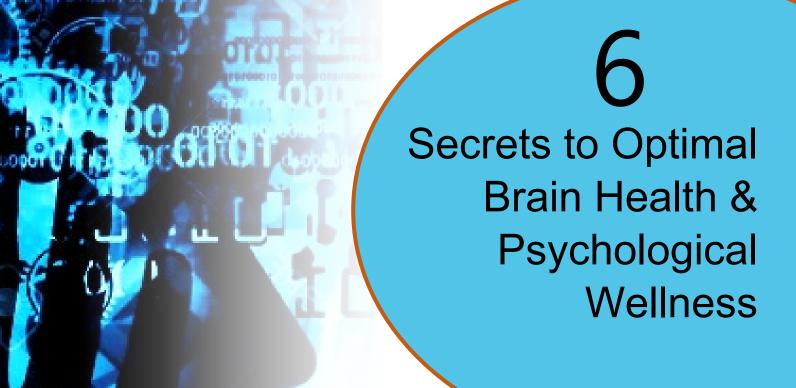
Practical NeuroWisdom

Memory, Trauma & The Brain



Mark Waldman

Memory, Trauma & the Brain

6 Secrets to Optimal Brain Health & Psychological Wellness

Mark Waldman



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Contents

Introduction	4
There is No Past or Future; Only Now!	6
The Neuroscience of NeuroCoaching	9
Most of Our Memories Are Products of Our Imagination	13
Body, Mind or Spirit	18
Summarizing the Neuroscience of Remembering	20
The Value of Forgetting and the Lure of Reinvention	23
A Final Word	25
About the Author	26
The Trauma-Centered NeuroCoaching Program	27

Introduction

Our Beliefs are the Most Stable Inaccurate Memories We Have

What if I were to tell you that nearly everything you think you know about the brain is fundamentally wrong? For example, most people believe that your amygdala is the fear button of your brain. It's not! It's part of your learning center, designed to pay attention to anything that is potentially valuable for your happiness and health.

And what if I were to tell you that nearly everything we've been taught about memory, emotions, and psychological health is now considered outdated and irrelevant? Most of us don't even realize that the popular books and public speakers we listen to are spreading more pseudoscience than fact, and that we are engaging in healing practices that are based on misunderstood neuroscientific principles. Examples abound: Neuroscientists have known for decades that memories cannot be stored in the body, and that the memories we have about ourselves are unstable, constantly changing every time we think about them. And what do you think our most inflexible memories might be? Our deepest and most cherished beliefs, especially those we hold about religion, society, psychology and ourselves. Recent neuroscientific research shows that these permanent memories are mostly false, filled with biases, prejudices, misconceptions, and fantasies.

Exercise

Take a moment, close your eyes, and deeply relax. Think about your deepest beliefs about yourself, about society, about the world, and about love. Write them down on a sheet of paper and think about them. How do they make you feel?

Now pay close attention to your response to this question: "If someone told you they were false, how would you react?" Now imagine that you discovered those beliefs were illusions created in the imagination center of your brain (they are!). Would you be able to change them or let them go? Most people would not be willing to do so, but if you did, the experience could literally be enlightening!

Now take moment and write down a list of your deepest beliefs you have about memories, emotions, trauma, and the brain, knowing that most of them are probably false.

Up until a few months ago (November 15th, 2022 to be exact) even I did not realize how many misconceptions I had about memories, trauma, and emotional distress. Personally, I was enthralled to discover that recollections of past experiences occur in the huge Imagination/Default Network where they are constantly being revised to solve problems arising in the present moment. But if these traces of "remembrances" are not recalled, they immediately begin to decay!

Let me share with you some of the most important discoveries that have emerged in the last few years from the new field of network neuroscience. It has the power to transform the world of psychology and education, and I have used these discoveries to create a brand-new 12-week course that will teach you the principles of Trauma-Centered NeuroCoaching. It's more effective than the current strategies used to work with emotional distress and PTSD. You'll learn how easy it is to build long-term emotional resilience and enhance post-traumatic growth, and it's easy to teach to your clients, friends, and students.

Let's begin by addressing the one of the most difficult neuromyths to dispel...



There Is No Past or Future; Only Now!

