of us are born with an inner critic. We develop negative beliefs about ourselves based on our negative experiences, often childhood experiences when the brain isn't developed enough to understand complex situations. Often, we can identify the negative voice in our head as belonging to someone else; a critical parent, bullies at school, or an overly strict teacher/coach.

Other times, when we don't have loving adults around to help us understand the situation, our child brains will resort back to the primitive negativity bias and make an inaccurate assumption about how we caused the problems in our lives (i.e., My parents are getting divorced because I'm bad, my older sibling gets better grades because I'm stupid, etc.).

Exercise: Consider the messages that were born from your difficult early life experiences. How do they show up in your behavior/coping/relationships/self-talk today?

Ask yourself, "Whose voice is that?" or "How did I develop that idea?"

# *Challenge Your Inner Critic With Neuroscience!*

The more you engage certain mental states, the more consolidated those states become, ultimately forming your neural traits. What does that mean? It means **your mind builds your brain**. So, when you continue to engage your negative self-talk, you get better and better at it.

Your thoughts teach your brain how to be mean to itself and then your brain gets *really* good at it, which is bad news for you. The good news, is you can use the power of your mind to teach your brain to be kind, loving and compassionate towards itself too.

This is where the process of neuroplasticity comes into play. Neuroplasticity is the ability of the brain to form and reorganize synaptic connections, especially in response to learning or experience. Our brains maintain the ability to do this for our entire lives, so the idea that you can't teach an old dog new tricks is false! We can always learn or unlearn our thinking habits if we practice (just like we must practice anything to get good at it).

There are two types of neuroplasticity. Experience-Dependent is when the brain makes new connections based on what happens in our lives through our experiences. This can be considered natural learning.

Self-Directed neuroplasticity is when we intentionally engage in practices that encourage new connections in the brain. This is what we will focus on next.

Those of us who engage in frequent self-deprecating dialogue have strengthened certain parts of our brains while letting other, more useful parts atrophy. For example, chronic worry and self-criticism can produce a large amygdala, which is an anxiety/danger center of the brain. This kind of thinking can also create a smaller hippocampus, which is where we store our positive memories. Remember, the negativity bias is naturally going to cause your brain to pay more attention to the bad than the good, so we must teach our brains that it is both acceptable and preferable to spend more time focusing on the good.

That's where self-directed neuroplasticity comes in. These are the daily practices we can engage in to strengthen those atrophied parts of our brain that produce happiness, gratitude and self-love.

Engaging in positive self-directed neuroplasticity takes work! Think about the last time you had a bad day. Was it really an entirely awful day? Maybe, but often, a "bad day" is really a bad meeting or a difficult phone call, maybe a challenging hour or two, or sometimes just a challenging 10-15 minutes. But our pesky negativity bias makes us believe it was 24 hours of hot, steaming garbage. When we have that rough meeting or bad phone call, it can overshadow all the good or neutral moments, which comprise most of our lives.

When my kids were young, instead of asking them how school was, I used to ask them to tell me one good thing that happened that day. No matter what, they had to find one moment. Sometimes it was just that they liked their lunch or went to the computer lab, but no matter how upset they were about their day, I insisted they look for and acknowledge the good.

As you reflect on your day, take a moment to acknowledge the good, to notice the things that could have gone wrong but didn't, like not getting a flat tire, not getting fired, not having the AC go out in the middle of July. Think of all the good things that continue to be true in your life like access to running water in your home, food in your fridge, people who continue to be your friends, the ongoing health and general wellness of you and the people you love.

Instead of thinking about what could go wrong, think of what could go right, and make a conscious decision to find positive meaning in your negative experiences. Your perspective on something, or the way you remember it, becomes more important to your brain than the actual facts. So, you want to maintain control over your perspective and how you consolidate your memories to maintain more inner peace around your difficult experiences.

This is how you use self-directed neuroplasticity to your advantage! For more on this, you can read one of my all-time favorite books, *Hardwiring Happiness*, by Rick Hanson.



## **Exercise: Taking in the Good.**

Here is an example from Dr. Hanson's book. To improve your brain's ability to notice the good, you must practice taking in the good moments that happen.

First you notice or decide to create a good moment. Then you can notice how it makes you feel. Ask yourself, how is this experience relevant to me? How is it good for me?

Find a place in your body to hold the emotional state. If something happens that makes you feel valued or peaceful, where in your body can you store it so you can access it later? Take several moments to absorb the good feeling. Tell yourself, "This is important. Remember what this feels like."



