

Light for the Broken

A NeuroFaith® Guide to Healing Trauma
and Addiction Through Faith and Neuroscience



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Endorsements

for

Light for the Broken

*A NeuroFaith® Guide to Healing Trauma and
Addiction Through Faith and Neuroscience*

Light for the Broken: A NeuroFaith® Guide to Healing Trauma and Addiction Through Faith and Neuroscience is a groundbreaking and deeply insightful work that powerfully bridges the gap between faith and science. Dr. Jeffrey E. Hansen and Pastor Earl Heverly masterfully weave together cutting-edge neuroscience with the timeless truths of faith, providing a comprehensive and compassionate approach to understanding and healing trauma and addiction. This book offers hope and tangible steps for those seeking recovery, while also serving as an invaluable resource for professionals in the field of mental health and addiction treatment. With clarity and heart, NeuroFaith® reminds us that true healing involves not just the body and mind, but also the soul. A must-read for anyone seeking to understand the profound connections between trauma, addiction, and faith-based recovery.

Andrew P. Doan, MPH, MD, PhD

*Adjunct Associate Professor of Surgery, Uniformed Services University
Ophthalmology and Aerospace Medicine*

Dr. Jeff Hansen has been healing members of the military community for decades. For those of us trained to see ourselves as impenetrable, this wealth of resources is a lifeline. Wellness through connection with others and our creator is no matter of blind faith. Jeff and Earl give a solid vector for those of us carrying hidden wounds.

Pete Grossenbach

US Air Force C-17 Pilot

Light for the Broken: A NeuroFaith® Guide to Healing Trauma and Addiction Through Faith and Neuroscience perfectly reconciles the disparate approaches of the medical model, the psychological model and the social learning model of addiction medicine. For years, the medical model has been embraced by researchers and therapists alike. The medical model is too reliant on the treatment of symptoms and lacks focus on “Why.” To poorly quote Viktor Frankl, if we know the “why,” the “how” may become evident. To this end, Dr. Hansen and Pastor Heverly provide a roadmap for a truly holistic approach. Healing is not accomplished by masking symptoms. It requires an understanding of the root cause of the problem. Including Faith in the “How” discussion adds a powerful tool for those struggling with trauma and addiction. This book shows how Spirituality and neuroscience are not at odds but complementary and the best approach to using both for recovery.

Salvatore Bitondo, LICSW, BCD

Chief, Family Advocacy Program

Behavioral Health Service Line

Madigan Army Medical Center, JBLM

Fantastic! This book fulfills a long-held wish of mine for a work that complements the insights I have been able to bring to others through Scripture. Perhaps nowhere is this more impactful than in Romans 12:2, where God reveals His profound process of ‘renewing the mind.’ The book's description of neural pathways wonderfully illustrates how God accomplishes

this transformation, reprogramming the brain to form new paths and bring true renewal.

As someone practiced in presenting spiritual truths, I find it seamless to integrate these with the scientific insights so well-articulated here. For readers engaged in science or clinical practice, this book offers a powerful vision of hope for treating trauma and addiction, pointing toward a profound intersection of science and faith that promises lasting transformation.

In every chapter, scientific truths emerge in a way that resonates deeply, enhancing my understanding of Biblical truths honed over 50 years of Christian ministry. This book has a unique and natural

Harmony that touches the soul and elevates both the scientific and spiritual pursuits.

Best wishes and blessings in your ministry.

Gary E. Thomas, Assistant Pastor (Retired)

Counseling and Discipleship

Calvary Chapel of Olympia

Dr. Jeff Hansen's newest book is perhaps the best he has ever written. It is truly "holistic," in that the material he has presented is comprehensive and quintessential to the reader wishing to understand addiction from every possible perspective.

Light for the Broken: A NeuroFaith® Guide to Healing Trauma and Addiction Through Faith and Neuroscience is a book I wish I had in graduate school when I studied to become an Addiction Counselor. The information it contains covers the Biological, Psychological, and Neurophysiology of those struggling with single isolated addictions, as well as a plethora of other addictions. The book is not isolated to therapeutic information covering substance use alone. Dr. Jeffrey Hansen takes us on a deep dive into process addictions as well, such as

pornography, and helps us understand the stronghold it has on one's mind, body, and soul.

I believe that Dr. Jeff Hansen's book belongs in the halls of every college and university that offers a degree in addiction studies. Perhaps the most creative and profound parts of his book are where faith and Scripture are interwoven into the fabric of scientific and clinical information. His words from the Bible offer undisputed truth and therefore, in the end, may help to bring healing and restoration to those struggling with addiction.

Bravo Dr. Jeff and Earl Heverly for providing such a valuable book to not just the student of addictionology, but to individuals, couples, and families who struggle to find answers to this hugely growing problem which affects us all in myriad ways.

Libby Smith, Ed.D., Ph.D.

Lead Therapist Emeritus, Holdfast Recovery

In Dedication

With deep love and respect, we dedicate this book to all military service members, law enforcement officers, and firefighters who have given so much in the service of others. You are our heroes, and we know that many of you carry unseen wounds—of mind, body, and soul. We honor your incredible sacrifices.

We pray that these pages bring you comfort, healing, and renewed strength as you continue your journey. You are always in our hearts, and we are forever grateful for your courage and dedication.

Light for the Broken

A NeuroFaith® Guide to Healing Trauma and
Addiction Through Faith and Neuroscience

by

Jeffrey E. Hansen, Ph.D.
and Pastor Earl Heverly

NO MEDICAL ADVICE IS GIVEN NOR PROVIDED IN THIS BOOK. SUCH INFORMATION, WHICH MAY BE MEDICAL IN NATURE, IS INFORMATION ONLY FOR THE USE OF LICENSED AND EXPERIENCED MEDICAL PRACTITIONERS. A READER INTERESTED IN MEDICAL ADVICE OR MEDICAL TREATMENT SHOULD CONSULT A MEDICAL PRACTITIONER WITH AN APPROPRIATE SPECIALTY WHO IS PROPERLY LICENSED IN THE READER'S JURISDICTION.

Author's Note on AI Collaboration

This book is the product of years of clinical work, research, personal reflection, and prayer. As the primary author, I (Dr. Jeffrey Hansen, Ph.D.) have drawn extensively from my past publications, clinical experience, and therapeutic model development, particularly the NeuroFaith®™ model, which integrates neuroscience, trauma-informed therapy, and Christian spirituality.

In preparing this book, I made use of advanced AI tools, including ChatGPT, to assist with brainstorming, drafting, editing, refining

structure, and organizing complex ideas. This technology functioned as a supportive collaborator, helping me clarify language, summarize research, and format content. All the clinical insights, theological direction, and original research come from me and my team.

This work reflects my voice, my convictions, and my hard-won experience. The AI never generated original research, therapeutic models, or claims on its own. Rather, it served as a helpful tool under my direct guidance, offering efficiency in the writing process and allowing me to articulate more clearly what has been at the heart of my professional mission for decades.

I believe in transparency and integrity, especially when integrating new technologies. It is my hope that this disclosure affirms the honesty of this process while giving full credit where it is due. The ideas, models, and framework presented in this book are mine, and I stand behind them.

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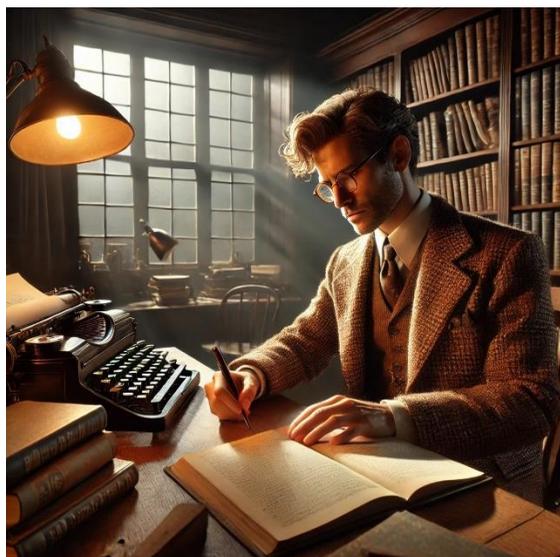
Prescott Valley, Arizona

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Why We Write

A Call To Healing: Where Faith Meets Science



This book is written with a singular purpose: to offer a pathway of hope and healing for those struggling with addiction and trauma by merging cutting-edge neuroscience with the life-transforming power of faith. We believe in addressing the whole person—mind, body, and soul—so that true, lasting recovery can occur.

We did not write this book simply to share theories. We wrote it because these pages are carved out of our own lives.

My (Jeff) story begins long before I was ever a psychologist. It begins on a Nebraska farm two generations before I was born. My grandfather

was, in many ways, a good man, but he carried deep wounds from a brutal childhood. As a boy, he was beaten savagely and then left in the cellar for days. That kind of suffering does not vanish. It burrows deep, shaping how a person sees the world, themselves, and others. And it gets passed down, often without intention, but with devastating effect.

As an adult, my grandfather worked hard to build a better life, pouring himself into the farm. But a financial investment in a trucking firm went bad, and he lost everything. The farm was gone. He had to sell out and start over in Denver, a crushing transition after years of sweat and sacrifice. That loss hardened some of the wounds he already carried. In time, my grandfather found Christ, and his faith began to heal many of those wounds. But faith, though powerful, does not erase every scar, and some of the pain remained.

My father grew up under that weight. Life in Nebraska before the move was harsh, and discipline could be severe. Beatings before school were not uncommon. The combination of generational trauma and the upheaval of losing everything left my father with an inner rage he never asked for and never wanted, but it was there. And though he, too, was a good man in many ways, he passed some of that woundedness down to us.

They were men who worked hard at the expense of everything, with an unyielding commitment and dedication in every circumstance. Yet, in the midst of that relentless drive, they did not see — or perhaps could not face — the deeper work that needed to be done to heal the damage that had been building across generations.

By God's grace, my father also came to faith in Christ. His faith transformed him, softened him, and began to heal many of the wounds.

Light for the Broken: A NeuroFaith® Guide to Healing Trauma and Addiction
Through Faith and Neuroscience

Both my father and my grandfather experienced deep spiritual change, but not every scar disappeared. Some pain remained, and some of it found its way into the next generation.

I grew up in that legacy. I carried those scars into adulthood, and for years I was able to manage the weight. I poured myself into education, earning advanced degrees, serving in the Army, working with traumatized soldiers, military families, and children. I built a career around helping others navigate pain.

But in my fifties, the fault lines beneath my life gave way. It happened during what I now call “the perfect storm.” Within a short span of time, my wife was diagnosed with melanoma, my daughter faced repeated hospital stays under the heavy suspicion of lymphoma, the 2008 financial crisis hit hard, and I found myself unable to sleep for days on end. Then a patient threatened me. I had done nothing wrong, but my nervous system would not shut off. I could not think, could not sleep, and I could not climb out of the spiral. Eventually, I requested to be taken to the hospital. I made that call. It was the only way I could see to break the cycle and get rest.

The road back was long and grueling. I experienced the raw, humbling truth that even someone with decades of clinical experience is not immune to the crushing weight of trauma and stress. My recovery forced me to dig deeper than I ever had, into neuroscience, into Scripture, and into the reality of how faith can literally rewire the brain and restore the soul. It was during that season that the seeds of NeuroFaith®™ began to take root.

Then, in late 2023, those generational scars claimed my twin brother. The pain that had built in him over a lifetime of wounds became too

heavy to bear. He fell into deep depression and eventually lost hope for life. His death has compelled me even deeper into helping others. It is a pain I will never completely get over, a pain I must learn to bear, but also a pain that sensitizes me to the suffering of others. It is nothing I would have ever asked for, but it is something I am required to make use of in the service of God. And it is not an easy task.

My (Earl) story is different from Jeff's, yet shaped by the same fingerprints of God's grace. I came to Christ as a child, but in my young adult years, my faith drifted. I found myself pulled into alcohol and disillusionment, trying to fill a void that only God could fill.

The turning point of my life came in a hospital parking lot on the day my daughter Melissa was born. She had a large birthmark covering one side of her face, and the shock of it hit me harder than I could have imagined. I had to be strong for Nancy, my wife, and for our new baby girl. I stayed close, watching every detail of her care, assuring Nancy that somehow everything was going to be alright.

But when it came time to leave the hospital and tell our older child about her new sister, I stepped out to the car and sat there alone. That's when the weight of it all hit me. I broke down, overwhelmed by my daughter's disfigurement. In desperation, I cried out to God: "God, I'll do anything. Please just help my baby."

Then, as if someone had reached inside me and flipped a switch, the tears stopped. A stillness came over me, and in that silence I heard His voice: "Earl, Melissa is Mine. I love her unconditionally. I gave her to you to raise, and I will always be with her. And I want that same kind of relationship with you. I will be with you always and will provide

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everything you will ever need. But you must give yourself completely to Me.”

In that moment, I surrendered. I gave my life, my family, and my future entirely into God’s hands, and I have never looked back. Four years later, I entered full-time ministry as a pastor, teacher, and counselor. Over the next 46 years, I served in two California churches as a pastor/shepherd and pastoral counselor, taught in three different Bible colleges, and had the privilege of walking alongside countless people through their valleys of pain, loss, and redemption. I retired from pastoral ministry in January 2024, but I continue to serve God’s people in various ways throughout northern California.

When Jeff and I reconnected in 2024 after talking intermittently but not seeing each other for over twenty years, we quickly realized that although our paths had been different, they converged on the same truth: trauma reshapes the brain, but only Christ can heal the soul. Neuroscience gives us the map of damage and recovery, but faith gives us the power to walk that road to restoration. Together, we have built a whole-person approach to healing — **mind, body, and spirit** — that became the foundation of NeuroFaith®.

We invite you to walk this journey with us, not only to understand the interplay between trauma, addiction, and the brain but also to witness the profound power of faith in healing lives.

Introduction



Vice is a monster of so frightful mien
As to be hated needs but to be seen
Yet seen too oft, familiar, with her face,
We first endure, then pity, then embrace.

-Alexander Pope's An Essay on Man

Addiction is a thief. It steals lives, dreams, and futures, leaving destruction in its wake. It's not just a habit or a moral failing; it is a force so consuming that it rewires the brain, distorts reality, and erodes a person's very sense of self. The struggle to escape its grip often feels like fighting an invisible enemy, one that hides in the crevices of the mind and haunts the soul.

Behind every story of addiction lies unimaginable pain: broken families, lost potential, and the weight of shame that crushes even the most hopeful spirit. Addiction thrives in the shadows of trauma, feeding off

emotional wounds that have never fully healed. It traps its victims in a vicious cycle of dependence, where the fleeting moments of relief are overshadowed by deeper and darker lows. The horrors of addiction reach beyond the physical, into the very core of a person's identity, numbing them to the world around them and, worse, to themselves.

Yet, within this seemingly hopeless landscape, there is a spark of light—a chance for recovery, renewal, and restoration. It is here, at the intersection of science and faith, that a path to healing emerges. As Scripture reminds us: *"The Lord is near to the brokenhearted and saves the crushed in spirit"* (Psalm 34:18, ESV). This book introduces you to a new approach: NeuroFaith®, where the cutting-edge revelations of neuroscience meet the timeless power of faith.

The Horrors of Addiction: Rewiring the Brain, Stealing the Soul

Addiction is not a simple choice; it is the product of profound changes in the brain. When addiction takes hold, it hijacks the brain's reward system, creating powerful neural pathways that prioritize the pursuit of substances or behaviors over everything else, love, family, work, even survival. The brain, once finely tuned to balance pleasure and self-preservation, becomes enslaved to the cycle of craving and compulsion. In the face of addiction, a person loses control of their decisions. It's no longer just a matter of "willpower"; the brain is no longer working the way it should; the capacity for healthy choices has been hijacked.

But the roots of addiction go even deeper. Beneath the surface of the addiction lies trauma. Trauma etches into the brain, shaping it in ways that make a person more susceptible to the pull of addiction. Whether it's childhood abuse, neglect, or emotional pain, these unresolved wounds leave scars in the brain's circuitry, making it harder to regulate stress and emotions. Addiction often becomes a coping mechanism, an attempt to numb the pain that never quite fades. This is why addiction

is so powerful—it is not just a battle against a substance or behavior but against the unhealed traumas that fuel it.

The horrors of addiction can seem endless: the sense of isolation, the shame that silences those who suffer, the broken promises to loved ones, and the gnawing fear that recovery is out of reach. In this darkness, hope can feel like a distant dream.

The Power of Faith: A Light in the Darkness

But even in the deepest despair, faith has the power to ignite hope. *“The light shines in the darkness, and the darkness has not overcome it”* (John 1:5, NIV). For centuries, faith has offered solace, strength, and healing to those in the throes of addiction. It provides a source of meaning and purpose when everything else feels lost. Faith speaks to the part of us that yearns for connection, redemption, and wholeness—things that addiction steals away and ultimately delivers us from these forces that control us.

What science is now discovering is that faith doesn't just offer psychological comfort, it can physically change the brain. Prayer, meditation, and belief in something greater than oneself activate the brain in ways that can promote healing. Studies show that people who embrace spirituality in recovery have better outcomes—they relapse less often, they build stronger social connections, and they find a deeper and more fulfilling sense of purpose.