Every morning, when we wake up, we literarily rewrite ourselves. New futures are predicted, and old memories are changed by new experiences. There is no past in the brain, only the present moment. Without us being aware of it, the most creative part of the brain – the Default Network – creates an imaginary past to help us predict an imaginary future where our dreams could be turned into reality.

But no one knew, for certain, that our memories are also part of that giant imagination network. It was Sigmund Freud who, over a hundred years ago, convinced us that our memories are real, and up until 1991 many neuroscientists believed that they were stable entities that could be stored away forever. They are not! As Nobel Laureate Eric Kandel states, "The recall of memory is a creative process [filled] with subtractions, additions, elaborations, and distortions."

If we remind ourselves, every morning when we awake, that we are constantly recreating our reality through our imagination, we can gain access to a new set of tools that allows us to deliberately forget unwanted memories and disrupt intrusive thoughts and feelings in a matter of minutes. Network Neuroscience (which you will learn about in the Trauma-Centered NeuroCoaching Course) has documented how easy it can be to free ourselves from worries, fears, and doubts – literally in a few minutes, without the need to revisit the past – by mastering

the art of "meta-awareness." When we fully immerse ourselves in the experience of the moment and simply observe how our thoughts and feelings (positive and negative ones) are constantly streaming through our imagination, all of our emotional struggles subside.

Exercise

Yawn and stretch, close your eyes, and immerse yourself in the experience of being in the present moment. Notice the objects around you: Their shapes and colors and the shadows they cast. Keeping your eyes closed, turn your attention to the sounds around you that may have never noticed before. Yawn again (it reduces neurological stress, as I'll explain in my course) and become "aware" aware of how rapid partial thoughts and feelings are constantly flowing through your consciousness. Just watch them and you'll see they immediately fade away – even the negative ones. And then notice how a new stream of consciousness floats by.

By maintaining a relaxed state of "present-moment awareness," where there is no past or present, only "Now," all of your anxiety will melt away, depression will disappear, and worries will fade away. With practice, you'll begin to see how all of your thoughts and feelings are created by your imagination. They are not real, just part of the creative problem-solving processes of the Default Network in your brain.

Now savor the serenity and calmness that briefly emerges, and then throw yourself back into your work, noticing how your motivation and confidence has increased. It will last for about an hour, but you'll only need to do the previous steps for 60 seconds or less to decrease your stress and enhance your performance and productivity.

You have just experienced the neuroscientific definition of psychological health! Throughout this course I will experientially guide you through many more meta-awareness exercises that have never been taught before. It's simpler and more powerful than the mindfulness, relaxation, and mediation exercises you are familiar with, and they are fully supported by the brain scan studies we've conducted over the past two decades.

In order to balance the key networks in your brain that regulate your emotional health, you need to practice meta-awareness once every hour or two throughout the day. The first step is to spend 60 seconds nonjudgmentally observing the mind-wandering process of your brain, noticing how different thoughts and feelings are constantly flowing through your mind.

Then you need to spend another 60 seconds becoming fully aware of present-moment experiences: What you are seeing, what you are hearing, and the body sensations you are having.

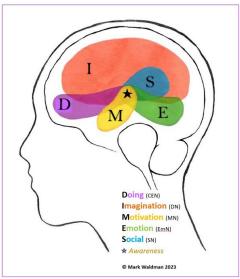
As you practice these two strategies, along with the other exercises described in my Trauma-Centered NeuroCoach course, you will be in a state of "Relaxed Mindful Awareness," which is the neurological definition of optimal psychological health.



The Neuroscience of NeuroCoaching

Here is a brief summary of some of the mind-blowing discoveries that form the foundation of network neuroscience and Trauma-Centered NeuroCoaching:

- 1. Neuroscientists no longer look at the structure and parts of the brain like the frontal lobes. Instead, we are looking at "functional connectivity", showing how axons (the brain's white matter) communicate with other networks to help us achieve desired goals.
- 2. We can use specific meta-awareness exercises (you'll master them in my course) to consciously influence three key brain networks (shown in the diagram here): The Imagination/Default Network (medial prefrontal cortex), the Central Executive Network (dorsolateral prefrontal cortex) which orchestrates what we are consciously doing in the present moment, and the Awareness/ Salience Network (anterior cingulate & insula) which is responsible for emotional regulation and achieving an optimal balance between the Default and Executive Networks.