# Self-Love Through Self-Compassion

**Self-compassion is the antidote to our self-love barriers.**

Simply put, self-compassion is extending compassion to yourself in instances of perceived inadequacy, failure or general suffering. It entails self-kindness, that is, being warm and loving towards yourself when encountering pain and personal shortcomings. Self-compassion does not allow us to ignore our pain or further hurt ourselves with self-criticism.

In fact, I see self-compassion as the antithesis of self-criticism, because when you practice it, you are talking to yourself the same way you would talk to a loved one experiencing pain. It mandates that we must speak to ourselves the way we speak to others when they are struggling, with empathy, tenderness, support, and love.

To read more about self-compassion, Dr. Kristen Neff is the leading expert on self-compassion research and her book, *Self-Compassion: The Proven Power of Being Kind to Yourself* is a powerful read.

**Both self-criticism and self-compassion are systems designed to keep us safe.**

Self-Criticism is created in the amygdala, which releases the stress hormone cortisol and adrenaline to activate our fight-or-flight response. It prepares us for threat, but the threat is actually us, attacking ourselves.

Self-compassion utilizes our more evolved mammalian brain. Because it involves a more advanced part of the brain, it isn't as instinctual as our reptilian brain responses. However, self-compassion is far more effective than self-criticism, which is why we need to train ourselves to use it.

Humans are highly sensitive to physical touch, so you can start your self-compassion practice by placing your hand on your heart, giving yourself a neck massage, or giving yourself a butterfly hug when you're feeling upset.

# Exercise: Engage Your Inner Critic with Compassion

- Write down your self-deprecating thoughts.
- Redirect with a kind, compassionate counterbalancing thought.
- Engage in a reality check: Is this thought always true? Does it make me feel good? Does it help me reach my goals?
- Talk to yourself the way you would talk to a loved one in your position.

## • Here is an example:

- “I am a failure.”
- ‘I’ve had many successes in my life’ (name a few).
- Reality check: Telling myself I’m a failure because this thing didn’t work out for me is not helpful to my personal growth or my mental health. Moreover, it’s objectively not true based on other successes I’ve had.
- This really sucks. It’s okay to be disappointed. Anyone in my shoes would be upset right now. I’m going to let myself have a good cry and take a few days to recover and then I am going to figure out what to do next. I will not let this experience break me because I am bigger than this.

# *Self-Compassion Training*

Dr. David Hamilton, author of *I Heart Me*, offers four self compassion strategies. Like any new skill, it takes work, training and consistency. If you are in the habit of being self-critical, being self-compassionate is going to feel wrong at first. Just like learning a new language, you might be bad at it in the beginning and your inner critic will tell you it's stupid and pointless. In anticipation of your inner critic chiming in, be prepared to respond with, "OK Inner Critic, but you haven't been very helpful either so I'm going to try something different!"

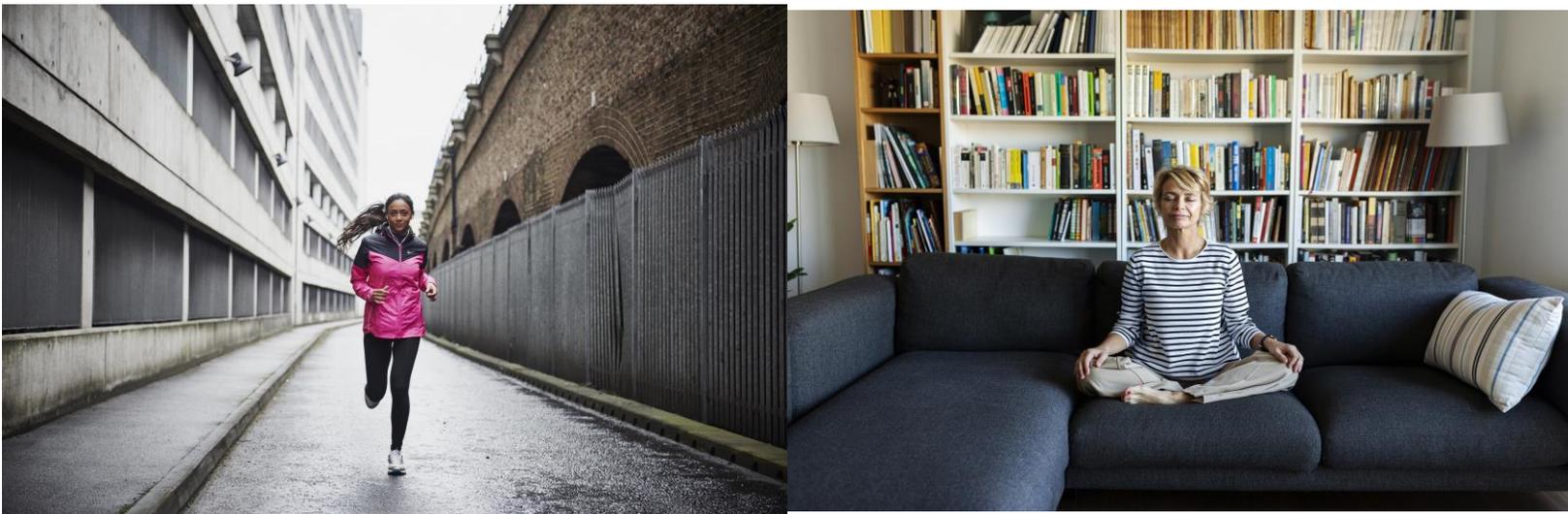
1. Swap a self-defeating thought for a gentle one. You can make a list of times you coped with a challenge well or times you have shown courage. Make a list of your happiest, most self-loving moments. Then, when you are being hard on yourself, read your lists and choose an item from the list to visualize or repeat while doing some deep breathing.
2. Loving Kindness Meditation: Place your hand on heart and repeat to yourself, "May I be filled with loving-kindness. May I be well, peaceful and at ease, May I be happy and free of suffering." You can use words that are more meaningful for you or find a recorded version online to listen to and follow along.
3. Listen to your inner Buddha: What does the wisest part of you want you to know right now? It could be an older version of you sending a loving message to help you get through this struggle. This is a nice journaling exercise.
4. Take on a compassionate body posture. Maybe place your open palms on your knees, take your hands to your heart, or give yourself a hug. Hold for two minutes and breathe deeply and slowly, allowing your body to send a message up to your brain instead of the other way around.