Faith offers what addiction seeks to destroy: a sense of identity, of belonging, of being loved and valued despite one's struggles. *“For we are God's masterpiece. He has created us anew in Christ Jesus, so we can do the good things he planned for us long ago”* (Ephesians 2:10, NLT). Faith gives people the strength to confront their trauma, forgive themselves, believe that change is possible, and experience that change for themselves.

NeuroFaith®: The Intersection of Science and Healing

This is where the concept of NeuroFaith® comes into play—a powerful fusion of neuroscience and faith. It bridges the gap between science and spirituality, showing how the brain can be restored, and how faith can aid in this process. The brain, though deeply affected by addiction, is capable of change—this is the promise of neuroplasticity, the brain’s remarkable ability to rewire itself. With the right interventions, the brain can heal from the damage of addiction. It can form new pathways, create new habits, and break the cycles of craving and dependency.

Faith plays a crucial role in this transformation. When we pray, meditate, or embrace a spiritual practice, we strengthen the very parts of the brain involved in self-control, resilience, and emotional regulation. Faith works as a partner to science, helping the brain to heal, rebuild, and resist the pull of addiction. This isn’t a vague promise or wishful thinking—it’s grounded in science. Brain scans show that people who engage in regular spiritual practices experience growth in areas of the brain that combat anxiety, depression, and addictive behaviors.

Together, neuroscience and faith form a holistic approach to recovery, one that addresses the brain, the heart, and the soul. NeuroFaith® is not about choosing between science or faith; it is about embracing both, understanding that healing comes from integrating the two through the indwelling presence and wisdom of God.

Trauma, Addiction, and the Journey to Restoration

Trauma sets the stage for addiction, and healing from addiction requires confronting that trauma. But this is where many recovery programs fall short, by treating the symptoms of addiction without addressing the root causes. NeuroFaith® takes a different approach. It recognizes that true healing requires a deeper understanding of the brain’s response to trauma, and how faith can help heal the wounds that science alone cannot reach.

In this book, we will explore how trauma rewires the brain, how addiction takes hold, and how faith and science together can break these chains. We will hear the stories of people who have walked this path, those who have been broken by addiction yet found healing through the powerful combination of neuroscience and spiritual transformation.

You will learn how trauma shapes behavior, how addiction alters the brain's chemistry, and how recovery is possible—through both scientific intervention and spiritual renewal. You will come to understand that addiction is not a life sentence. *“He heals the brokenhearted and binds up their wounds”* (Psalm 147:3, NIV). The brain can be restored, the soul can be renewed, and lives devastated by addiction can be rebuilt with the help of both science and faith.

This is a journey not just of recovery but of restoration—of becoming whole again and even more, becoming who each person was created to be. NeuroFaith® offers a new way forward, a new way to understand addiction, and a new path to healing. Whether you are someone battling addiction, a loved one seeking hope, or a clinician looking for deeper insights, this book will guide you through the horrors of addiction and the promise of transformation through the fusion of brain science and faith.

Our Book's Roadmap to Recovery

As we transition into the core of this book, it's important to set a clear path for what lies ahead. Addiction, as we've discussed, is a powerful force—one that consumes the mind, body, and soul. To understand the full scope of addiction and its treatment, we must explore it from multiple angles: the science that explains its mechanics, the stories that reveal its devastation, and the hope that comes from faith and healing.

In the coming chapters, we will dive deeper into this multifaceted issue, starting with a clear understanding of addiction's scale and impact.

Numbers alone can be startling, but they help us grasp the magnitude of the problem we face. From there, we'll break down the definitions of addiction—not just as a diagnosis, but as a concept that can unlock paths to true healing.

We will then venture into groundbreaking territory with epigenetics, exploring how our environments and experiences shape our genes and contribute to addiction susceptibility. Early attachment theory will also guide us, revealing how the bonds we form as children can set the stage for addiction or resilience.

As we move forward, we'll take a close look at how addiction takes hold, from that first taste or experience to the tight grip it eventually secures on a person's life. We will examine the substances and behaviors that most often pull people into addiction, along with a deep dive into the neuroscience behind this process. This is where we'll explore the brain's plasticity and how addiction rewires its functions, making recovery feel daunting—but not impossible.

Following that, we will explore various therapeutic pathways that offer healing and peace. These include cutting-edge approaches like **Polyvagal-Informed Therapy**, which helps regulate the nervous system and foster safety in the body; **HeartMath®**, a technique that blends emotional self-regulation with heart-brain coherence to enhance resilience; and **Internal Family Systems (IFS)**, a groundbreaking model that helps individuals heal by addressing the different “parts” within themselves that hold trauma and pain. Together, these therapies create a holistic framework for recovery that integrates mind, body, and soul.

We will also explore Johann Hari's model for connected living—a refreshing take on what recovery can look like when we address disconnection at its core. Additionally, the 12-step program serves as a foundational tool, anchoring individuals in hope during the recovery process.

But recovery isn't without its challenges. We'll explore the complexities surrounding medication in treatment, questioning whether we place too much trust in pharmaceuticals and considering alternative approaches.

By the time we reach the conclusion, we will have charted a journey of hope and healing—one that combines the best of science, faith, and community. The road ahead may seem long, but it is one paved with opportunities for renewal, growth, and restoration.

So, as we proceed, know that each chapter builds upon the last. Together, they form a roadmap toward understanding addiction and, more importantly, toward reclaiming lives from its grip.

Welcome to NeuroFaith®:

A new path of hope, healing, and restoration!



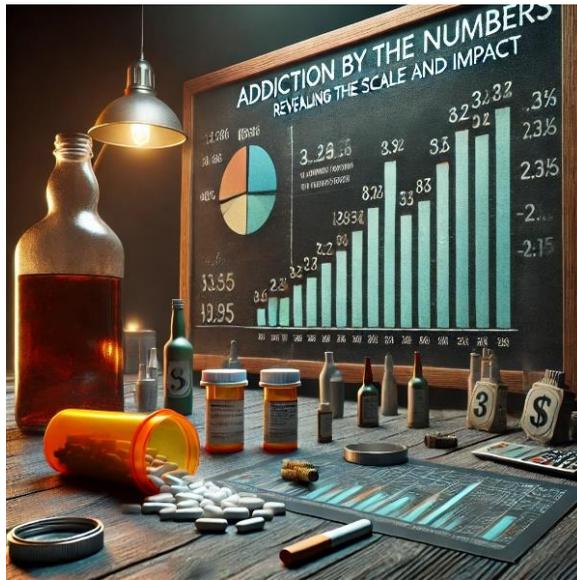
PART 1
THE
BACKDROP

Addiction by the Numbers

Revealing the Scale and Impact

*"The truth will set you free,
but first it will make you miserable."*

- James A. Garfield



As nicely summarized by behavioral neuroscientist, and professor of psychology, Dr. Judith Grisel, at Bucknell University, the financial toll of this epidemic is equally devastating. Substance abuse costs society more than five times as

much as the global fight against AIDS and twice as much as cancer. In the U.S., approximately 10% of the nation's healthcare budget is funneled into the prevention, diagnosis, and treatment of substance abuse disorders. However, despite these massive investments, the prospects for recovery remain tragically stagnant. In fact, recovery success rates today are no better than they were 50 years ago with traditional treatment methods (Grisel, 2019). Astonishingly, an individual battling addiction has a better chance of surviving brain cancer than achieving long-term recovery from addiction (Grisel, 2019).

The broader implications of substance abuse in the U.S. are just as alarming. Currently, 16% of Americans aged 12 and older meet the clinical criteria for a substance use disorder, a number that represents millions of individuals and families trapped in the grip of addiction. The toll on public health is devastating, with excessive drug use accounting for a quarter of all deaths in the country. Globally, every single day, 10,000 lives are lost to substance abuse, a figure that underscores the merciless reach of addiction (Grisel, 2019).

These statistics paint a grim picture of a national catastrophe that shows no signs of slowing down. The opioid crisis is a relentless epidemic, claiming lives at an accelerating pace and leaving behind shattered families and broken communities. Every number represents a person—a life cut short, a family left in grief. The time for change isn't in some distant future; it's right now. If we continue on this path without radically rethinking our approach to addiction and its treatment, the death toll will continue to climb, and society will be left to pick up the pieces, one life at a time. This isn't just a public health emergency; it's a staggering failure of the systems meant to protect, heal, and restore. How much longer can we afford to let this crisis spiral

out of control? The time for action is now—before more lives are irreparably lost.

In an outstanding presentation, Dr. Kevin McCauley (2023) describes the terrors of the opioid crisis, noting that this epidemic in the United States has reached catastrophic proportions, with overdose deaths climbing at an alarming rate. In 2019, there were 70,630 drug overdose deaths, of which 70.6% (49,860) were opioid-related (Hedegaard, Miniño, Spencer, & Warner, 2020). The situation worsened dramatically in 2020, with 91,799 drug overdose deaths, and a staggering 74.8% (68,630) of those deaths involving opioids (Hedegaard, Miniño, Spencer, & Warner, 2021). By 2021, the crisis reached its highest point yet, with 106,699 overdose deaths—75.4% (80,411) linked to opioids (Hedegaard, Miniño, Spencer, & Warner, 2022).

The daily toll of this epidemic is staggering. In 2021, the United States lost 292 people per day to drug overdoses, equating to one death every five minutes. Of these, 220 deaths per day were opioid-related—meaning one person died every seven minutes from opioid overdose (Hedegaard et al., 2022). Since 1999, over one million lives have been lost to drug overdoses, with more than 644,000 of these deaths attributed to opioids (Hedegaard et al., 2022).

What makes these numbers even more shocking is the rapid escalation of the crisis. Between 2020 and 2021, the age-adjusted mortality rate for drug overdoses increased by a staggering 31.4%, reaching 32.4 deaths per 100,000 people (Hedegaard et al., 2022). The continuous rise in opioid-related deaths demonstrates the crisis's relentless grip on the nation, despite widespread awareness and intervention efforts.

Light for the Broken: A NeuroFaith® Guide to Healing Trauma and Addiction Through Faith and Neuroscience

Addiction today is Epidemic and Catastrophic

- In the US, **16%** of the population 12 and older meet criteria for a substance abuse disorder.
- A **quarter of all deaths** in the US is due to excessive drug use.
- Each day, **10,000 people around the globe die** as a result of substance abuse.
- Substance abuse costs **5X** as much as AIDS and **2X** as much as cancer.
- In the US, about **10% of all health-care dollars** go to substance abuse prevention, diagnosis and treatment.
- Despite all of this, successful recovery is no more likely than **50 years ago** with conventional treatments.
- An addicted person has about twice as good a chance from surviving brain cancer.

From: Judith Grisel (2019) *Never Enough: The Neuroscience and Experience of Addiction*.



Beyond the Label

How Defining Addiction Unlocks True Healing

Definitions are the foundation of clear thinking; without them, we build on sand."

- Mortimer J. Adler

<p>Roots of the word ADDICTION Adam Slater (2018) <i>Irresistible</i></p>		<p>In Rome being "addicted" meant that you had just been sentenced to slavery.</p>
		<p>If you owed someone money and couldn't repay, a judge would sentence you to work as a slave until you could repay the debt.</p>
		<p>Addiction later evolved to describe any bond that was difficult to break.</p>

Imagine for a moment that you're standing at the edge of your life, feeling trapped and alone. You've lost yourself in behaviors you can't seem to control, despite the harm they bring. You tell yourself to stop, you swear this time will be different, but the pull is too strong, and it drags you back again and again. You look in the mirror, and instead of a whole person, you see someone broken, trapped in a cycle you can't escape. This is the reality for so many people struggling with

addiction. It's not just about substances or behaviors—it's about pain, trauma, and a search for meaning.

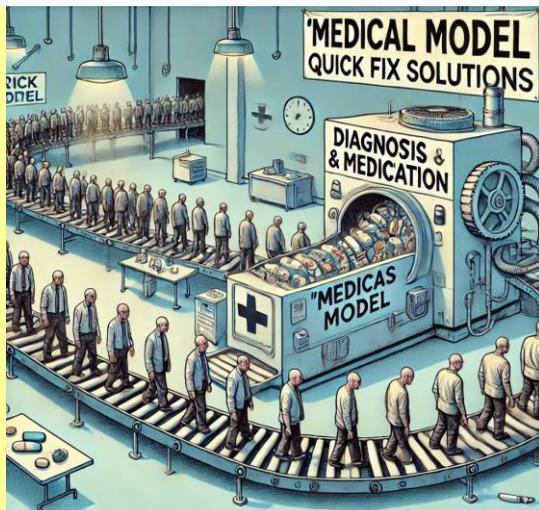
But here's the question that matters: how do we understand this experience? How do we define addiction? Because how we define addiction shapes how we help people. And when we get that definition wrong, we risk offering solutions that don't address the whole person, leaving vital needs unmet.

For years, the **American Society of Addiction Medicine (ASAM)** has defined addiction as a **chronic, relapsing brain disease characterized by compulsive substance use despite harmful consequences**. This medical model emphasizes that addiction affects both the brain and behavior and involves **complex interactions between genetic, environmental, and psychosocial factors**. It frames addiction largely as a disease of the brain, one where individuals are driven by compulsions they cannot control due to altered brain chemistry (ASAM, 2011).

ASAM Medical/Disease Model of Addiction

The ASAM (American Society of Addiction Medicine) disease model of addiction defines addiction as:

- A **chronic, relapsing brain disease**
- Characterized by compulsive substance use despite harmful consequences
- According to ASAM, addiction affects both the brain and behavior, involving complex interactions between genetic, environmental, and psychosocial factors.



This view has shaped a lot of the treatment approaches we see today, which tend to revolve around **diagnosis and medication**—treating the brain’s altered state as the root of the problem. And while this view is valuable in acknowledging the serious impact of addiction on the brain, it leaves out several crucial factors: the person’s emotional, psychological, and spiritual life. It forgets to ask, *Why?* Why is this person struggling with addiction? What pain or trauma are they carrying? What unmet emotional needs are driving them to seek relief, even at great personal cost?

If we reduce addiction to just a medical issue, a brain disease that requires treatment through medication and management of symptoms, we risk missing the complexity of the human being in front of us. The conveyor belt image you may have seen, of patients processed like parts in a machine, funneled through medical interventions, paints a powerful picture of what happens when we limit our understanding of addiction to a purely biological problem. People become cases, symptoms to be fixed. But addiction is never just a physical ailment. It’s tied to the heart, the spirit, and the mind. If we only treat the brain, we’re leaving the rest of the person behind.

Similarly, the **National Institute on Alcohol Abuse and Alcoholism (NIAA)** defines addiction as a **chronic, relapsing disorder characterized by compulsive drug-seeking, continued use despite harmful consequences, and long-lasting changes in the brain**. This definition reinforces the chronic nature of addiction and the powerful grip that compulsive behaviors can have on a person. It acknowledges that addiction rewires the brain, making it difficult for individuals to break free from the cycle of craving and use (NIAA, 2024).

The National Institute on Alcohol Abuse (NIAA) definition of addiction

Addiction is defined as a **chronic, relapsing disorder** characterized by:

1. Compulsive drug seeking
2. Continued use despite harmful consequences
3. Long-lasting changes in the brain.



This model, too, has great value in helping us understand the persistent and relapsing nature of addiction, but it doesn't answer the deeper question: *Why?* Why does a person reach for substances in the first place? Why do they seek relief in ways that ultimately harm them? If we only focus on the compulsive behaviors, we risk missing the emotional wounds, the traumas, and the unmet needs that often drive addiction in the first place. Addiction isn't just about the brain's reward system being hijacked—it's about what a person is running from or trying to cope with.

In fact, research has shown that when addiction is defined as a disease, people often feel relieved initially. Their **anxiety tends to go down** because they feel less personally responsible—after all, it's a disease, something happening *to* them rather than something they can control. However, there's a downside: **outcomes also tend to decline**. When addiction is viewed solely as an external, uncontrollable force, individuals can feel powerless to change their behavior. Their sense of control shifts outward, toward an **external locus of control**, where

recovery is seen as something that depends on factors outside themselves, like medication or external support systems.

On the other hand, when addiction is not defined as a disease, the initial reaction is often different. **Anxiety tends to increase** because individuals may feel more responsible for their actions, which can be overwhelming at first. But this is where hope lies: as anxiety rises, so does **the potential for better outcomes**. Without the disease label, individuals are encouraged to see addiction as something they can learn to manage, something they have **internal control** over. This shift from external to **internal locus of control** fosters personal responsibility and empowerment, helping people see that they are not helpless victims of a disease but rather individuals capable of growth, change, and healing (McGregor, Susanne, 2012).

This is why **Professor Mark Lewis's Learning Model of Addiction** offers such an important shift in perspective in his seminal book, *The Biology of Desire: Why addiction is not a disease*. Lewis defines addiction as a **learned behavior**, not as a chronic brain disease—a result of the brain's ability to adapt and change through repeated experiences. According to this model, addiction is not an irreversible condition but rather a **behavior that can be unlearned**. It happens because the brain, through its neuroplasticity, becomes wired to seek out the rewards and relief that substances and/or behavior provide. Over time, the brain becomes highly sensitive to cues associated with substance use, leading to cravings and compulsive behaviors (Lewis, 2015).