3. Nearly every cognitive, emotional, and psychological problem is caused by excessive activity in the Default Network.

Through a combination of mindful yawning (a thermoregulatory mechanism), and present-moment awareness which stimulates the Salience Network, Default activity is reduced, which stops you from ruminating on negative thoughts and feelings.

- 4. Most forms of therapy and coaching involve metacognition strategies thinking about how you are thinking, and then changing the way you think actually increase activity in the Default Network, causing as many problems as it creates. This explains why current strategies are only slightly effective, barely beating the placebo effect. But the newest research shows that the meta-awareness strategies I've developed show a moderate to robust improvement (terms you rarely see in psychology studies) in emotional and cognitive health.
- 5. Two decades of neuroscience research has proven that there is no such thing as a traumatic memory, just traces of past painful experiences that are constantly being rewritten by new experiences (your Learning Network) and revised by the creative problem-solving processes of the Default Network. If your autobiographical memories, and the feelings associated with them, are not revised or consciously recalled, they decay and disappear.
- 6. The newest research in Network Neuroscience shows that consciously recalling and talking about past painful experiences actually strengthens them, making them feel more real and more difficult to get rid of! Strategies involving "active forgetting" turn out to be far more effective than many current approaches to post-traumatic stress. But when unwanted thoughts, feelings, and memory intrude and interfere with work, sleep, and relationships (the clinical definition of PTSD) it is essential to follow the unique Trauma-Centered NeuroCoaching protocol that I'll walk you through in our course.
- 7. When you pair up with a trusted friend, and both enter into a state of "Relaxed Mindful Awareness" a unique intuitive dialogue spontaneously unfolds, eliminating any propensity to pulled into the emotional reactions to past painful experiences. By sharing only a few minutes of a disturbing "remembrance", and then returning to "present-moment awareness" the emotional reactivity is extinguished.

An entire module in my course is devoted to teaching you the principles and strategies of Compassionate Communication, which has been taught to university students, therapists, coaches, and corporate executives throughout the world. You'll be given all of my interactive slides that you can share with others and teach the principles of Trauma-Centered NeuroCoaching. That is my special gift for you and to help educate others about Network Neuroscience and these powerful new strategies

to achieve optimal psychological health.

8. Did you know that your intuition – a key function of your Salience Network – can provide you with insights that are more profound than the best advice anyone else can give you? You can easily stimulate the Salience Network by focusing on a deep inner value.

To summarize: Network Neuroscience provides a simpler way to understand how your brain works and how you can improve its functioning by stimulating the Salience network through the exercises provided in this Trauma-Centered NeuroCoaching course. These "Relaxed Mindful Awareness" strategies will slow down excessive activity in the Imagination/Default Network which is the cause for most of our psychological problems.

And when it comes to working with post-traumatic stress, the newest discoveries in Network Neuroscience show that we do not need to delve deeply into past experiences. Instead, all we need to do is to describe, to a trusted friend or NeuroCoach using the Compassionate Communication strategies in this course, how our creative imagination can be used to revise and extinguish unwanted memory traces that are causing emotional distress. Then, we can use our intuition and inner values to rapidly find insights that bring more purpose and meaning into our life.

Exercise

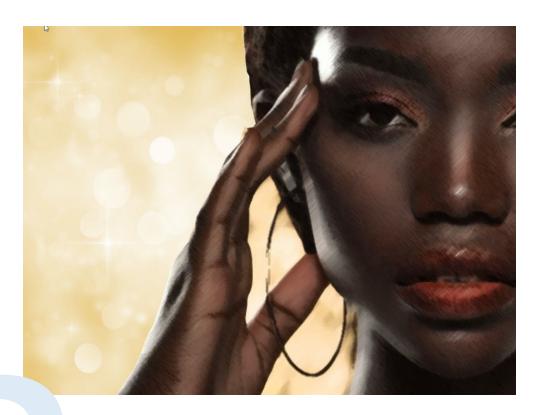
Do a mindful yawn and stretch, and gently run your fingers across your arms and face, or give yourself a warm nurturing hug – anything that feels physically pleasurable – and then maintain a state of Relaxed Mindful Awareness for the next 60 seconds, simply becoming aware of your thoughts and feelings, and what you are noticing and experiencing in this present moment.