# Self-Compassion and the Mind/Body Connection

## The Vagus Nerve

This is the longest cranial nerve, stretching from the top of the brain stem throughout the body. It interacts with the heart, lungs, stomach, and other vital organs. It's part of a circuit that links the neck, heart, lungs, and abdomen to the brain.

The vagus nerve has several different functions. From a mental health perspective, having good “vagal tone” helps humans regulate their nervous system to control the physical sensations related to stress.



## Other Important Functions of The Vagus Nerve

1. Communication between the brain and the gut
2. Relaxation through deep breathing
3. Reducing inflammation
4. Lowering heart rate and blood pressure
5. Fear management



# Compassion and the Vagus Nerve Work Together

- People who are high in compassion usually have high vagal tone. The vagus nerve is given a lot to do, but when it is healthy, it keeps inflammation in the body low. Inflammation is a primary cause of chronic pain. The stronger your vagus response or vagal tone, the stronger your body is at regulating blood glucose levels, reducing the likelihood of diabetes, stroke and cardiovascular disease.
- Studies show how self-compassion meditations can reduce pain for chronic pain sufferers.
- In one study, 43 chronic back-pain sufferers participated either in an 8-week course in the loving-kindness meditation or standard care for their back pain. Meditators had significantly less pain after 8 weeks than those who received standard back pain care.
- Another study showed that those with chronic back pain who engaged in compassion toward others in a “Patient to Peer” program, significantly reduced their own pain.

# How Are Distressing Emotions Good For Us?

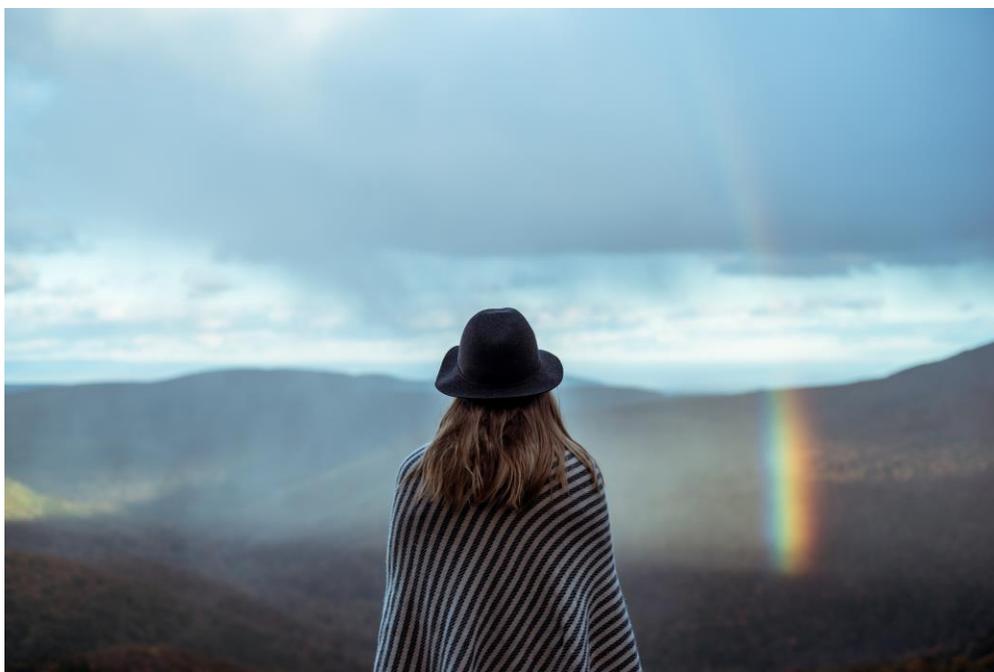
While many people mistakenly assume emotions are unnecessary or weak, there *is* a biological purpose to our unpleasant emotions. Painful emotions give us messages necessary for survival and safety. They tell us when something isn't good for us, so we can avoid it.