LEARNING MODEL OF ADDICTION

Neuroplasticity and Learning

- Addiction is a result of the brain's capacity to adapt and change based on repeated experiences.
- The brain's reward system becomes highly sensitive to cues related to substance use, resulting in cravings and compulsions.

Learning Model of Addiction

Professor Mark Lewis views addiction as a chronic brain disorder. Lewis's model conceptualizes addiction as a learned behavior influenced by neuroplasticity and personal experiences.

What's so powerful about this model is that it gives us **hope**. If addiction is learned, it can be unlearned. The brain can be rewired toward healthier patterns, and recovery becomes not just a process of managing symptoms but a journey of **retraining the mind**. This model also shifts the focus back to the person's **life experiences**. Addiction, in this view, is not something that happens in a vacuum, it's shaped by personal history, environment, and the emotional struggles a person faces. Lewis's model helps us see that addiction is often a coping mechanism, a way to deal with pain, trauma, or emotional distress.

This understanding forms the core of how addiction is treated. These centers see addiction as a **response to trauma, emotional pain, and a lack of meaningful connections**. Addiction, in this view, is not just about the brain's chemistry; it's about the **heart and soul**. When someone is caught in the cycle of addiction, they are often trying to

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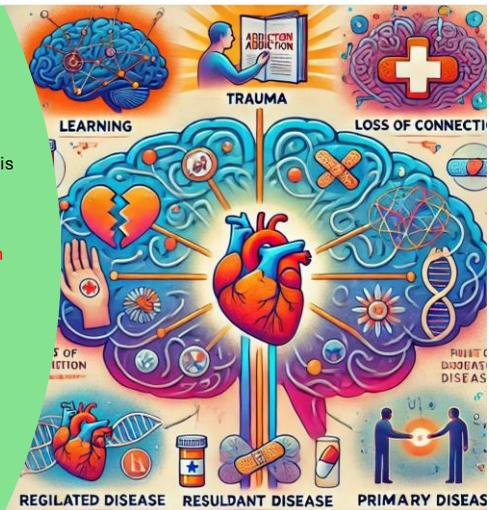
cope with deep-seated emotional wounds, using substances or behaviors as a way to numb the pain or fill the void left by broken relationships or unhealed traumas.

AnchorPoint's Integrated Definition
Directs us to the Most Cutting-Edge
Treatments

At AnchorPoint and Holdfast Recovery, addiction is primarily understood as a **response to trauma, emotional pain, and a lack of meaningful connections in life.**

As such addiction serves as a **copng mechanism** for individuals dealing with these deep-seated issues and social isolation.

This perspective emphasizes the role of unmet emotional needs and the impact of traumatic experiences in driving addictive behaviors.



This understanding leads to a **holistic approach** to treatment; we ask the questions that matter: “What’s behind this addiction? What pain are you trying to numb? What loss are you grieving? Where do you feel disconnected from yourself and others?” By asking these questions, they get to the **root of the issue**. They understand that addiction is often a symptom of a deeper emotional struggle, a **copng mechanism** for dealing with pain that feels too overwhelming to face alone.

Light for the Broken: A NeuroFaith® Guide to Healing Trauma and Addiction Through Faith and Neuroscience

AnchorPoint's Integrated Definition Directs us to the Most Cutting- Edge Treatments, cont.

While we recognize that these forms of psychological and social problems can **lead to a disease state** or problems in the brain, and that certain forms of addiction may exhibit characteristics of a primary disease, these factors are not considered the primary drivers of addiction.

We appreciate that the disease model acknowledges a level of genetic and medical influence, but it is not seen as the deciding or dominant factor in addiction.

Instead, the focus is on addressing **the underlying psychological, social, spiritual, and trauma-related factors** that contribute to the development and persistence of addiction.



Because of this understanding, we hold that treatment is about much more than just managing cravings or detoxing from substances. It's about healing the **whole person**, their body, mind, heart, and spirit. They focus on **trauma-informed care**, which means they recognize how deeply trauma can affect a person's ability to recover. They provide **personalized treatment plans** that consider each person's unique story, their struggles, and their strengths. And they emphasize the importance of **community and connection** because they know that isolation is one of the most painful aspects of addiction—and one of the hardest to overcome alone.

But perhaps the most transformative part of the NeuroFaith approach is the focus on **spiritual healing**. They understand that addiction is not just a physical or emotional struggle for many people, it's a **spiritual one**. People battling addiction often feel lost, disconnected from themselves, others, and something larger than themselves. That's why NeuroFaith® incorporates **spiritual-based therapy**. Their approach is grounded in Christian values, but they are respectful of all spiritual

beliefs, knowing that the search for meaning and connection is universal. For many, finding that **spiritual peace and wholeness** is key to overcoming addiction and rebuilding a life filled with purpose.

So, why does getting the definition of addiction right matter so much? Because how we define addiction determines how we treat it. If we see addiction only as a brain disease, we will offer solutions that focus on the brain. But if we see addiction as a **complex, human experience**—one that involves pain, trauma, disconnection, and the need for meaning—then our treatment must reflect that understanding. It must be **holistic**, compassionate, and person-centered.

We embrace a holistic view of healing, where every person is seen for who they truly are—not just their addiction. We welcome you into a space filled with compassion, understanding, and unwavering commitment to your journey toward lasting recovery.

Our starting point is Trauma-Informed Care. We understand that many who struggle with addiction have endured trauma, and we make it a priority to ensure that your care is sensitive to these past experiences. We create a safe, nurturing environment where healing begins without the fear of retraumatization.

We also believe that your recovery plan should be as unique as you are. That's why we focus on Personalized Treatment Plans, crafted to fit your specific needs, challenges, and strengths. By tailoring our approach, we make your journey more meaningful and effective.

Our philosophy is Holistic. We don't just focus on the addiction—we address the emotional, relational, and spiritual challenges that often accompany it. By treating the whole person, we aim to help you not

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only achieve sobriety but also find a deeper sense of peace, connection, and purpose.

Connection is key. We know that building relationships and fostering a sense of Community can be transformative. You won't be walking this road alone—we create an environment where you can find the support and belonging that are crucial for long-term recovery.

We offer a variety of Therapeutic Modalities to suit your individual needs. Whether you benefit from Cognitive Behavioral Therapy (CBT), Internal Family Systems (IFS), or Polyvagal-Informed Therapy, we make sure you have the tools and resources to heal on all levels—emotionally, mentally, and physically.

Spiritual-Based Therapy is also an essential part of our approach. While we are rooted in Christian values, we warmly welcome individuals of all beliefs. Our goal is to help you find your own sense of purpose and inner peace, whether through faith or another spiritual path.

You are so much more than a patient, you are a person with a unique story. We are here to walk with you every step of the way, providing the compassionate care and support you need to heal, grow, and rediscover yourself.

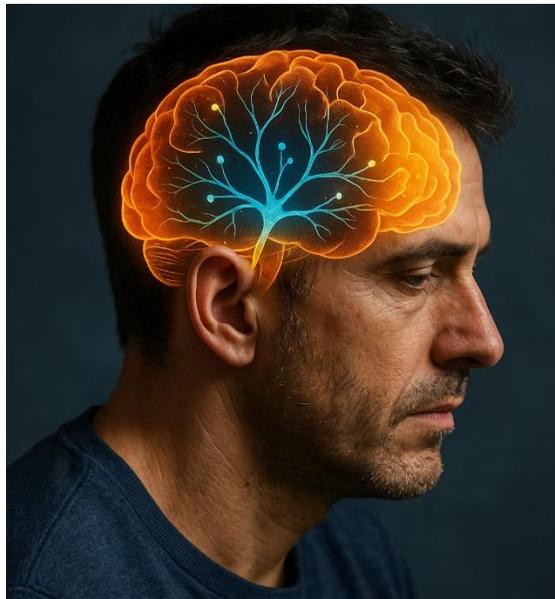
Addiction is not a life sentence. It's not a label that defines who you are. It's a condition that can be treated, healed, and transformed. But only if we understand it in its full complexity. And that's why getting the definition of addiction right is so incredibly important. Because when we do, we can offer people the kind of help that **truly changes lives.**

Inside The Addicted Mind

The Neuroscience of Addiction

*"For what I want to do I do not do,
but what I hate I do."*

- Romans 7:15

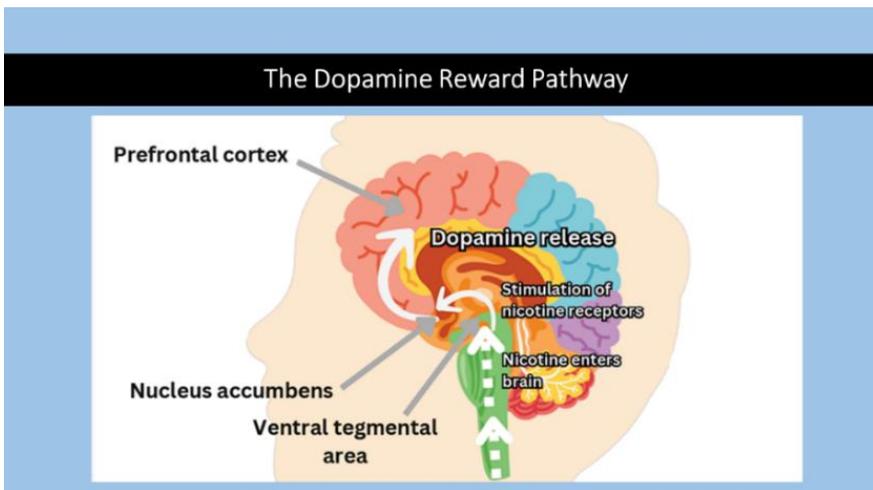


Addiction is a battle between desire and destruction, an inner turmoil where the mind is held captive by the very things it longs to escape. As the Apostle Paul so eloquently expressed in his letter to the Romans, we often find ourselves doing the things we despise, trapped in a cycle we cannot break on our own. This inner conflict is

the essence of addiction—a war between the pleasure-seeking centers of the brain and the soul's deeper yearning for freedom.

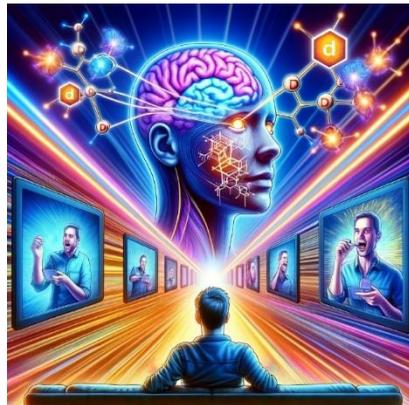
In his book *Glow Kids*, Nicholas Kardaras emphasizes that to understand addiction, we must first understand the brain's reward system. At the heart of this system is dopamine, the neurotransmitter that fuels the addict's pursuit of pleasure. What starts as a seemingly harmless indulgence soon morphs into a powerful and destructive force, hijacking the brain's natural circuitry and enslaving the individual to the substance or behavior that triggers the release of this "feel-good" chemical.

Just as Paul wrestled with the tension between good intentions and harmful actions, those battling addiction face a constant tug-of-war between seeking satisfaction and spiraling into deeper bondage. Understanding the neuroscience of addiction not only sheds light on this internal struggle but also offers a path toward healing—a path that acknowledges both the physiological and spiritual dimensions of recovery.



Specifically, how much dopamine is activated by a substance or behavior is correlated directly with the addictive potential of that substance or behavior. **Dopamine**, as many of us know, is the “feel-good” neurotransmitter that is the most critical and important part of the addiction process. Dopamine was discovered in 1958 by Arvid Carlsson and Niles-Ake Hillarp at the National Heart Institute of Sweden. As also noted by psychologist Dr. Susan Weinschenk (2009), **dopamine** is created in various parts of the brain and is critical in several brain functions to include:

- Thinking
- Moving
- Sleeping
- Mood
- Attention
- Motivation
- Seeking and reward



Inspired to pursue addiction because of dopamine

When an individual performs an action that is satisfying to a need or fulfills a desire, dopamine is released into the nucleus accumbens, a cluster of nerve cells beneath the cerebral hemisphere specifically associated with reward and pleasure. This is also known as the brain’s “**pleasure center.**” Basically, engaging in a pleasure-seeking behavior increases dopamine levels so that the dopamine pathway is activated, which tells the person to repeat what s/he just did to continue that “feel-good” sensation, or as Kardaras calls it, “**the dopamine trickle.**”

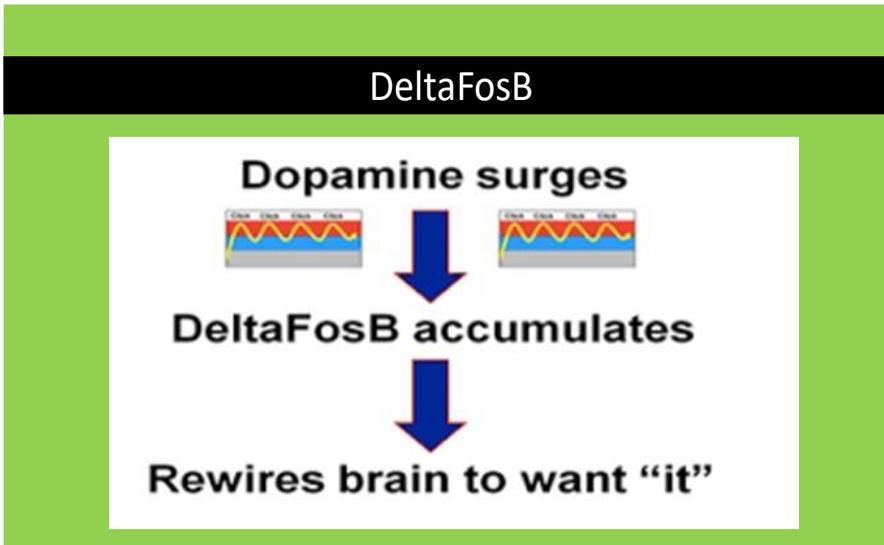
From an evolutionary perspective, this dopamine trickle is an important survival mechanism as it rewards, and, thus, incentivizes essential and important biological and social functions, such as eating, procreation, love, friendship, and novelty seeking. Natural dopaminergic activities, such as eating and sex, usually come after effort and delay and as previously mentioned, serve a survival function. These are called the “**natural rewards**” as contrasted with addictive chemicals/behaviors (which can hijack the same circuitry). In other words, addictive drugs and behaviors, such as gambling and video gaming, actually offer a *short-circuit* to this process, which only ends up flooding the nucleus accumbens with dopamine and does not serve any biological function.

As Wilson (2014) points out, the evolutionary purpose of dopamine is to motivate you to do what serves your genes. The bigger the hit of dopamine, the more you want or even crave the goal. Dopamine surges are the barometer by which you determine the potential value of any particular experience. Moreover, dopamine tells you what to remember by rewiring your brain by virtue of new and even stronger nerve connections.

Although dopamine has been referred to as the “pleasure molecule,” it is more about seeking and searching for pleasure, rather than pleasure itself. Dopamine is more involved in drive and motivation to seek. The “final reward,” or what we experience as feelings of pleasure, Wilson (2014) writes, involve the release of **endogenous opioids**. You can think of dopamine as “wanting” and opioids as “liking.” As psychologist Dr. Weinschenk explains, dopamine causes us to want, desire, seek out and search. However, the dopamine system is stronger than the opioid system, and we hence seek more than we are as satisfied...” Seeking is

more likely to keep us alive rather than sitting around in a satisfied stupor. (Weinschenk, 2009). “Addicts want it more but gradually like it less. Addiction might be thought of as *wanting gone amok*.” (Wilson, 2014).

Wilson (2014) explains that the neurological process does not stop there. Highly salient activities, in this case, addiction, lead to the accumulation of **DeltaFosB**, a protein that activates the genes involved with addiction. The molecular changes it potentiates are almost identical for both sexual conditioning and chronic drug use. Specifically, **DeltaFosB** rewires the brain to crave IT, whatever IT is. This is quite adaptive in situations where survival is furthered by overriding satiation mechanisms (e.g., I’m full, I’m done). In terms of the survival of the species, Wilson points out that excess food or sex signals the brain that you have hit the “evolutionary jackpot,” and a powerful incentive kicks in gear. For example, wolves, which need to stow away huge amounts of food (up to twenty pounds) of a single kill will continue to consume their kill even though they are full. This is particularly salient in porn addiction. In a sense, dopamine is like the foreman on a construction site barking orders, and **DeltaFosB** is the worker on the site. Dopamine is yelling, “This activity is really important, and you should do it again and again” (Wilson, 2014). **DeltaFosB** is responsible for ensuring that you remember and repeat the activity. This repeated process produces what is called **sensitization**, which is based on the principle, “Nerve cells that fire together, wire together.” Repeated activity strengthens cell connections.