Now, ask your intuition to come up with a word that captures one of your deepest inner values and find a single word that gives you a sense of fullness (for example: -peace, calm, serenity, joy, God, or any word or sound that holds deep meaning for you).

Now, repeat it, slowly, 5-10 times. Finally ask your intuition for an insight – something you found intriguing and potentially useful in anything you've read in this eBook – and write it down. Do it again, and write down an

insight or discovery that you've never thought of before (this is where your intuitive Salience Network can tap into the creative imagination of your Default Network).

In the future, use this values-&-intuition strategy to seek out solutions to any immediate problem that arises. When working with emotionally distressing issues, returning frequently to your inner value will keep you calm and steady, and it will keep you grounded whenever you are engaging in an important or difficult conversation with anyone.



Most of Our Memories Are Products of Our Imagination

Memories aren't really "things" that are stored in any specific area of the brain, nor can they be stored in the body like many people believe. In 1991, a series of remarkable experiments demonstrated that nearly all of our personal, historical, and emotional "remembrances" are continually being altered or extinguished by the new experiences we have every day.

Today, neuroscientists use the term "memory" as a metaphor for how our brain encodes pieces of potentially useful information that can help us carry out all of our daily tasks. As I mentioned earlier, memory traces do not accurately reflect the past, nor do they need to, and each time they are used by the Default Network, they are revised and reconstructed into different traces that might be useful for a future task.

So, what, exactly, is a memory, and where is it formed? It begins the moment we have an emotional reaction (positive or negative) to what is happening to us in the world. Then, our amygdala (which is not the fear button in the brain), along with other surrounding structures, evaluates the importance of the experience. If the emotional impact is strong and different from previous experiences, the hippocampus engages in a learning process and releases dopamine that is used to form a memory trace.

That trace of learned information is encoded into specific protein molecules that circulate in the spaces (the synapses) between the tips of a neuron's axon and the dendrites of other neurons that will receive the incoming information and then pass it on to other synaptic clefts.

The amygdala, as many people believe, is *not* the fear button in your brain. That notion grew out of the numerous brain scan studies that were studying how Pavlovian fear conditioning involved different structures of the brain. One third of the amygdala is devoted to recognizing and responding to actual threats in the world (the electrical shocks used in many studies).

But the amygdala is also involved in recognizing and responding to pleasure. Its main role is to help in the learning processes of the brain and to identify which emotional experiences are important to pay attention to.

Many pop-psychology self-help books helped to create the neuromyth that the amygdala is the fear center of the brain. Most of our fears are actually generated in the medial prefrontal cortex of the Imagination/Default Network and have little to do with what is actually happening to us in the present moment.

There can be as many as 10,000 of these "communication terminals" in a single neuron, and this is where our fluid unstable memory traces are held, waiting to be used by other parts of the brain to make decisions and carry out specific tasks in an efficient way. The memory traces that shape our emotional behaviors, our autobiographical sense of self, and most of our social interactions become an active part of the huge imagination center of the Default Network, which uses them to predict what may or may not happen in the future.

First, the protein molecules (our "remembrances") are activated, and then they are reconsolidated into a slightly different pattern, awaiting to be recalled for a future decision or action. As the famous neuroscientist Joseph LeDoux has often said, your memory is only as accurate as the last time you recalled it.

Most of our autobiographical memories are unstable and can be easily revised and extinguished, but other memory traces are more stable, like habitual movements and motor skills that we constantly repeat. But even those learned behaviors can become inefficient or even harmful over time. For example, many people have developed poor postures that, over time, can generate physical pain. But we can easily destabilize those memory traces by learning how to move with greater awareness. We can, for example, practice mindful walking, moving super-slowly as we take a single step. This allows the motor cortex and cerebellum to "overwrite" inefficient movement memories and to replace them with new ones that allow us to move pain-free.

Our most stable memories involve the places and objects we encounter in our daily lives, along with spatial memories of distance and locations. This is what allows us to remember the faces of people we regularly see. Those memory traces are located in the visual cortex, and there is little need to disrupt them. However, over time, they too can begin to decay.

These synaptic memory traces comprise the majority of our thoughts and feelings that we are having in the present moment. If you think about it – and if you've ever practiced the meta-awareness exercise of observing how your mind wanders – you'll quickly see that it is impossible to recall the same thought or feeling or memory in exactly the same way. They are changing all the time, and if you try to stop it, you'll interfere with the natural processes of the brain. If you've ever gone back to a place you lived in or visited a long time ago.