Think about a friendship or romantic relationship that brought you unhappiness. The distress you felt helped you get out of a bad relationship and will help you stay out of relationships like that in the future. Distressing emotions are our helpers. When we understand their purpose, we can have gratitude for them and learn the lessons they are trying to teach us.



Painful Emotions = Survival

1. Embrace your painful emotions to take in the survival message.
2. Let go of how it “should” be and accept how it is.
3. Trust that your emotions are part of the healing journey.



Starting today, you can use the power of your mind to change your brain for the better. You can change your internal response to your critical thoughts. You can change your response to your painful emotions.

Sadness exists so we will seek support and care from others, anger exists so we can defend ourselves to maintain connection or to keep those we love safe to preserve that connection. All emotions serve a purpose.

**Self-Compassion Exercise for Your Body:** Instead of panicking when you feel a physical symptom of distress, try gratitude. For example:

“Thank you pounding heart for trying to keep me safe.”

“Thank you aching legs for working so hard to keep me moving.”

“Thank you, headache, for letting me know I need to take a break and focus on something else for a while.”

How are you fighting with your body’s natural stress responses? How can you begin joining with and loving your body instead?

# The Importance of Acceptance and Non-Judgment

The term radical acceptance often refers to accepting the reality of a situation. We can also apply this concept to our emotions.

Nonacceptance of reality causes pain and suffering. Likewise, nonacceptance of our emotions only increases the distress of those emotions.

When you experience uncomfortable emotions, try not to get frustrated with yourself or push the emotions away. Instead, be with them. If you try to quickly jump out of them, you could miss the opportunity to learn from them and heal. Remember, resistance increases suffering.

When you trust your emotions, you can stop judging them. Instead of noticing an unpleasant emotion and chastising yourself for it, simply observe it without judgment. You want to avoid any unhelpful resistance that will only increase your discomfort. We can apply the same logic to the inner critic. Getting frustrated and angry at yourself every time you notice your critical thoughts only increases your distress. Instead, stay curious and ask yourself, “Is this helpful? Am I being effective right now?”

You might choose to say something like, “I’m being really hard on myself right now. I’m feeling so insecure and unsure of myself right now.” Notice your thoughts in a caring, loving way. To be a friend to yourself, you must not dismiss your feelings. It’s like saying, “Your feelings are invalid! Stop feeling them!” You wouldn’t say that to a friend. Don’t say it to yourself.

# Change Your Relationship With Your Inner Critic

The truth is, it's unlikely you will get rid of your inner critic completely. Instead, you must learn to live in relation to it and respond to it differently. When you respond to it with intention, you lessen its power over you and strengthen your relationship to your wisest, kindest self. When your inner critic arrives, don't give it power by assuming its words are true. Just notice, "My inner critic is here." Notice that it is hurtful, unkind, and shaming (even if some of what it says is factually true – like if you made a mistake). When you accept the words of the inner critic you can succumb to negative emotional states and get stuck. You need to stay separate from that voice.

You must also stay separate from your self-compassion so you don't drown in it. We don't want to get stuck forever saying, "This was so awful, it shouldn't have happened, it was unfair, and it ruined my life!" If you drown in empathy for another, you can't help them. If you came upon a car accident, you wouldn't offer compassion and empathy alone to the injured driver. You need to have both compassion and wisdom to call 911 and get them the help they need. You need to be able to do that for yourself as well. We call that "Wise Mind" – being connected to both your logic and your emotions, but not being over-run by either.

Staying connected to your wisest self helps you not jump into the self-critical, "I should have outgrown this" or "I should know better by now" or "That was so long ago, how am I not over this" talk. Contrary to popular belief, time does not heal all wounds. Time and INTENTION can. But intention requires knowledge, compassion, and practice, which also take time to build. Be patient with yourself.