As the brain recognizes that it needs a rest, it will kick out **CREB** to slow things down. In essence, **DeltaFosB** acts like the gas pedal, and **CREB** functions as the brakes. It specifically inhibits dopamine and endogenous opioids to take the joy out of the bingeing/addictive behavior or substance so that you can give it a rest (Wilson, 2014). This numbed pleasure response induced by CREB is often identified as **desensitization**, which leads to **tolerance** - the need for increasingly higher doses to achieve the same effect. Tolerance is a key factor in addiction (Wilson, 2014).

While **CREB** can help to perhaps curb less sensational behaviors, such as too many portions of a good meal, it has little chance against high valence substances, such as cocaine, porn media, and intense game media. This leads to what Wilson (2014) calls "*nature's cruel joke.*" Specifically, **CREB's** attempt to suppress dopamine and natural/endogenous opioids is insufficient to shut down the process in highly salient addictions/behaviors in today's world. Therefore, the

person's pleasure response is not sufficiently attenuated, so they are driven to more extreme addiction behavior. In other words, **CREB** can lead to tolerance, which can result in more compulsive use and escalation. So, we see that chronic overstimulation can lead to two opposite effects:

- Increased dopamine activity (wanting/seeking it more) – sensitization via DeltaFosB
- Decreased dopamine and opioid activity (liking it/enjoying it less) – via desensitization via CREB

The infographic features a dark grey header with a red arrow pointing right, containing the text: "So, we see that chronic overstimulation can lead to two opposite effects:". Below this, there are two colored boxes. The left box is orange and contains the number "01", the text "Increased dopamine activity (wanting/seeking it more) –", and "sensitization via DeltaFosB". The right box is brown and contains the number "02", the text "Decreased dopamine and opioid activity (liking it/enjoying it less) –", and "desensitization via CREB".

Sadly, the evolutionary process has not equipped us to withstand such an onslaught of dopamine. When we become addicted, our bodies respond by reducing dopamine levels or shutting down its production, providing some relief to the overwhelmed receptor cells. So, with this reduced capacity to produce dopamine naturally, we enter into a vicious cycle whereby we need to ingest increasing amounts of the addictive substance in question or engage in the addictive behavior in question just to maintain our dopamine level (Wilson, 2014).

Then, as a “double whammy,” this chronic exposure to addictive behaviors or substances then impacts negatively on the prefrontal cortex, which, among other things, is the brain’s decision-making center, associated with impulse-control or “braking mechanism.” As the prefrontal cortex’s braking mechanism becomes increasingly impaired, we are far less able to put on the brakes and refrain from the addictive substance or behavior (Wilson, 2014).

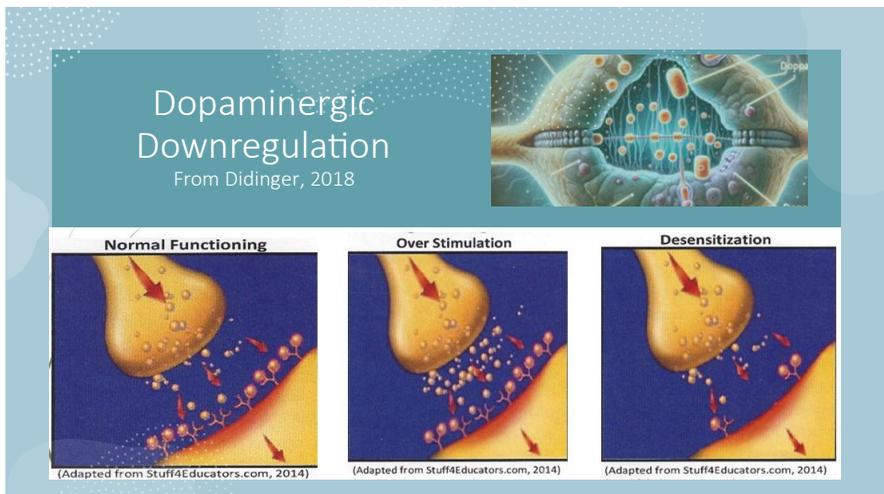
More on **Sensitization** and **Desensitization** on a cellular level:

Sensitization: Dr. Robert Dindinger, in his workbook, *Pornography Addiction: Breaking through the Chains*, nicely describes the biological changes on the cellular level that occur. Specifically, the first biological process, sensitization, begins when a source of stimulation is associated with high levels of dopamine, and the brain becomes hypersensitive to this resource. For example, In the case of pornography, the images become burned into memory, creating “super memories” that the brain recalls regularly to stimulate the desire to seek more pornography (Dindinger, 2018). So, at the synapse (the space between neurons that connect via tiny vesicles of dopamine that cross over to fire up the next neuron), there is an increase of dopamine vesicles crossing that synapse. The image below, as noted in Dindinger (2018) portrays the changes:

Desensitization: The next step in the process of developing addiction on the cellular level is desensitization, which refers to a general dialing down (as previously noted) of responsiveness to all forms of pleasure. This process occurs as a result of prolonged dopamine production (Volkow et al., 2101). As Dindinger (2018) notes, when high valence stimuli. such as pornography. are encountered, dopamine increases dramatically, which eventually results in overstimulation, something we

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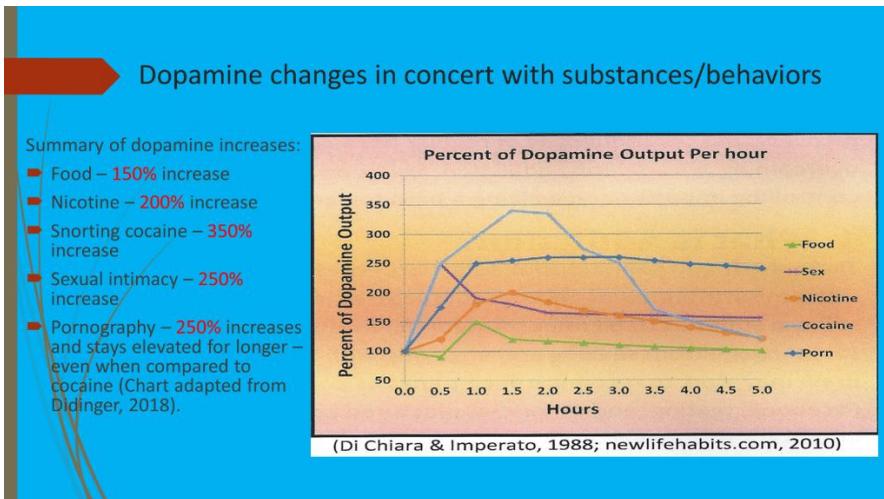
might like, but our brain doesn't. As with most biological processes, our brain will seek a state of homeostasis or normalcy. Didinger adds that our brain effectively retaliates by reducing the amount of receptor sites available to receive the dopaminergic stimulation as can be seen in the graphic below (adapted from Didinger, 2018). Sadly, this loss of receptor sites during desensitization effectively and qualitatively changes how we experience normal sources of pleasure. As a result, essential and healthy survival resources, such as friends, food, family achievement, social activities, and dating, become weaker and less pleasurable, and we pursue them less or stop pursuing them altogether. In other words, sources that used to bring us pleasure no longer hit the mark, and we then seek higher and higher valence sources in the quest of more intense dopamine.... thus, we seek more extreme levels of a substance or behavior to achieve this.



The use of drugs increases dopamine the same as sexual intimacy does, **250%**, but what is alarming is that it maintains the dopamine level much longer than sexual intimacy does. Dr. Didinger comments that even

with an extremely addictive drug like cocaine, which increases dopamine by 350%, dopamine levels decrease much faster than with pornography. As such, he notes that the brain interprets pornography to be extremely valuable and necessary for survival, thus essential to maintain, which helps to perpetuate the descent into addiction (Didinger, 2018).

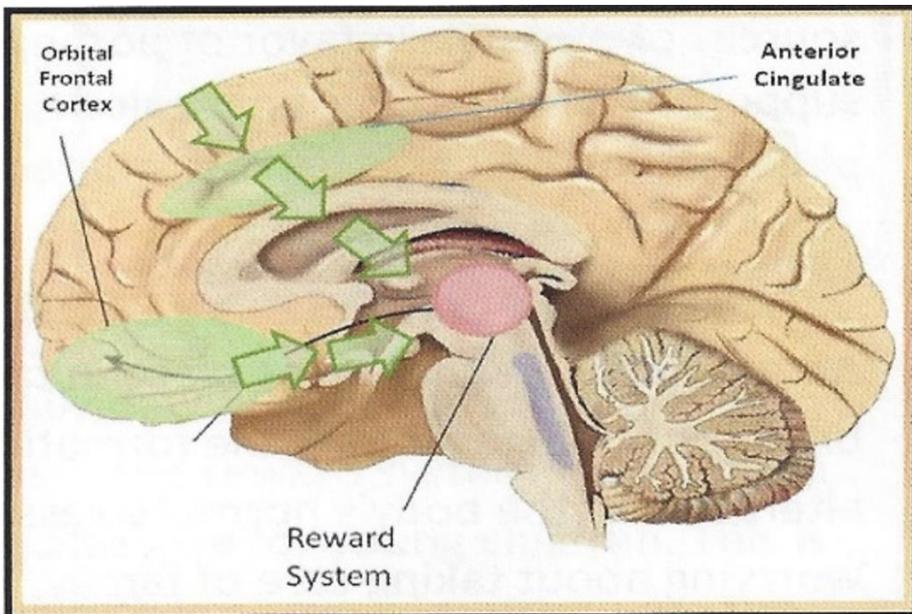
As can be seen in the chart below:



Hypofrontality – Not a good thing:

As Didinger (2018) points out, at the beginning of developing an addiction such as pornography, sensitization and desensitization of dopaminergic pathways are the primary driving forces. Once an addiction is on its way to becoming fully established, hypofrontality kicks in to ensure that the new substance of behavior is maintained. In many ways, hypofrontality is very insidious as it removes our ability to override or stop porn-seeking (Hilton, 2007).

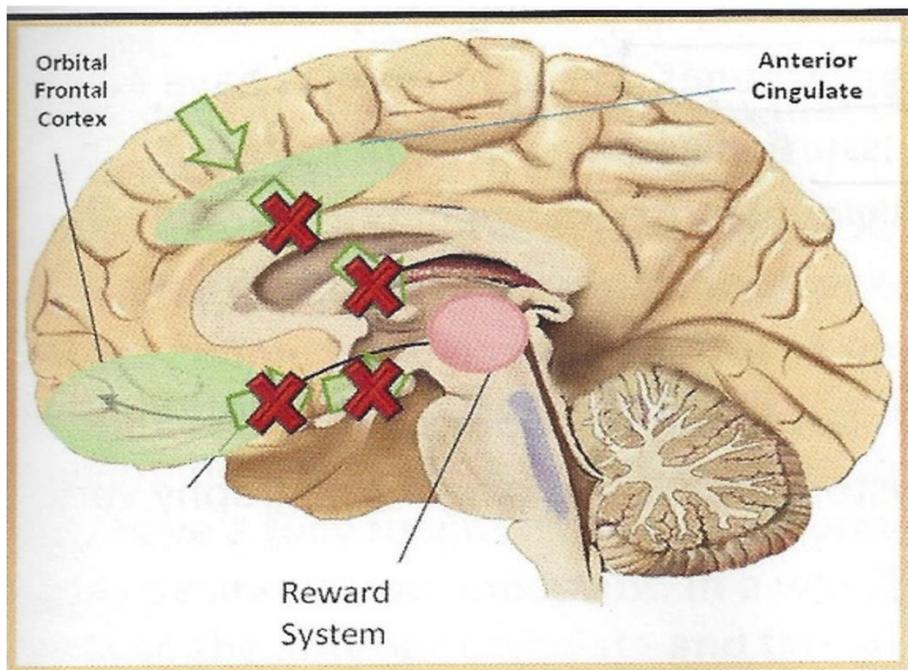
Two areas of the brain, the **anterior cingulate** and the **orbital frontal cortex**, serve as a protective mechanism to counter the reward system's desire for ever-increasing dopamine increase. Specifically, they help us to avoid and/or continue in activities or behaviors that could potentially harm us. For example, Freddy wants to ditch football practice and go off with friends to smoke some weed, which would greatly increase dopamine and help to begin the process of rewiring his brain as shown in the diagram below.



(Adapted from Study Blue, 2007)

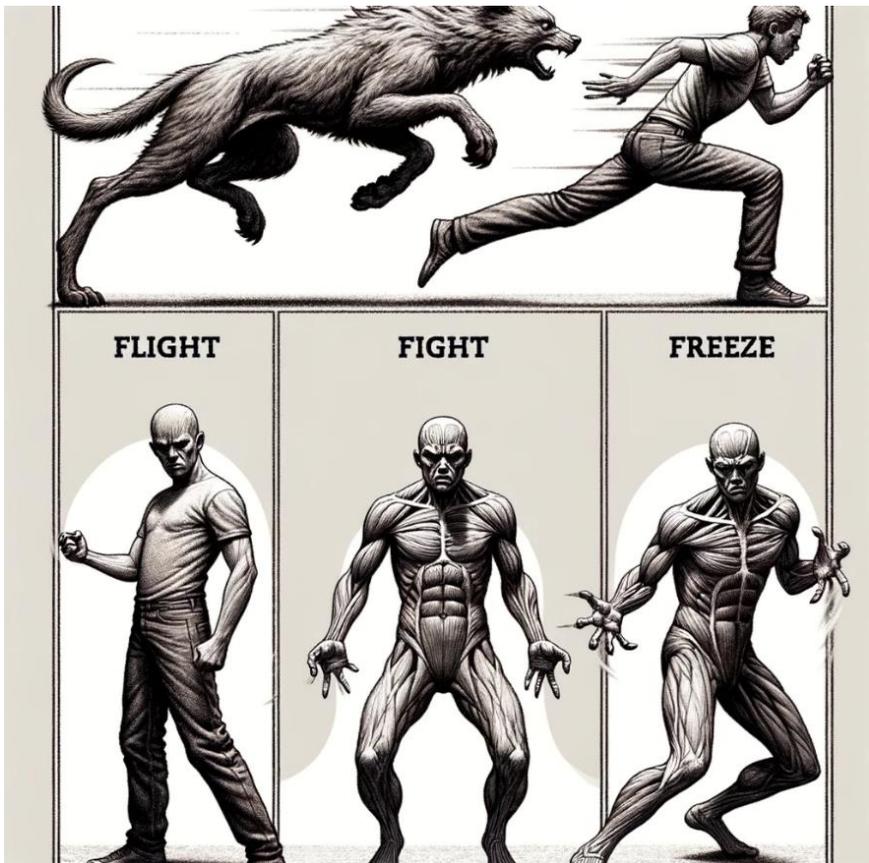
The reward system is successfully shut down

However, the anterior cingulate and orbital frontal cortex jump in and suppress the reward system to avoid the negative consequences of possibly being kicked off the team, not to mention losing the car keys as shown in the diagram below.



(Adapted from Study Blue, 2007)

The reward system fails to shut down

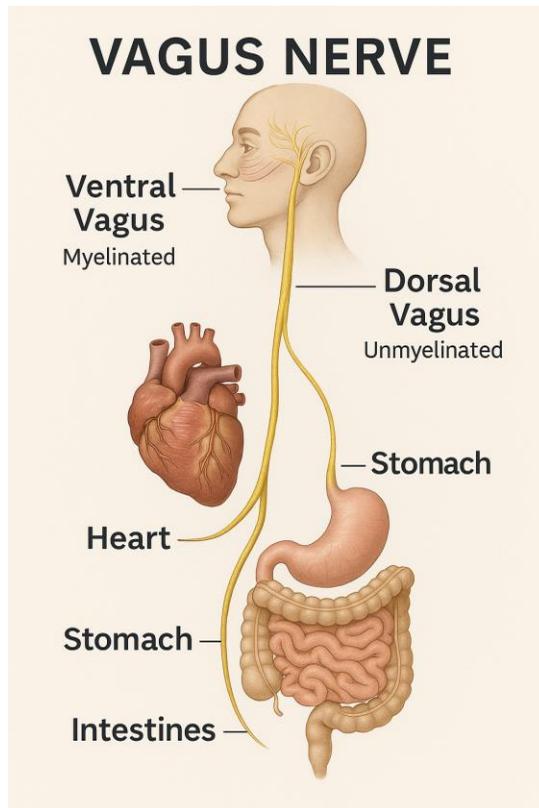


Polyvagal Theory:

In order to move forward in our understanding of what is happening to us as we progress toward addiction, we must understand Steven Porges' Polyvagal Theory and then integrate this knowledge with Triune Brain Theory. So, first, a little anatomy. The Autonomic Nervous System is a control system that acts largely unconsciously and regulates bodily functions, such as heart rate, digestion, respiratory rate, pupillary response, urination, and even sexual arousal. It has two main subdivisions: Sympathetic and Parasympathetic.

- **Sympathetic Division:** Prepares the body for stressful or emergency situations – fight or flight. Thus, the sympathetic division increases heart rate and the force of heart contractions and widens (dilates) the airways to make breathing easier. It causes the body to release stored energy. Muscular strength is increased. This division also causes palms to sweat, pupils to dilate, and hair to stand on end. It slows body processes that are less important in emergencies, such as digestion and urination (Merck Manual).
- **Parasympathetic Division:** Generally, the parasympathetic division conserves and restores calm/homeostasis. It slows the heart rate and decreases blood pressure. It stimulates the digestive tract to process food and eliminate wastes. Energy from the processed food is used to restore and build tissues (Merck Manual).