Exercise

Try this "memory" experiment right now: If you've ever gone back to a place you lived in or visited a long time ago, you may have been surprised by how different it looked compared to your remembrances. I had the clear recollection of playing in this giant forest of bamboo in the backyard of the house I lived in when I was five. I visited it 40 years later, only to discover that the entire backyard was a tiny patch of dirt. The bamboo was still there, but it covered an area of about 3x5 feet! Not quite the forest I remember. Close your eyes and recall a beautiful place you once visited.

Try to remember as many details as possible. Now, open your eyes, yawn and stretch and focus on the space you are presently in for about 30 seconds. Close your eyes and try to recall the same image. For most people, it's quite different. Your mind may have chosen to look at the waterfall or forest from a different angle. The colors will be different, and I'm willing to bet that tomorrow, when you attempt to recall the same space, it might look very different. Most of the time we're unaware of how our Default Network selects only a few pieces of the actual scenery, filling in the rest with new snippets of imagination.

Emotional experiences are even more unstable. Try to remember the last time you kissed or held your current partner (or the last time you hugged a friend). Now go and actually kiss or hug that person. It will be a profoundly different experience, largely because you have brought "present-moment awareness" into consciousness. As far as your brain is concerned, "now" is the only experience it records, filled with pieces constructed from an imaginary past and future.

When memory traces are not used or recalled, they decay and the neurochemical activity within those synaptic spaces is extinguished, and as I mentioned earlier, current research also emphasizes the importance of deliberately forgetting the past. This calls into question the therapeutic practice of recalling old traumas, a practice which will actually strengthen and stabilize the memory traces, imaginary or real. Worrying is a perfect example of this neurological process: The more you focus your attention on negative thoughts and feelings, the more anxious you become. You are literally turning your imagination into a false reality.

PTSD is different. Violence and abuse, especially during childhood, can form very strong and very accurate memories, powerful enough to damage the structure of the synapses in a way that makes it more difficult to eradicate memory traces formed by chronic anxiety and continued abuse or neglect.

Strong beliefs also appear to become stable and inflexible, forming biases that can make us intolerant toward others who hold different beliefs. even when we encounter situations that challenge the reality of those thoughts. Ruminating on negative thoughts and experiences also strengthen the memory traces associated with them, and emotionally traumatic experiences can become so stable that they can permanently change both the structure and functioning of the brain, which is why some symptoms of post-traumatic stress can be so hard to eradicate.

In summary: Memories are not recordings of past experiences. They are processes that take place in synaptic clefts, and they are continually changed by new experiences and learned information. There are gaps in all of our recollections, and those gaps are filled with real and imaginary experiences. They influence perception and behavior, and they help to shape the future. Memories don't preserve information; they transform it to help us solve immediate problems and to seek out new experiences that are rewarding and pleasurable. And when dealing with painful memories, we can, as Joseph LeDoux said, "create a competing memory that suppresses the old memory."

This is where the value of spiritual practices come in. They teach us how to savor the wonderful experiences that are happening right now. This awareness of living in the present moment is the fastest and easiest way to regulate our emotions and improve the functioning of key brain networks, which is the neurological definition of optimal psychological health.



Body, Mind or Spirit? 3 Historical Ways to Maintain Psychological Health

In the age of Egyptian Pharaohs physical, mental, and spiritual health resided in all of the body's organs, with the exception of the brain, and during mummification the grey gooey stuff was extracted and thrown away.

In fact, nearly all of the ancient Greek, Roman, and Asian writings had no term for mental illness. Emotional disturbances were created by the heart, not the brain, and madness was a curse that came from the gods or from an imbalanced soul. Throughout Eastern and Western antiquity, demons were mostly responsible for a person's bizarre behavior and thinking.

For Hippocrates, who many consider the father of modern medicine, mental health was tied to physical health. Psychological problems came from the environment and from imbalances in the "humors" of the body. This is the "bottom-up" approach to wellness, a framework that is clearly reflected in most Asian treatments like yoga, acupuncture, and Qigong: treat the spiritual energies of the body (not the mind) through touch or movement, and mental health will be sustained.

Today, many of the alternative coaching and healing therapies (Energy Psychology, EFT, Somatic Experiencing, etc.) embrace the same bottom-up approach by maintaining the false belief that memories and trauma are also stored in the body via the autonomic nervous system.

The notion that psychological illness resided solely in the brain and mind did not gain prominence until the late 1800s, largely based on Janet's, Charcot's, and Freud's belief that severe emotional suffering was caused by repressed memories of childhood abuse. This was one of the first top-down models (the disturbed mind affects the body and behavior) that laid the foundation for contemporary psychology and therapy.

With the neuroscientific discoveries of the past twenty years, nearly all forms of emotional health are tied to top-down processes of our Imagination/Default Network and our Awareness/Salience Network. On the other hand, pharmaceutical drugs use a bottom-up approach: Change the functioning of brain networks through the release or inhibition of neurochemicals, and psychological health can be restored.

Here's what I find most fascinating: Very few philosophers or psychologists hold the belief that the experience of "being in the present moment" holds the key to happiness and health. Pyrrha & Epicurus (341-270 BC) referred to mental wellness as the absence of a suffering soul: Free from worry, having no negative thoughts about the past, nor fears about the future. This was achieved, they said, by living fully in the present moment.

The Roman Emperor Marcus Aurelius, who reigned between 161-180 AC, stated a similar ethic:

"Objective judgement, now, at this very moment.

Unselfish action, now, at this very moment. Willing acceptance – now, at this very moment – of all external events. That's all you need [to be happy]."

Not only does this mirror the goal of mindfulness-based practices, it's now supported by the most recent developments in Network Neuroscience: Living in the present moment and being nonjudgmentally aware of one's feelings and thoughts is all that is needed to balance the key networks in your brain that regulate our emotional and cognitive states.

This is the neurological definition of optimal psychological health, and it can be established, literally in just a few minutes by practicing the meta-awareness strategies described in my Trauma-Centered NeuroCoach course.



Summarizing the Neuroscience of Remembering

Before you read further, take a moment, right now, and close your eyes. Use any strategy that deeply relaxes you and brings you into a state of savoring this present moment. Now ask your intuition for three brand-new discoveries or insights that you've gained from reading this eBook, and write them down. Look for something that you can make use, right now, in your life, and write that down as well.

Close your eyes again and go even deeper into a relaxed state of present-moment meta-awareness. Listen to how your intuition — your Salience Network — is constantly guiding you toward valuable experiences. Savor those impressions and find a creative way to bring them into your life — not tomorrow, but today! Remain in a state of Relaxed Mindful Awareness as you "flow" through this brief summary of some of the key elements involved in memory creation, reconstruction, and disintegration.

Memories aren't really "things" that are stored in any specific areas of the brain (and they are never stored in the body like many people believe). The term is used as a metaphor for dozens of different memory processes that produced by experiences we have in the world, and

important pieces of information stimulate an exchange of molecules that are active within the synapses of different parts of your brain.

Memory traces – especially those that shape our autobiographical sense of self and social interactions – are creatively constructed from past emotional experiences. This is part of the brain's learning process, and the learned information is sent from the hippocampus and amygdala to different regions of the brain. Memory traces that help us move our bodies in efficient ways are integrated into the cerebellum, and objects and places become a stable part of our visual cortex.

But most of our memory traces become an active part of the huge imagination center called the Default Network and are used to predict what may or may not happen in the future. If those memory traces are not used, or we consciously choose to forget them, they decay and the neurochemical activity within those synaptic spaces is extinguished. Those memories are not important for the healthy functioning of your brain. But the moment a memory trace is used to carry out a specific task (or is called into consciousness as a recollection or "remembrance"); it is revised, reconstructed, and turned into a new memory trace that may have little to do with the original event.

Even the experiences that we might write into a diary will be interpreted differently by our brain each time we read what we have written in the past. The important "memories" are what we are writing down in the present moment because they reflect the new experiences we have. And whatever emotional state we are in will change the contents of any memory trace that we recall. Memory processes are constantly changing; if they didn't, we wouldn't be able to respond well to any new situation we encounter.

However, there are many exceptions to the instability of memory traces. For example, most of our habitual movements are made up of stable memory traces, but some of those movements can become inefficient over time. Injuries and poor postures can create movement behaviors that continue to generate pain. If, however, we slow down our habitual movements – like walking up and down stairs – and become mindfully aware of the experience of taking a single step, the motor cortex and cerebellum can "overwrite" the old movement memory with a new more efficient one.