Steven Porges discovered that the parasympathetic division of the Autonomic Nervous System consists of two branches that lead to two different responses. The main nerve in the parasympathetic nervous system is the 10th cranial nerve, aka the **vagus nerve**, the largest of the 12 cranial nerves and has huge implications for our well-being and health. The vagus nerve has two very distinct branches: **Dorsal vagal nerve** and the **ventral vagal nerve**.

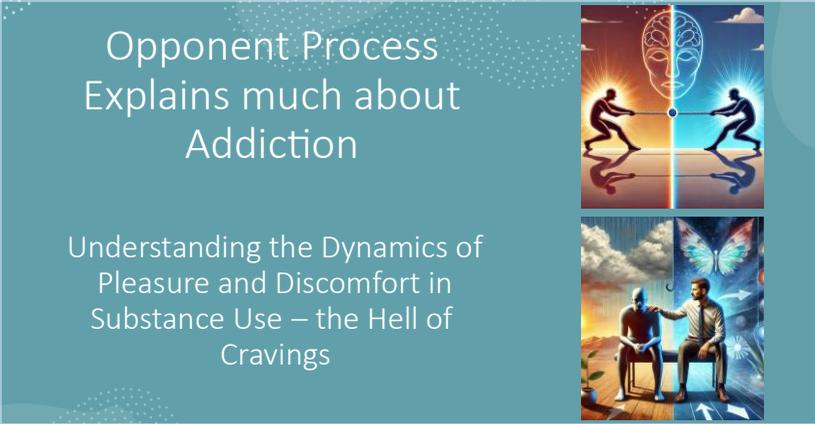


Dorsal Vagal Nerve: Barta (2018) notes that the most primitive form of defense occurs when the dorsal vagal nerve is activated. When activated, the dorsal vagal nerve promotes shutdown, freeze, and collapse. An example of this shutdown is when a gazelle is being stalked by a lion and when trapped with no possible way to flee, drops down, and appears to be deadlier than a doornail. This is not a conscious process but is, rather, a very primitive and unconscious one.

Ventral Vagal Nerve: Barta (2018) writes that the second response of our parasympathetic nervous system (the first being freeze and collapse, as noted above) is responsible for our ability to engage socially and handle social relationships. According to Barta, the social

engagement system is controlled by our ventral vagus nerve, a very smart nerve with a rapid response time. As such, it allows us to “know” if we are safe enough so we can calm our defenses through a process of “neuroception.” roughly translated as the brain’s ability to sense safety. This serves not only bonding needs but allows us to shift out of sympathetic arousal and move into parasympathetic calm or downshift from activation to calm.

Opponent Process Theory



Opponent Process
Explains much about
Addiction

Understanding the Dynamics of
Pleasure and Discomfort in
Substance Use – the Hell of
Cravings

In the complex journey of overcoming addiction, many struggle with feelings of hopelessness, wondering why the battle seems so relentless. But what if there was a powerful tool—an ancient insight—that could help explain exactly what you’re going through and offer a roadmap for recovery? Enter Opponent Process Theory, a concept that has stood the test of time and, as addiction expert Dr. Judith Grisel points out, is

key to understanding the very forces that trap people in cycles of addiction.

Dr. Grisel, a neuroscientist who has also experienced addiction firsthand, asserts that this theory can shine a light on why we become habituated, why tolerance builds, and why cravings can feel so overwhelming. Her groundbreaking work, particularly in her book *Never Enough* (2019, 2022), is a must-read for anyone serious about breaking free from addiction's grip. It's not just a scientific explanation; it's a lifeline. Understanding how pleasure and pain are intertwined—and why your brain pushes you toward more of the substance even when it's damaging you—can empower you to take control.

In this section, we will explore a vital, often overlooked body of literature as noted and eloquently describe by Dr. Grisel (2019, 2022) that connects ancient philosophy with modern addiction science. It has the potential to offer profound insights into how cravings and withdrawals work, giving you not just knowledge, but a powerful tool to fight back and reclaim your life.

We begin by looking at Socrates, a philosopher from ancient Greece, whose words in 399 BC still resonate with modern scientific understanding. Just before his death, Socrates reflected on how pleasure and pain are deeply intertwined. He observed that those who pursue one are often compelled to experience the other. This insight, known as Opponent Process Theory in modern terms, explains the duality of human experience—pleasure is often followed by pain, and pain by pleasure. It's a profound observation that laid the groundwork for future discussions on human biology and psychology.

Wise Old Socrates just before he was killed in 399 BC predicted Opponent Process Theory

Image from Judith Grisel
<https://www.youtube.com/watch?v=Ya3cZLwBVw>

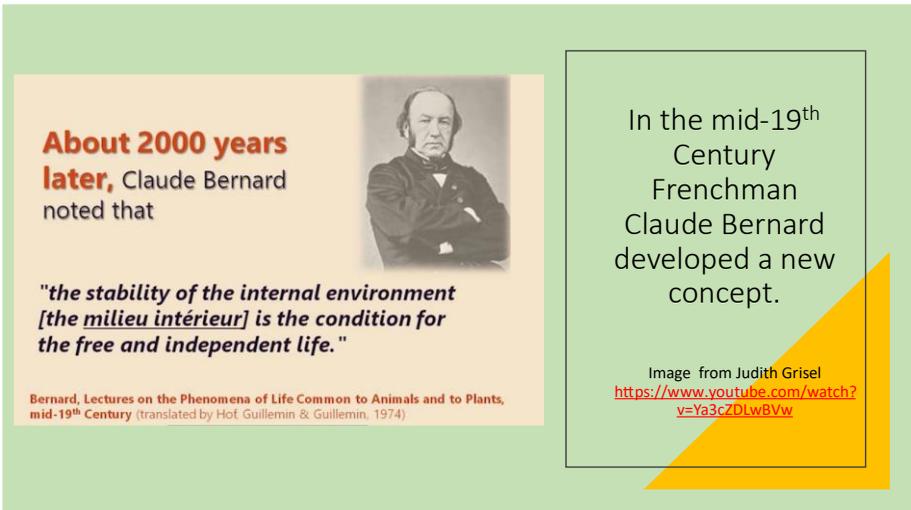
Socrates' Last Day

"How singular is the thing called pleasure, and how curiously related to pain, which might be thought to be the opposite of it... he who pursues either of them is generally compelled to take the other."
-Recorded by Plato, about 350 B.C.E in *Phaedo*



Fast-forward almost two millennia, and we find French scientist Claude Bernard expanding on this idea of balance but in a more physiological context. In the mid-19th century, Bernard introduced the concept of the "milieu intérieur," or the stability of the internal environment. He argued that for organisms to live freely and independently, their internal systems must remain stable, even when the external world is constantly changing. This idea of homeostasis—the body's effort to maintain balance—builds on Socrates' philosophical musings about the natural counterforces of pleasure and pain but brings them into the biological realm.

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About 2000 years later, Claude Bernard noted that



"the stability of the internal environment [the milieu intérieur] is the condition for the free and independent life."

Bernard, Lectures on the Phenomena of Life Common to Animals and to Plants, mid-19th Century (translated by Hof. Guillemin & Guillemin, 1974)

In the mid-19th Century Frenchman Claude Bernard developed a new concept.

Image from Judith Grisel
<https://www.youtube.com/watch?v=Ya3cZLwBVw>

Another 80 years later, Walter Cannon popularized Bernard's idea of homeostasis and expanded it to include the fight-or-flight response, which describes how the body reacts to threats. Cannon coined the term "homeostasis" to describe the body's ability to maintain stability through change. He demonstrated how, during stressful situations, the body mobilizes resources to either confront or flee from a threat—a physiological response deeply connected to maintaining internal balance. Importantly, after these stress responses, the body seeks to return to equilibrium, often experiencing what's called "parasympathetic overshoot," as it attempts to stabilize after an intense reaction.

Walter Cannon: Homeostasis and Fight or Flight

Images from Judith Grisel
<https://www.youtube.com/watch?v=Ya3cZDLwBVw>

Another 80 years...

Walter Cannon popularized Bernard's ideas using the term **homeostasis**

Cannon, Walter B. 1932. *The Wisdom of the Body*. New York: Norton



"Fight or Flight"

Homeostasis: Stability through change



"Parasympathetic Overshoot"

Alboni, et al. 2011, Heart

From Socrates' early musings on pleasure and pain, through Claude Bernard's scientific framing of internal stability, to Walter Cannon's work on fight-or-flight, humanity's understanding of balance has evolved. Together, these insights highlight the complex interaction between our internal and external worlds—whether in our emotional states or physiological responses. They form a continuous thread in understanding how humans navigate the opposing forces that shape both our minds and bodies, driving us toward equilibrium in an ever-changing environment.

For many and as noted earlier, addiction begins with the pursuit of pleasure. Substances such as alcohol, opioids, stimulants, and even nicotine activate the brain's reward systems, flooding it with dopamine, the "feel-good" chemical. This rush of dopamine creates a powerful sense of euphoria or relaxation, depending on the substance.

At this stage, the experience is mostly positive. The brain hasn't yet adapted to the substance, and users often feel in control, enjoying the

positive effects and the sense of relief or pleasure it brings. This initial period can be seen as the brain's **A-process**—the primary response to the stimulus, which, in this case, is intense pleasure.

The a and b process

The graph below depicts the underlying initial effect of the drug, and the top graph reveals the felt positive affective response (a process) to the drug followed by a compensatory negative affect response (b process)

Graph from Judith Grisel, Ph.D.
[https://youtu.be/Ya3cZDLwBVw?si=tR-kxmumEv8 -Ai](https://youtu.be/Ya3cZDLwBVw?si=tR-kxmumEv8-Ai)

Why the 'Affective Pattern'?

First few stimulations

Manifest affective response

Underlying opponent processes

"a process"

- Direct result of the drug acting in the brain
- i.e., consequence of receptor binding, or reuptake blockade

Consider the visual metaphor: two figures in balance, one representing pleasure, the other representing discomfort. At the start, pleasure dominates—represented by the figure in the image exerting force on one side of the balance. But this balance is temporary, as the opposing force begins to build momentum.

The pleasure that once came easily soon starts to diminish. As the brain adapts to the presence of the substance, the receptors in the brain become less sensitive to dopamine. The same amount of substance that used to create a powerful high now results in a reduced effect, leading users to increase the dosage in pursuit of that initial feeling.

This diminishing return is the first sign of the opponent process taking hold.

Discomfort and the Hell of Cravings:

Over time, something profound happens: the **B-process**—the brain's counterbalancing response—becomes stronger. This means that after the initial pleasurable effects wear off, the user experiences discomfort. The brain, in its attempt to return to equilibrium, begins to overcompensate for the euphoric effects of the substance, creating negative feelings such as anxiety, irritability, or physical discomfort.

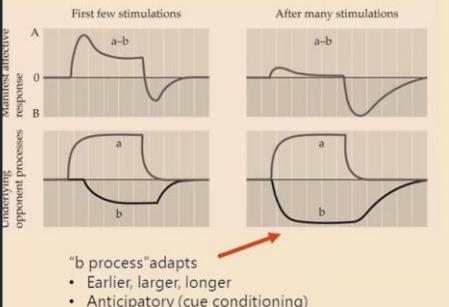
Drug-Induced Changes in Affect



As we continue in consumption of the drug body produces a negative physical state (b process) as shown in the graph below and note that the body learns and moves the negative state forward, so it is experienced immediately creating cravings.

And note the affective response above whereby the negative response become larger and the positive response gets smaller which explains tolerance and cravings

Graph from Judith Grisel, Ph.D.
https://youtu.be/Ya3cZLw8Vw?si=tR-_kxmumEv8_-Ai



Stimulus affective response

Underlying opponent processes

First few stimulations

After many stimulations

A

B

a-b

a-b

a

b

a

b

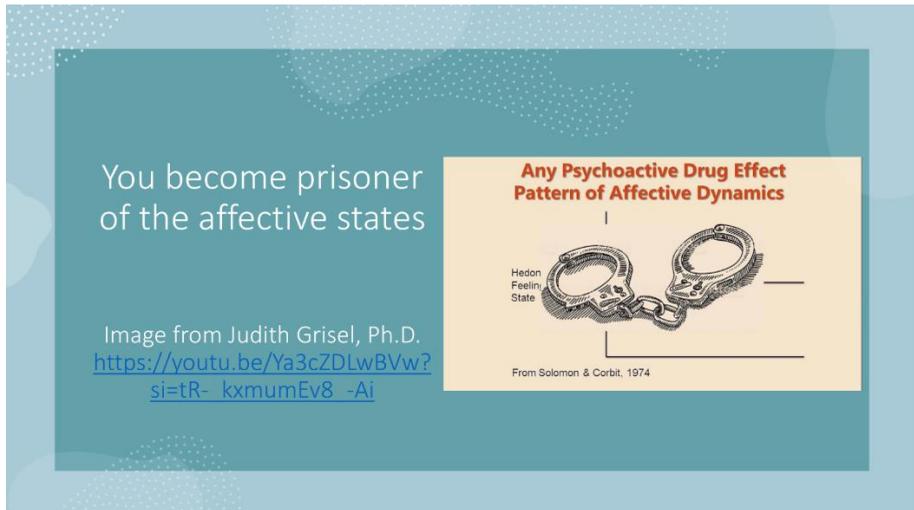
"b process" adapts

- Earlier, larger, longer
- Anticipatory (cue conditioning)

This is where the "hell of cravings" begins. The user no longer consumes the substance for pleasure, but rather to avoid the intense discomfort of withdrawal. The A-process of pleasure is now short-lived, and the B-process of discomfort dominates. The need to relieve this discomfort drives further use, leading the person into the spiral of addiction.

Cravings are, in essence, the brain's desperate plea to avoid the emotional and physical distress triggered by the B-process. What started as a search for pleasure has now become a relentless effort to escape pain. Addiction, at this stage, becomes less about chasing highs

and more about avoiding the lows. This shift is what makes addiction so devastating—it transforms from a voluntary act into a compulsion driven by the brain’s altered chemistry.



The Vicious Cycle of Addiction:

Addiction is not just about using more of a substance to feel good; it’s about using the substance to feel *normal*. As the user increases the frequency or dosage of their substance use, the brain’s baseline functioning becomes dependent on it. This dependence deepens the cycle: more substance use leads to stronger withdrawal symptoms, which leads to more cravings, and the cycle repeats.

Breaking free from this vicious cycle is incredibly difficult because the brain has now rewired itself to prioritize the avoidance of discomfort. Even when users want to quit, they face the brutal opponent process that makes quitting feel nearly impossible without intervention.

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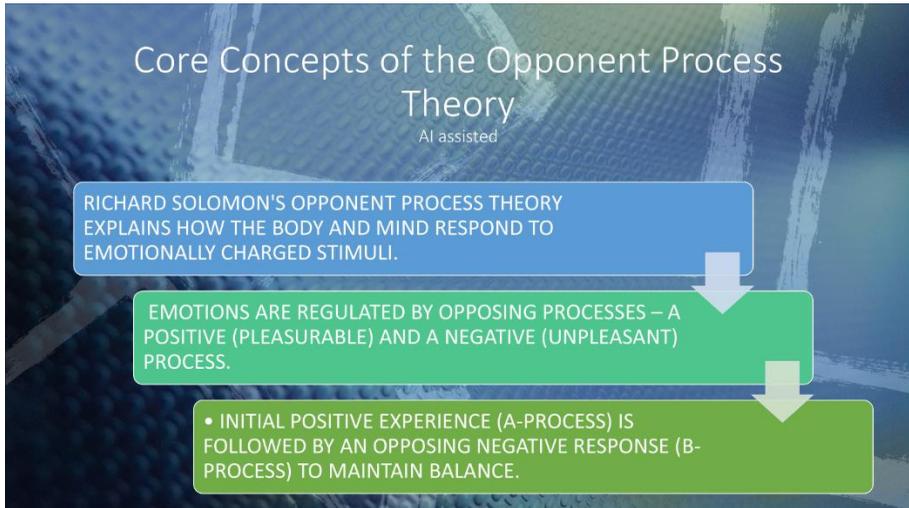
The visual of the opposing forces highlights this struggle: pleasure no longer holds the dominant position; instead, the discomfort and withdrawal symptoms hold sway, forcing the user into repeated substance use to stave off the emotional and physical pain.

Understanding the Opponent Process for Better Treatment

Understanding addiction through the lens of the Opponent Process Theory offers critical insights into why it is so hard to quit. Successful treatments must not only address the user's cravings for pleasure but also focus on reducing the intense discomfort that fuels the cycle of addiction. This is why many treatment approaches focus not only on detoxifying the body but also on restoring balance in the brain's reward systems.

By recognizing that the experience of addiction is about escaping the "hell" of withdrawal rather than just pursuing the "heaven" of euphoria, we can tailor treatments to be more compassionate and effective. Medications, behavioral therapy, and support systems that ease the discomfort and help individuals find healthier ways to cope can provide an escape from the cycle of addiction.