Our most stable memories involve the places and objects we encounter in our daily lives, along with spatial memories of distance and locations, and often the faces of people we regularly see. These stable traces are located throughout the visual cortex, and there is little need to disrupt them.

Strong beliefs also appear to become stable and inflexible, even when we encounter situations that challenge the reality of those thoughts. Ruminating on negative thoughts and experiences also strengthen the memory traces associated with them, and emotionally traumatic experiences can become so stable that they can permanently change both the structure and functioning of the brain, which is why some symptoms of post-traumatic stress can be so hard to eradicate.

In summary: Memories are not recordings of past experiences. They are processes that are continually changed by new experiences and learned information. There are gaps in all of our recollections, and those gaps are filled with real and imaginary experiences. They influence perception and behavior, and they help to shape our future actions and goals. Memories don't preserve information; they transform it to help us solve immediate problems. And when dealing with painful memories, we can, as Joseph LeDoux said, "create a competing memory that suppresses the old memory."

Mindfully observing disturbing feelings and thoughts, and then deliberately savoring the positive ones brings us into the present moment where there is no past or future; just the wonderful sense of being here now, with those you love, honor, and trust.



The Value of Forgetting & the Lure of Reinvention

In Kristin Hannah's masterful work, The Nightingale – a story about the women of the French Resistance – she begins her novel with these words:

"Today's young people want to know everything about everyone. They think talking about a problem will solve it. I came from a quieter generation. We understand the value of forgetting, the lure of reinvention."

I come from a different generation, where everyone wants to know everything about the human brain, and the current research turns Hannah's fictional words into fact. Talking about a problem doesn't solve it, and it can do the opposite by strengthening the memory traces that are flowing through the imagination center of our brain. It can make the problem feel more real, often crippling our ability to extinguish the emotional pain associated with the horrible acts of cruelty, abuse, and neglect that descend upon children throughout the world.

The brain is built not to remember, but to learn, and as it seeks out new experiences, past remembrances are forgotten. We literally reinvent ourselves every day as we encounter new problems, embrace new people, and engage in new activities that are pleasurable and rewarding.

And our brain is not built to ruminate on the past, nor does it live in the future. It's built to be curious about what is happening in the present moment, and it's built to be playful with those we trust, with those who nurture and care for us, and especially with those who seek serenity and joy. Is it really that hard to imagine a life filled with meaning, purpose and value, a life in which we savor – with our friends and family – the hundreds of tiny pleasurable experiences that happening every day?

Exercise

Close your eyes, right now, and savor the experience of breathing in and out, and then open your eyes and savor the experience being here, right now, knowing that the past will always fade away as you reinvent yourself for tomorrow.

It's really quite easy to do, and that is what Trauma-Centered NeuroCoaching is all about!

A Final Word

For me, the last few years of doing neuroscience research has been a transformative, and even a mystical experience. In the process I have had to abandon many of my old beliefs about the human brain, trauma and emotional pain, and how we can best achieve serenity, intimacy, and happiness. It turns out that the path to optimal psychological health is much simpler than anyone thought possible. In fact, Network Neuroscience has challenged the very foundation of psychology and coaching, and this is why I created this groundbreaking 12-week self-guided course in Trauma-Centered NeuroCoaching. I hope you'll join me on this path of discovery and enlightenment where:

- You'll learn about the five key brain networks Default, Executive, Salience,
 Motivation, and Emotion that shape every decision we make and every relationship we enter into.
- You'll be given a simple formula on how you can balance these networks using a process we call "Relaxed Mindful Awareness."
- You'll also learn how to optimize your seven core Emotional Networks that control
 your drive to survive and thrive (caring, curiosity, playfulness, grief, lust, rage and
 fear) and how to distinguish these unconscious instinctual responses to the world
 from our conscious feelings which are constructed by our imagination and thoughts.
- You'll discover that most of your psychological problems (anxiety, depression, procrastination, relationship discord, and the inability to stay focused on your work) are mostly caused by excessive neural activity in your Imagination Network, and we'll give you specific exercises to interrupt negative feelings and painful memories.
- You'll discover how essential and easy it is to improve "network functional connectivity" by spending just a few minutes, several times a day, to do deliberate mind-wandering and how to use the intuitive processes of your Salience Network and not your "mind" which is a product of a tiny part of your Executive Network to gain insights and creative solutions for any personal, relationship, or professional problem you are wrestling with.
- You'll learn how to practice "Relaxed Mindful Awareness" and to bring it into a
 "Network Balancing" dialogue that you can do with a client, student, or trusted friend,
 and to bring it into the workplace to instantly lower stress, increase performance, and
 create greater empathy and cooperation with others.