The following two graphics summarize key points:



Summary: The science of addiction reveals the powerful forces at play in the brain, yet this knowledge also provides hope. As we have seen, addiction is not just a moral failing or a weakness of willpower, but a deeply ingrained neurochemical process. The understanding of dopamine's role and the hijacking of the brain's natural reward system

shows us that addiction rewires the brain in ways that make it difficult to break free.

But as overwhelming as this battle may seem, there is always hope for renewal and transformation. The same brain that has been rewired by addiction can also be healed. *"I know that nothing good lives in me. I mean, nothing good lives in the part of me that is earthly and sinful. I want to do what is right, but I cannot. I do not do the good I want to do. Instead, I am always doing the sinful things I do not want to do."* (Romans 7:18-19). In the same way that the Apostle Paul wrestled with doing the very things he hated, we, too, can find hope in his realization that healing and strength come from a power beyond ourselves.

In the battle between desire and destruction, we are not left to fight on our own. The apostle Paul reminds us in *Philippians 4:13*: *"I can do all this through him who gives me strength."* Addiction can feel overwhelming, as if the pull toward destruction is greater than our will to resist. But Scripture assures us that we are never abandoned to fight in our own power. God's presence and strength become the anchor that allows us to endure, to resist, and to move toward freedom. In Christ, the very power that conquered sin and death is at work within us, enabling us to step forward into healing and restoration.

Healing comes through the sovereign work of Christ that makes us a new creation when we put our faith in Him and through the healing power of the Holy Spirit that is unleashed in us. We become a new creation that replaces our old sinful nature with our new nature, which then brings healing.

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The process of healing requires both understanding the mechanisms at work in our minds and hearts and trusting that the strength to overcome comes from something greater than ourselves. *"Therefore, if anyone is in Christ, the new creation has come: The old has gone, the new is here!"* (2 Corinthians 5:17).

No matter how strong the grip of addiction may feel, healing is always possible. When our minds are renewed, when we embrace knowledge, and when faith gives us strength, a new story can begin. This is not the end but the beginning of a better path. With commitment, support, and faith, freedom can be found and life can be reclaimed, the life we were created to live, that replaces our old sinful nature with our new nature, which then brings healing.

The Grip of Addiction

A Closer Look at Substances and Behaviors

In this chapter, we confront the powerful forces behind addiction by exploring the substances that entangle us in a cycle of dependence. From the familiar dangers of alcohol and prescription medications to illicit substances like opioids, cocaine, and methamphetamines, these chemicals manipulate our brains, bodies, and even our sense of identity, drawing us into a battle that can feel impossible to win. However, as *1 Corinthians 10:13 (NIV)* reminds us, “No temptation has overtaken you except what is common to mankind. And God is faithful; he will not let you be tempted beyond what you can bear. But when you are tempted, he will also provide a way out so that you can endure it.” This verse reminds us that while addiction may seem like an insurmountable force, there is always hope for breaking free, and God provides a way out, even in our darkest struggles.

Facing the reality of addiction can be uncomfortable, even terrifying, but it’s also the first step toward freedom. These substances are not just physical chemicals—they are catalysts for cravings, destructive behaviors, and emotional turmoil. They prey on our vulnerabilities, amplifying pain, stress, and trauma while offering a fleeting sense of escape or relief.

But we won't focus solely on the fearsome power of these substances. This chapter is about empowerment through knowledge. We'll examine how each addictive substance hijacks the brain's reward system, creating intense highs that hook people, while leaving behind a trail of devastation—physically, emotionally, and relationally. By understanding how these substances affect us, we can begin to break down the barriers they create on the path to recovery.

We will also consider the broader social and environmental factors that make certain substances more dangerous and accessible. Why are some people more susceptible to addiction than others? What makes one substance more addictive than another? These questions will be addressed as we explore the various pathways into addiction and, more importantly, the pathways out.

In a later chapter, we will explore the neuroscience that connects all forms of addiction, revealing the common threads that link these substances. We'll uncover how the brain's reward system is rewired, why certain neural pathways become hardwired for addiction, and how understanding these mechanisms can unlock the door to recovery. Knowing this science gives us the tools to fight back, regardless of the specific substance involved.

Though the truth about addiction can be daunting, understanding it gives us power. By shining a light on the nature of these substances, we can take away some of their control. We begin to see that addiction, while powerful, is not invincible. Recovery is not just a possibility—it's a journey that many have successfully walked, and one that is fully within reach.

This chapter serves as both a warning and a guide. Yes, these substances can ensnare us, destroy our lives, and even kill us, but armed with knowledge, understanding, and a personal commitment to Christ, we can break free, reclaim our lives, and rediscover hope in the face of addiction .

Alcohol – The Liquid Lure

Alcohol is the ultimate shapeshifter of addiction—slipping through the brain’s defenses without binding to any one receptor, yet leaving its mark on nearly every system it touches. Addiction expert and behavioral neuroscientist, Dr. Judith Grisel describes alcohol as a neurological sledgehammer that impacts the brain extensively, targeting numerous areas and influencing nearly every aspect of neural function. (Grisel, 2019). Alcohol stands out as the only addictive substance that doesn't target a specific receptor in the brain, which makes it unique in the world of addiction. Unlike opioids, which have opioid receptors, or nicotine that locks onto nicotinic receptors, alcohol takes a different, more widespread approach.



Instead of attaching to just one receptor, alcohol interacts with multiple neurotransmitter systems, producing a broad range of effects. It enhances GABA, a neurotransmitter responsible for calming the brain, creating that familiar sense of relaxation, while simultaneously suppressing glutamate, which normally excites the brain. This double

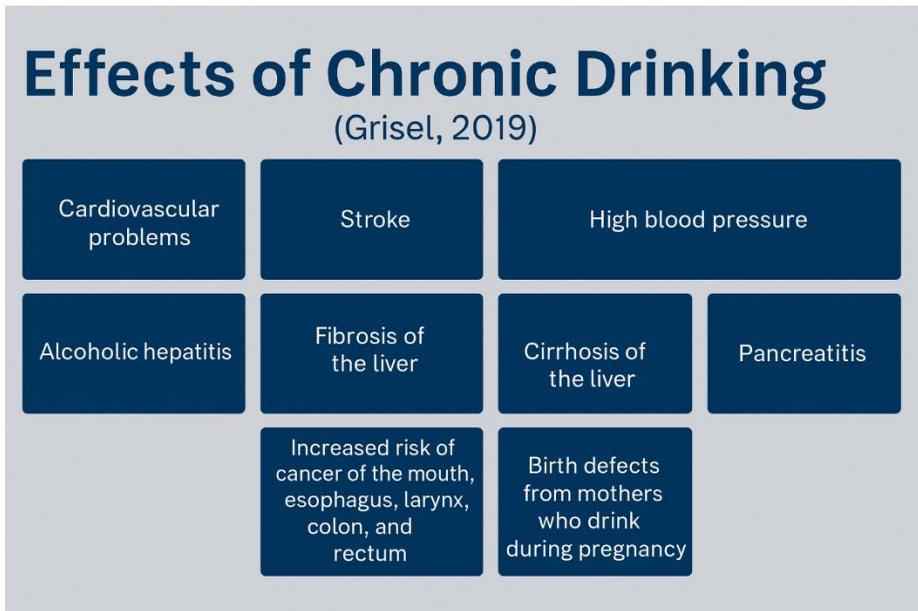
action explains why alcohol slows us down, both mentally and physically.

But alcohol doesn't stop there. It also ramps up the release of dopamine, the "feel-good" neurotransmitter, fueling that initial rush of pleasure and contentment. This dopamine surge, though, is a secondary effect, making alcohol's addictive nature more complex and harder to pin down.

Unlike substances that have a clear, direct pathway to addiction, alcohol subtly weaves its way through different parts of the brain, making its grip both pervasive and personal. It's this scattered impact that makes alcohol addiction so unpredictable and uniquely challenging.

Dr. Grisel notes that about a third of all traffic-related fatalities in the United States are related to alcohol intoxication. She adds that nearly 700,000 students a year in the US between the ages of eighteen to twenty-four are assaulted by another student who has been drinking. She continues by listing the physical impact of chronic drinking:

- Cardiovascular problems
- Stroke
- High blood pressure
- Steatosis (fatty liver)
- Alcoholic hepatitis
- Fibrosis of the liver
- Cirrhosis of the liver
- Pancreatitis
- Increased risk of cancer of the mouth, esophagus, larynx, pharynx, breast, liver, colon, and rectum
- Birth defects from mothers who drink during pregnancy

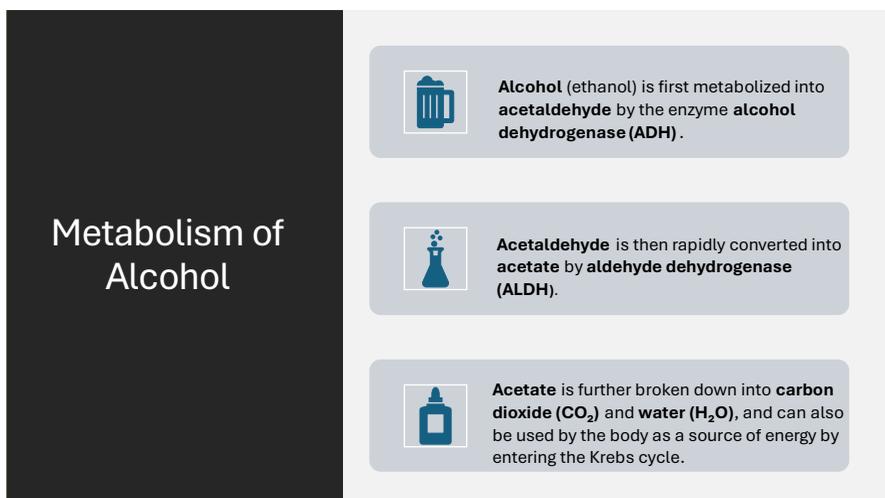


Dr. Andrew Huberman, one of our neuroscience heroes, is a neuroscientist at Stanford University, and has a deeply personal connection to his research on how alcohol affects the body and brain. Growing up, he witnessed the damaging effects of alcohol addiction in his family and community, which inspired his passion for understanding the science behind addiction and its impact on the brain. With this background, Dr. Huberman has dedicated much of his work to educating people about the physiological effects of substances like alcohol.

One of the most important insights he shares is how alcohol is metabolized in the body. When you drink alcohol, your liver starts the process of breaking it down. The first stage of this process turns alcohol into **acetaldehyde**, a highly toxic substance that is harmful to almost every part of your body. Acetaldehyde is not just toxic; it's a known carcinogen, meaning it can damage your cells and increase the risk of

cancer. Dr. Huberman emphasizes that acetaldehyde is what makes alcohol so harmful because it effectively poisons your body and brain. It is actually this toxin or poison that produces the buzz from alcohol.

As your liver continues working, acetaldehyde is eventually converted into **acetate**, a less harmful substance which the body can use for energy. However, the problem is that while your body is processing alcohol, especially in that first stage, the acetaldehyde circulates through your bloodstream, damaging cells and creating inflammation in your brain and other organs. This is why alcohol can cause hangovers, brain fog, and even long-term cognitive damage.



Dr. Huberman explains that this toxic process happens every time you drink, even if it's just a small amount. Regular drinking increases the accumulation of acetaldehyde in your system, leading to more damage over time. For him, understanding this science is not just an academic exercise—it's personal. His experiences growing up showed him firsthand how damaging alcohol can be, and he now uses his platform to educate others on how alcohol affects the brain, why it's so harmful,

and how it can lead to long-term health issues like liver disease, memory problems, and cancer.

In short, when you drink alcohol, your body is going through a process of detoxifying itself, but it's being poisoned in the meantime by acetaldehyde. This insight from Dr. Huberman helps us understand why even moderate alcohol consumption can have harmful effects over time (Huberman, 2022).

Opioids – The Comfort Curse

Opioid addiction doesn't announce itself with a roar—it slips in quietly, often disguised as relief, prescribed by trusted hands. What starts as a solution for pain can quickly spiral into a struggle for survival, as the very remedy becomes the chains that bind. In this chapter, we pull back the curtain on the opioid epidemic, exposing the seductive grip these drugs have on both body and mind, and the devastating toll they take on lives, families, and communities.



Opioids have been used for thousands of years, beginning with the opium poppy, which was cultivated as early as 3400 BCE in Mesopotamia (Brownstein, 1993). The use of opium spread to ancient Egypt and Greece, where it was used both recreationally and medicinally. By the 19th century, morphine, the active ingredient in opium, was isolated, leading to its widespread use as a painkiller, particularly in the American Civil War. However, the addictive

properties of morphine soon became evident, prompting the development of alternatives.

In the early 20th century, heroin was introduced by the Bayer pharmaceutical company as a supposedly safer alternative to morphine, though it soon became clear that heroin was even more addictive (Kolodny et al., 2015). This led to increased regulation, and by the mid-20th century, researchers began developing synthetic opioids. The synthesis of Fentanyl by Paul Janssen in 1960 was a breakthrough, as it was far more potent than morphine and other opioids, allowing for its use in anesthesia and pain management (Stanley, 1992).

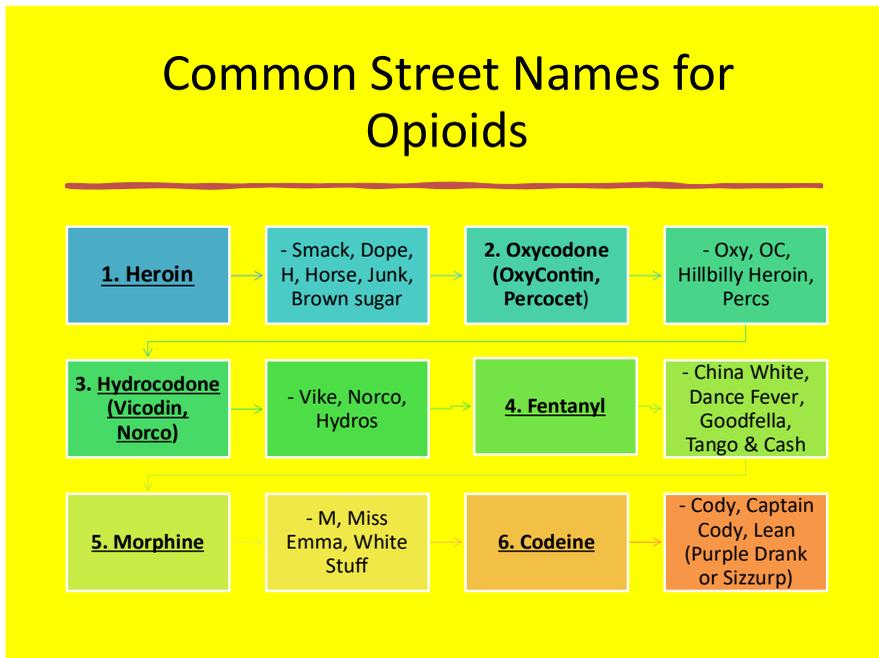
Despite their medical benefits, opioids have remained controversial due to their addictive potential. The late 20th and early 21st centuries have seen an opioid crisis emerge, particularly in the U.S., largely driven by the over-prescription of opioid painkillers such as oxycodone and hydrocodone (Volkow & McLellan, 2016). This crisis has led to widespread addiction, prompting increased attention to the regulation and appropriate use of opioid medications.

Opioids vs Opiates – what’s the difference? Imagine you’re walking through a garden, and in the middle, you find a poppy plant. From that plant, we can extract **opiates**—the natural compounds like **morphine** and **codeine** that have been used for centuries to relieve pain. These substances are straight from nature.

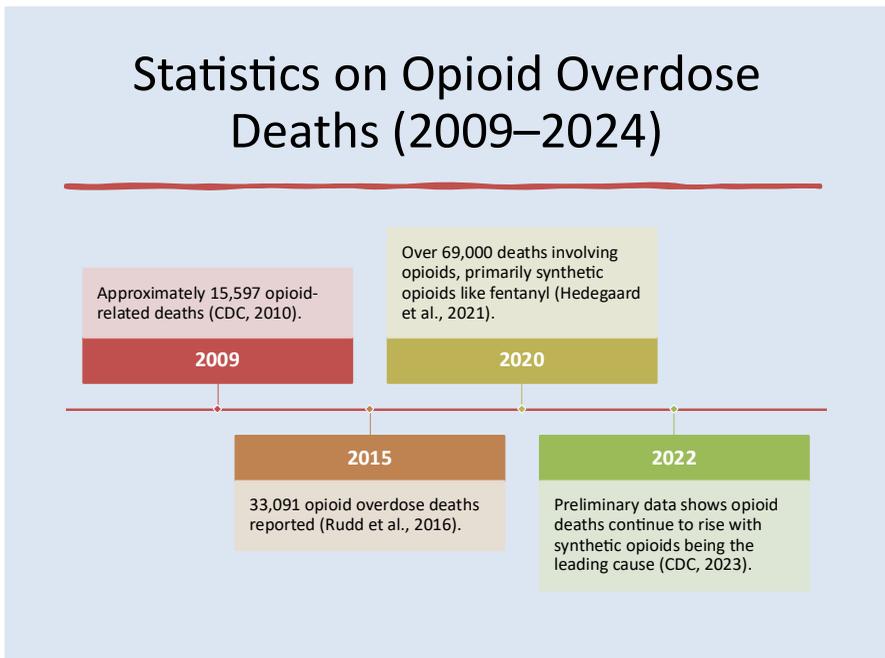
But, the story doesn’t end with the poppy. As science advanced, we learned how to **create powerful drugs** that work like opiates but aren’t directly from the plant. These are **opioids**, a broader category that

includes both natural and **synthetic** compounds like **Oxycodone**, **Fentanyl**, and **Methadone**.

So, while **opiates** come directly from nature, **opioids** are a modern extension, including everything from the traditional to the lab-made. All opiates are opioids, but opioids also encompass synthetic creations that are even more potent and, at times, more dangerous.



Statistics on Opioid Overdose Deaths (2009–2024)



Opioids are powerful drugs that interact with key receptors in our brains, spinal cords, and bodies, designed to naturally ease pain. But when we turn to opioids, their impact goes beyond just relieving discomfort—they can change how we experience pleasure, pain, and even how we feel about ourselves (Kosten & George, 2002).

Binding to Opioid Receptors: When you take opioids, they latch onto special receptors in your brain and nervous system—mainly the mu receptors, which are responsible for those feelings of euphoria and pain relief (Kosten & George, 2002). At first, it may feel like a miracle—a quick solution to escape the pain. But this effect is precisely what can make opioids so alluring, and eventually, so dangerous.

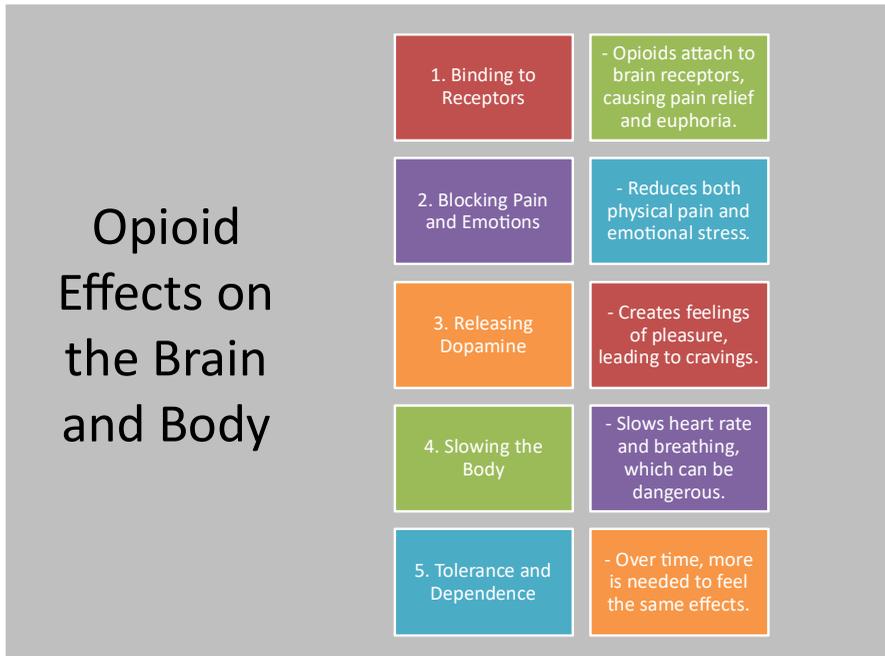
Blocking Pain Signals: Opioids don't just dull physical pain. They also quiet the emotional response to it. You might feel like you're not just avoiding the physical hurt but also escaping from stress, anxiety, or emotional turmoil. It's easy to see how this can become a habit, as

opioids provide both physical and emotional relief (Volkow & McLellan, 2016).

Releasing Dopamine: One of the reasons opioids feel so good is because they release a flood of dopamine, the brain's pleasure chemical. This surge can leave you feeling euphoric, relaxed, even invincible for a while (Koob & Volkow, 2016). But this rush also reinforces the need to keep using. You start chasing that same feeling, trying to recreate the pleasure, and before you know it, you're trapped in a cycle of craving and addiction (Kosten & George, 2002).

Slowing Down the Central Nervous System: Beyond the good feelings, opioids also slow everything down. You may feel calm, your breathing slows, your heart rate dips, and it can feel like the world is finally quieting down. But this sedative effect can also be dangerous. In higher doses, it can cause your breathing to slow too much, leading to respiratory issues or even death (Ballantyne & LaForge, 2007).

Development of Tolerance and Dependence: Over time, your brain adapts to the constant presence of opioids. You find that you need more and more to feel the same relief. What started as a small dose becomes bigger and bigger, and soon, you're dependent on the drug just to function. When you try to stop, your body rebels—nausea, anxiety, muscle pain, sleepless nights—it feels unbearable, pushing you back toward the drug (Volkow & McLellan, 2016).



In the end, opioids trick your body and mind, offering temporary relief at the cost of long-term dependence. They hijack the brain's natural chemistry, making you feel like you can't live without them. But with that understanding comes the power to recognize the trap and seek a way out before it's too late (Koob & Volkow, 2016).

Medication-Assisted Therapy (MAT) for Opiate Addiction

Medication-Assisted Therapy (MAT) is an evidence-based approach used to treat opioid addiction by combining medications with behavioral therapies. This treatment is highly effective in helping individuals reduce or stop opioid use and improve their overall functioning. The primary medications used in MAT for opioid addiction are methadone, buprenorphine, and naltrexone, which help normalize brain chemistry, block the euphoric effects of opioids, and relieve physiological cravings.

Methadone

- Mechanism: Methadone is a long-acting opioid agonist (a chemical that activates) that works by activating opioid receptors in the brain but at a much lower intensity than other opioids like heroin or prescription painkillers. It helps to reduce cravings and withdrawal symptoms without producing the euphoric high.
- Administration: Methadone is typically dispensed daily in liquid form at certified treatment programs.
- Effectiveness: It has been shown to reduce opioid use, improve social functioning, and lower the risk of overdose (NIDA, 2021).

Buprenorphine

- Mechanism: Buprenorphine is a partial opioid agonist. It activates opioid receptors but to a lesser extent than full agonists like heroin or methadone, which helps reduce cravings and withdrawal symptoms.
- Form: It is often combined with naloxone (as in Suboxone) to prevent misuse by causing withdrawal symptoms if injected.
- Administration: It can be prescribed by a doctor and taken at home as a sublingual tablet or film.
- Effectiveness: Buprenorphine reduces opioid use, helps manage withdrawal symptoms, and improves treatment retention (SAMHSA, 2021).

Naltrexone

- Mechanism: Naltrexone is an opioid antagonist, which means it blocks opioid receptors. Unlike methadone and buprenorphine, it does not activate opioid receptors but instead prevents opioids from producing euphoric effects.
- Form: Available as a daily pill or a monthly injectable (Vivitrol).
- Administration: Unlike methadone or buprenorphine, naltrexone requires full detoxification before use to avoid precipitating withdrawal.
- Effectiveness: It has been shown to reduce cravings and prevent relapse by blocking the effects of opioids (NIDA, 2021).

Benefits of MAT

- Reduced Opioid Use: MAT significantly decreases opioid misuse by helping patients manage withdrawal symptoms and cravings.
- Improved Retention in Treatment: MAT improves retention in treatment programs, leading to better long-term recovery outcomes.
- Lower Risk of Overdose: By reducing cravings and blocking the effects of opioids, MAT helps reduce the risk of fatal overdose.
- Improved Quality of Life: MAT, combined with counseling and behavioral therapies, can help improve the overall well-being of individuals recovering from opioid addiction.

Behavioral Therapies in MAT

MAT is most effective when combined with behavioral therapies such as cognitive-behavioral therapy (CBT), motivational interviewing (MI), and contingency management. These therapies help patients develop coping strategies, change harmful behaviors, and address underlying psychological issues.

Challenges and Considerations

- **Access:** Some individuals face barriers to accessing MAT due to limited availability of treatment programs, especially in rural areas.
- **Stigma:** There is still stigma surrounding MAT, as some view the use of medications like methadone as simply "replacing one drug with another."
- **Adherence:** Long-term adherence to MAT is crucial for success, but some patients may struggle with sticking to the treatment plan.

Cocaine, Meth, and Stimulants - Fast & Furious

Imagine stepping into a world where everything around you speeds up—your heart races, thoughts fire like lightning, and for a fleeting moment, it feels like you're invincible. This is the deceptive allure of stimulants: drugs that supercharge your body and mind, promising heightened focus, boundless energy, and a sense of euphoria that can make the ordinary feel extraordinary. Whether it's the powdered rush of cocaine, the crystalline intensity of meth, or the prescription pills

that fuel sleepless nights, stimulants have carved a dangerous niche in both recreational use and addiction.

But these drugs aren't just about momentary highs. With every dose, the stakes get higher. What starts as a quick burst of energy can lead to a spiral of dependence, a relentless chase for the same intensity that drove the first hit. In this chapter, we'll explore the world of stimulants—how they work, why they're so seductive, and the toll they take on both body and mind.

1. Cocaine	- Street Names: Blow, Coke, Snow, Flake, Nose Candy, White	2. Methamphetamine (Meth)	- Street Names: Crystal, Crank, Ice, Glass, Speed, Tina
3. Amphetamine	- Street Names: Speed, Uppers, Bennies, Black Beauties, Pep Pills	4. MDMA (Ecstasy/Molly)	- Street Names: E, X, XTC, Adam, Molly, Roll
5. Adderall	- Street Names: Addys, Beans, Study Buddies, Smarties	6. Ritalin	- Street Names: Rids, Vitamin R, Skittles, Kiddie Coke
7. Crack Cocaine	- Street Names: Rock, Hard, Gravel, Nuggets, Base	8. Khat	- Street Names: Abyssinian Tea, African Salad, Catha, Chat, Qat

The rise in stimulant-related deaths, particularly from methamphetamine and cocaine, has become a significant public health crisis in the U.S. Over the past decade, these drugs, once known for their euphoric highs, have become increasingly lethal.

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The alarming rise in overdose deaths related to psychostimulants paints a stark picture of the current drug crisis in the United States. Since 2010, rates of psychostimulant overdose deaths have surged, with nearly 33,000 Americans losing their lives to such overdoses in 2021 alone. This represents a staggering 37% increase from the previous year, emphasizing the growing threat posed by these substances. In 2021, psychostimulants were involved in over 30% of all drug overdose deaths in the country (CDC, 2022). This troubling trend has disproportionately impacted certain populations, with American Indian and Alaska Native communities experiencing consistently higher psychostimulant-involved overdose death rates compared to other racial and ethnic groups from 2004 to 2019 (CDC, 2022).

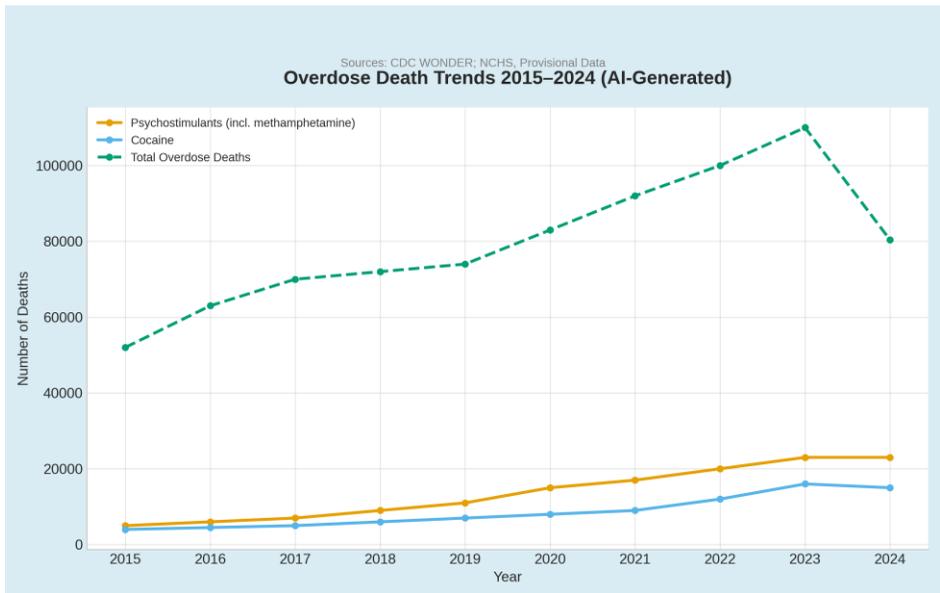
Cocaine, another dangerous stimulant, has followed a similarly worrying trajectory. After a period of decline in overdose deaths from 2004 to 2012, cocaine-involved deaths began to rise again in 2012. By 2019, non-Hispanic Black people faced the highest overdose death rate involving cocaine, further highlighting racial disparities in the overdose epidemic. From 2020 to 2021, the situation worsened as cocaine overdose deaths increased by more than 12%, claiming the lives of over 24,000 Americans in 2021 (CDC, 2022).

The surge in deaths related to methamphetamine use adds another layer of concern. From 2015 to 2019, overdose deaths involving psychostimulants other than cocaine, primarily methamphetamine, skyrocketed by 180%, jumping from 5,526 to 15,489 deaths. However, this dramatic rise in deaths far outpaced the increase in methamphetamine use, which only grew by 43% during the same period. This discrepancy suggests that factors beyond mere usage rates, such

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as the potency and contamination of the drugs, may be driving the surge in fatalities (NIH Record, 2021).

These statistics reveal the urgent need for continued public health efforts to address the escalating psychostimulant and cocaine overdose crises in the United States, particularly among the most vulnerable populations.



These numbers underscore a critical shift in the stimulant drug landscape. What once were “party drugs” or productivity enhancers have transformed into deadly substances, taking lives at an alarming rate. The intersection of methamphetamine, cocaine, and the opioid epidemic—fueled by the presence of fentanyl—has made stimulant use more perilous than ever before.

Methamphetamine

Mechanism of Action:

Methamphetamine primarily affects the brain by causing a significant release of dopamine, a neurotransmitter linked to pleasure, reward, and motivation. Methamphetamine enters neurons and triggers the release of large amounts of dopamine, resulting in an intense euphoric feeling. It also blocks dopamine's reabsorption, leading to an accumulation in the brain, which overstimulates the brain's reward circuits (ChatGPT, 2024).

Short-Term Effects:

- Increased energy and hyperactivity
- Euphoria and heightened mood
- Decreased appetite and weight loss
- Increased wakefulness and decreased need for sleep
- Increased heart rate, blood pressure, and breathing rate
- Paranoia, aggression, or irritability
- Anxiety and agitation
- Delusions or hallucinations (at high doses) (ChatGPT, 2024)

Long-Term Effects:

- Severe dental problems ("meth mouth")
- Extreme weight loss
- Memory loss and cognitive deficits
- Psychosis, including paranoia, hallucinations, and violent behavior
- Heart damage (arrhythmia, heart attack, or stroke)
- Liver, kidney, and lung damage
- Skin sores from obsessive picking
- Addiction and withdrawal symptoms (depression, fatigue, craving)

- Chronic methamphetamine use leads to damage in brain areas that regulate emotions, memory, and decision-making, resulting in cognitive impairments.
- Long-term meth use is associated with anxiety, paranoia, hallucinations, and violent behavior. Meth-induced psychosis can mimic schizophrenia (ChatGPT, 2024).

Cocaine

Mechanism of Action:

Cocaine primarily works by blocking the reabsorption of neurotransmitters such as dopamine, serotonin, and norepinephrine into neurons. This blockage leads to a build-up of these chemicals in the brain, overstimulating circuits related to pleasure and reward, which creates the intense "high" experienced by users (ChatGPT, 2024).

Short-Term Effects:

- Euphoria and intense feelings of pleasure
- Increased energy and alertness
- Heightened confidence and feelings of invincibility
- Increased heart rate, blood pressure, and body temperature
- Decreased appetite
- Dilated pupils and sensitivity to light
- Restlessness, irritability, and anxiety
- Nausea or muscle twitches (at high doses)
- Heart problems, including arrhythmias and heart attacks
- Sudden cardiac arrest or seizures (ChatGPT, 2024).

Long-Term Effects:

- Addiction and tolerance, requiring more of the drug for the same effect
- Chronic cardiovascular issues (heart attacks, strokes, high blood pressure)

- Nasal damage (when snorted), including nosebleeds, loss of smell, or a collapsed nasal septum
- Respiratory problems (if smoked)
- Severe weight loss and malnutrition
- Impaired cognitive function, particularly decision-making and attention
- Mood disorders, such as depression and anxiety
- Psychosis, including hallucinations and paranoia
- Social and financial consequences, including job loss, family issues, and legal problems
- Cocaine use is a major cause of sudden cardiac death because it disrupts the heart's electrical system, causing arrhythmias and heart attacks
- Chronic cocaine use impairs cognitive functions such as memory, attention, and impulse control. It can also result in strokes and seizures (ChatGPT, 2024).