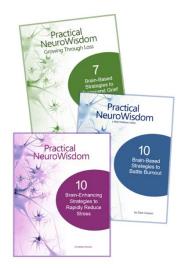
About the Author

Mark Waldman began his coaching career 1987, under the psychoanalytic supervision of Bruno Bettelheim and the Southern California Psychoanalytic Institute. He was actively involved with the Association for Transpersonal Psychology and was the founding editor of the Transpersonal Review. As an Associate Fellow at the University of Pennsylvania's Center for Spirituality and the Mind, Mark and Andrew Newberg used their brain-scan research to develop new ways to improve cognitive and emotional performance. Their national bestseller, How God Changes Your Brain, was chosen by Oprah as one of the "Must Read" books for 2012.



The author of 14 books, Mark's in-depth research has been published in neuroscience and psychology journals throughout the world and his work has been featured in Time Magazine, the Washington Post, the New York Times, Forbes, Entrepreneur, and many others. He has appeared on hundreds of radio and television programs, including PBS and NPR, and his TEDx Talk has been viewed by more than 100,000 people.

He created the world's first NeuroLeadership course that he taught for the Executive MBA program at Loyola Marymount University, and he has traveled throughout the world introducing new brain-enhancing strategies to schools and professional organizations throughout the world including the Los Angeles County Psychological Association, the UCLA Center for Neurobiology of Stress, the Texas Council of Community Centers, Pepperdine School of Psychology, Southern Louisiana University, University of California Irvine, Centers for Spiritual Living and many religious/spiritual groups.



About the Series

The Practical NeuroWisdom series provides brain-based, evidence-based neuroscience to help solve real-world problems and improve lives. It provides proven steps and strategies based on the latest neuroscience.

Check out the entire series at: https://vanburenpublishing.com/practical-neurowisdom

The World's First Brain-Based Course for Removing Emotional Distress...

Trauma-Centered NeuroCoaching

The Principles and Practice With Mark Waldman

This course will challenge some of your deepest beliefs about trauma and what actually makes healing possible. For example, did you know that nearly everything we've been told about memories (especially traumatic ones and Freud's notion of repression) is inaccurate? Understanding how memory processing really works and how it is constantly "rewritten" by the Imagination/Default Network can transform the way we've worked with emotional suffering for the past 100 years!

Complete Details Here



"I've been a supervisor of therapists, psychologists, and spiritual counselors for many decades and I strongly encourage you to enroll Mark Waldman's training program. The techniques you'll learn will greatly help your clients – especially those who are struggling with traumatic experiences – and they will help you to feel deeper satisfaction in your professional life."

- Dr. Neil Schuitevoerder, PhD, MFT, Clinical Psychologist



"Merci! You helped me to develop the necessary skills – and internal peace – to take a new direction in my work life. Having lived through wars growing up in Lebanon, I now have the confidence to help others, especially those who have experienced trauma. Now, as a Certified NeuroCoach, I know I can do a lot to help many people find deeper meaning and passion in life."

- Rima Chatila, Optician, France



"The information that I am learning in the Trauma Centered NeuroCoaching course has been utilized with my clients with amazing breakthroughs and results. I have never attended a class that equipped me from the very first class to implement the protocol with others."

-- Eryn Fryer, MSW

Total Health and Wellness Family Medical Clinic, Tennessee



"I was having panic attacks. One session using Mark Waldman's trauma strategies and they are gone. Now I'm a certified coach helping others. I had this crazy phobia for years. It was debilitating. At one point in my 20's I became agoraphobic and didn't leave my house for a whole year. I got sick of living that way and forced myself to get past it but this crazy fear would rear its ugly head suddenly in different situations. I learned how to push it down and lived with it."

- Marilyn Agee, Tennessee