THC – Hazy Days, Heavy Consequences

Imagine a substance so deeply woven into our culture that it is found at parties, in homes, and even in some medical clinics—THC, the psychoactive compound in marijuana. It is often painted as harmless or even medicinal, but beneath the surface lies a more complicated story. While some tout it as a natural remedy or a harmless way to unwind, the reality for many is far more complex. THC has the power to hijack the brain's reward system, leading not only to



dependence but also to profound changes in mood, motivation, and mental health.

Renowned neuroscientist, Dr. Judith Grisel, compares the impact of substances like THC to red paint splashed onto a canvas. At first, it seems to color everything in vivid, exciting shades, making even the mundane feel bright and salient. Life feels more interesting, more stimulating, when under the influence. However, once the paint dries and the high fades, nothing seems as colorful. Without THC, the brain struggles to find anything exciting or meaningful. The natural pleasures of life—connection, achievement, or even simple joys—become dull and pale by comparison, leaving the user chasing that artificial vibrancy again and again.

In this chapter, we will explore the hidden risks of THC, especially in today's era of increasingly potent strains, and how its use can evolve from casual experimentation to full-blown addiction. Whether you are someone who uses it, knows someone who does, or simply wants to understand more, this chapter will dive into the real impact THC can have on the brain, the body, and ultimately, on life itself. Let us uncover the truth behind this misunderstood substance.

In recent years, the conversation around cannabis has shifted from taboo to trendy, from illicit to normalized. THC, the psychoactive compound in marijuana, is often marketed as a harmless way to relax, manage anxiety, or enhance creativity. However, the reality for many, especially when use becomes habitual, is far more alarming.

Chronic THC use—defined as using two or more times per week—has been associated with a range of side effects that are not only physical

but deeply psychological (Volkow et al., 2014). For instance, THC has been shown to decrease testosterone levels, contributing to gynecomastia (breast tissue growth in males) and significant reductions in libido (Hall et al., 2019). These changes extend beyond mere physical appearance or sexual function—they have profound implications for mental health and self-esteem.

The psychological consequences are equally concerning. According to Lev-Ran et al. (2014), chronic users are four times more likely to develop Major Depressive Disorder, a statistic that underscores the risk of long-term use. Moreover, chronic THC use significantly heightens the likelihood of developing psychotic disorders, including schizophrenia (Di Forti et al., 2019). A study by Bechtold et al. (2015) reported that frequent users, particularly those starting in adolescence, are four times more likely to suffer from anxiety, often exacerbated by a year of continual use. This compounds the very symptoms that many users initially sought to alleviate.

Alarming Side Effects of Chronic THC USE
*Chronic is defined as 2 or more times per week

- Decreases testosterone levels
- Increases gynecomastia (breast tissue in males)
- Decreases libido
- Increases anxiety – typically after one year of use
- 4X more likely to develop Major Depressive Disorder
- 4X more likely to develop a psychotic disorder such as schizophrenia

The infographic features a cartoon illustration of a man with a wide, toothy grin, holding a lit cigarette. He is wearing a striped shirt and is set against a background of a backyard with a fence and a house.

But THC doesn't just manipulate the mind; it also alters brain structure. Research has shown that chronic THC use reduces gray matter in the prefrontal cortex, the region of the brain responsible for decision-making, impulse control, and emotional regulation (Battistella et al., 2014). This effect is especially concerning for adolescents, whose brains are still developing, as the changes may be irreversible.

Alarming side effects of THC



Decreases gray matter in the prefrontal cortex – this may not be recoverable and is more problematic in children/teens as the brain is still developing.

When smoked or vaped, endothelial cells which form the inner lining of a blood vessel and provide an anticoagulant barrier between the vessel wall and blood are damaged which significantly increases the risk of stroke.

The brain down-regulates CB1 receptors (tolerance) so more is needed to achieve the same effect.

IQ decreased by an average of 8 points when you start as a teen.

In addition to its impact on the brain, THC also poses significant cardiovascular risks. Studies indicate that smoking or vaping marijuana can damage the endothelial cells that line blood vessels, increasing the risk of stroke (Wolff et al., 2013). Over time, as tolerance builds, users require more THC to achieve the same effect, leading them deeper into dependency. This increased consumption can further exacerbate the physical and mental toll on the user (Volkow et al., 2014).

Perhaps the most tragic consequence of chronic THC use is Cannabinoid Hyperemesis Syndrome (CHS), a condition characterized by cyclic vomiting, abdominal pain, and a compulsive need for hot

showers to alleviate symptoms (Simonetto et al., 2012). In some cases, CHS can be fatal. One devastating case involved a mother who lost her son to this little-known syndrome, emphasizing the potential fatal consequences of prolonged marijuana use.

Cannabinoid Hyperemesis Syndrome

Cannabinoid hyperemesis syndrome (CHS) is a condition in which a patient experiences cyclical nausea, vomiting, and abdominal pain after using cannabis. It can in rare cases, kill you.

This disorder is characterized by 1) several years of preceding cannabis use, predating the onset of illness; 2) a cyclical pattern of hyperemesis every few weeks to months, at which time the patient is still using cannabis and 3) resolution of the symptoms after cessation of cannabis use, confirmed by a negative urine drug screen.

The almost pathognomic aspect of a patient's presenting history is that their symptoms are relieved by hot baths or shower or hot peppers.

Please click the link below to hear this mother's story of the tragic loss of her son to CHS:
<https://www.youtube.com/watch?v=E1laVfwz1yQ>

Despite these risks, many continue to perceive marijuana as harmless or even beneficial. Yet, voices from the medical and scientific communities, such as addiction medicine physician Dr. Ruth Potee (Potee, 2020) and neuroscientist Dr. Andrew Huberman (Huberman, 2021), caution against ignoring the mounting evidence of THC's dangers. They, along with advocates like Kim Porter, have spoken out about the adverse effects of THC use, particularly among teens. Porter (2019) emphasizes the dangers of normalizing THC consumption in youth, highlighting its damaging effects on developing brains.

What often begins as an innocent attempt at relaxation can spiral into something far more damaging—something that robs individuals of their mental clarity, physical health, and emotional well-being.

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Highly recommended lectures on THC

Please click the link below to listen to addiction medicine physician Dr. Ruth Potee's fantastic school talk on addiction and the teenage brain:

https://www.youtube.com/watch?v=25mK4yXzOkQ&ab_channel=1623Studios

Please click the link below to listen to Stanford neuroscientist. Dr. Andrew Huberman's superlative lecture on the dangers of THC use. It the best and most thorough discussion on the topic that I have heard.

https://www.youtube.com/watch?v=gXvuJu1kt48&ab_channel=AndrewHuberman

Cannabis, It's Complicated by Kim Porter who is an excellent advocate against teen use of THC. Please click the link below to listen:

https://www.youtube.com/watch?v=fdguiE_dTu0&t=2s&ab_channel=BeaPartoftheConversation



PART II

What's Driving the Collapse?

Understanding
the Deeper Causes
of Despair and
Addiction



What's Driving the Collapse?

*Understanding the Deeper Causes
of Brokenness and Addiction*

We cannot heal what we refuse to name. That is both the burden and the invitation of this chapter. Before we lay out strategies for recovery, we must look honestly at what is driving so much despair, anxiety, and addiction in our world.

For too long, tidy stories have dominated the conversation—chemical imbalance, random brain malfunction, quick diagnostic labels, fast prescriptions. But those stories are not the main story. They never were.

In decades of sitting with men and women, young and old, we have seen the same pattern: people drowning emotionally, desperate for relief, yet handed only a label or a pill. Rarely has anyone helped them ask the deeper question—*why?* Why does this pain run so deep? Why has it lingered despite treatments? Why does it feel like life itself is slipping away?

This chapter is about facing those deeper causes. It is not exhaustive, but it names the core drivers we see again and again in the clinical trenches:

- **Disconnection**—isolation from people, purpose, meaning, and even from ourselves, which Johann Hari and others have shown is one of the greatest predictors of despair.

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- **Pornography**—a silent epidemic that reshapes the brain, corrodes intimacy, and drives shame and secrecy.
- **Trauma**—the deep wounds of neglect, abuse, and broken attachment that live in the body and silently shape our lives.

These forces intertwine, forming the soil where depression and addiction grow. And the only way forward is to go deeper..

This chapter is an invitation to that honest journey. As you read, you may feel uncomfortable. Good. That means we're getting close to something real. Don't turn away. Don't settle for a surface-level explanation when your life is too precious for that.

The roots of depression and anxiety are deeper than most of us were taught. But the healing goes deeper still.

Cause One

Disconnection and the Descent into Despair and Addiction

*"We are not destroyed by suffering; we are destroyed
by suffering without meaning."*

– Viktor Frankl

Adulthood wasn't supposed to feel like this. Somewhere along the line, many of us stopped living and started managing. We wake up tired, go through the motions, carry the weight of responsibilities we can't name, and wonder why joy feels like something reserved for someone else's life. We've become experts at showing up, performing, pushing through. But deep inside, there's an ache. A dull, gnawing ache that says, "Something isn't right."

For far too many, that ache has a name: depression. For others, it wears the mask of anxiety, insomnia, apathy, irritability, or just a fog that won't lift. But the symptom is never the whole story. It's a signal. A call to attention. A cry from the deeper self that something important has been lost.

That's where Johann Hari comes in.

Hari, one of Jeff's absolute favorite authors and thinkers, wrote a groundbreaking book titled *Lost Connections: Uncovering the Real Causes of Depression – and the Unexpected Solutions* (2018). In it, he dares to ask a question that few in psychiatry have had the courage, or humility, to ask: *What if depression and anxiety aren't simply malfunctions of the brain? What if they are messages from lives gone off track?*

Hari's answer is not only intellectually compelling but emotionally liberating. He argues that depression is not primarily about serotonin deficits or broken synapses. It is about **disconnection**. Disconnection from meaning, from purpose, from belonging. Disconnection from nature, from others, from community, and ultimately, from the truest parts of ourselves. When those connections fray, the soul begins to dim. When they rupture, we fall.

And many of us are falling.

Modern life, for all its conveniences, is structured for disconnection. We live in crowded cities but feel isolated. We scroll endlessly through curated images but feel unseen. We are more “connected” than ever digitally, yet lonelier, angrier, more exhausted, and more despairing than any generation in recorded history.

This didn't happen all at once. It was a slow erosion. A thousand tiny compromises. A culture that traded purpose for productivity, presence for performance, contemplation for consumption. We were told that if we worked harder, optimized more, stayed busy, stayed plugged in, starving for something real, we would find happiness.

Hari gives language to what so many of us have felt but didn't know how to articulate. That our suffering is not random. It is rooted. It is

rational. It's not a flaw in our chemistry. It's a reflection of a deeper wound in our society—and often, in our story.

This book honors that insight.

We've seen it over and over in the clinical setting. A man in his fifties breaks down and says, "I don't even know who I am anymore." A mother confesses that she feels invisible. A retired veteran says the silence at night feels unbearable. These aren't weak people. These are the strong ones who've carried too much for too long without a place to lay it down. And beneath it all, at the core of the depression or anxiety or addiction is a wound of disconnection—sometimes from others, sometimes from self, sometimes from God.

We believe Hari is right. Depression is not nonsense. It makes perfect sense. Anxiety is not irrational. It's often the nervous system responding to a life out of alignment with what matters most.

This chapter will explore these themes of disconnection in depth, not just to name the pain but to begin charting a path back to connection. We will talk about the big ones: disconnection from community, from meaningful work, from personal agency, from the natural world, from safe emotional bonds, and from a sense of transcendence.

We'll also be honest. This chapter might stir something in you. That's good. That means it's working. It means you're not numb. It means there's still a flicker of desire deep down to reconnect with what matters, to reawaken to the sacredness of your own life.

We are not promising a quick fix. But we are promising this: your depression and anxiety are not signs that you are broken. They may be

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signs that you are still alive—that some part of you refuses to settle for disconnection. That part of you is not a liability. It's your signal fire. It's your path home.

Let's follow it.

Disconnection from Meaningful Work



MEANINGFUL WORK

Disconnection from meaningful work is a Hidden Source of depression and anxiety

Let's talk plainly. When you are depressed, the idea of engaging in work, even simple tasks, can feel crushing. You wake up already behind, already tired, with a fog sitting on your chest. You may feel worthless or defeated before the day even begins. And when you are anxious, your thoughts race, your body hums with tension, and everything feels like it's too much. So, let's be clear, we are not saying that work is a quick fix or that someone should just "snap out of it." We know better.

But here is the hard truth and the hopeful one: meaningful work, when engaged in gently and with support, can help stabilize and heal you. In psychology, we call this *behavioral activation*. It means you do not wait

until you feel better to start. You start small, you move your body, you do the next right thing, and often, the mind begins to follow. Action precedes emotion. The body can lead, and the soul can begin to wake up.

Johann Hari (2018) draws our attention to a worldwide crisis of meaning. In a massive Gallup study conducted between 2011 and 2012, researchers surveyed millions of workers across 142 countries. Only 13 percent of people reported being “engaged” in their work. Sixty-three percent were “not engaged,” and 24 percent were “actively disengaged,” meaning they were not only disconnected but acting out their discontent. Hari argues, convincingly, that this disconnection is not just a productivity issue. It is deeply linked to the rise in depression and anxiety.

We are not made to spend our lives doing things that feel pointless. And we are certainly not made to live under the weight of soul-deadening routines that offer no agency, creativity, or purpose. The Whitehall Study (Marmot et al., 2002) of British civil servants confirmed this, finding that a lack of autonomy and the inability to see a connection between effort and reward were powerful predictors of poor mental health. When your labor does not seem to matter, it takes something essential out of you.

And that is not just psychological. It is spiritual. In Genesis 2:15 (NIV), it says, “*The Lord God took the man and put him in the Garden of Eden to work it and take care of it.*” Work was part of the original design. It was never meant to be punishment. It was a way to partner with God in caring for the world He created. When that connection to meaningful labor is lost, something deep within us begins to fray.

For many adults, especially in modern Western life, work has become transactional and empty. People clock in, perform duties that feel disconnected from their values, and clock out. They go home drained, not from effort but from futility. Over time, this leads to what Hari calls a spiritual and psychological numbness. It is not just boredom. It is despair.

And here is the part we sometimes miss. Our children see it. They see us come home weary, bitter, or resigned. They see us sit in front of screens, not from laziness, but from a kind of emotional defeat. Adolescents learn from what we model. When they see adults robbed of purpose, they begin to believe that life itself is just something to survive. And they often turn to numbing behaviors of their own, whether through social media, substances, or fantasy worlds because the real world looks like a dead end.

But we can disrupt that pattern. We can reclaim meaningful work as part of healing.

That does not mean switching careers overnight. It might begin with reframing the work you already do, seeing how your efforts contribute, even in small ways. Or it might mean stepping into a new challenge, volunteering, helping someone else, fixing something, or creating something. These acts begin to stitch purpose back into our lives.

And when we root our labor in something greater, it takes on eternal meaning. Colossians 3:23–24 (NIV) tells us, *“Whatever you do, work at it with all your heart, as working for the Lord, not for human masters. It is the Lord Christ you are serving.”* That reframes everything. Whether you

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are folding laundry, leading a meeting, or rebuilding your life from the wreckage of depression, your effort matters.

You do not have to feel good to begin. You begin, and over time, the good feelings may come.

So, if you are depressed or anxious right now, start small. Take one action, however simple, that aligns with who you want to be. It might not feel like much today, but it is not nothing. It is a seed. And with time, care, and God's help, it can grow into something beautiful.

Disconnection from Meaningful People

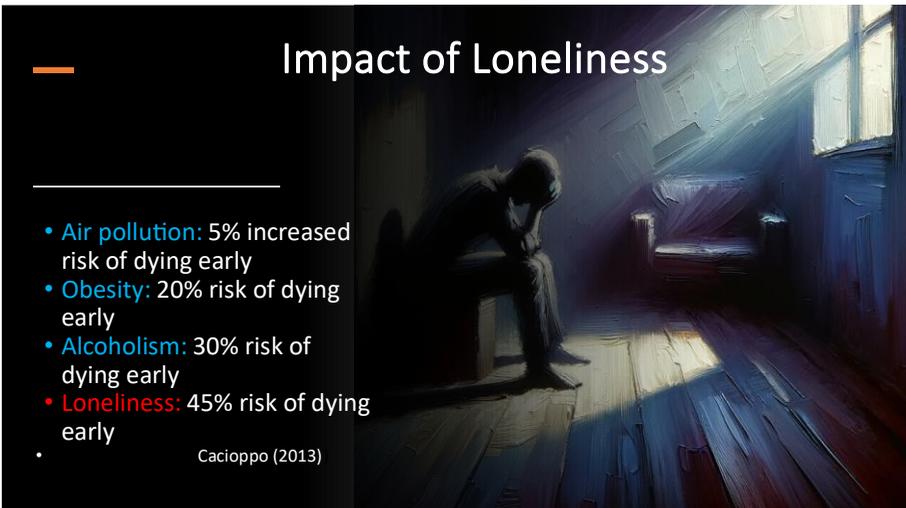


Loneliness is not just an emotion. It is a physiological and psychological threat. It can break your heart, not just figuratively but literally. It can scramble your brain's ability to regulate emotion, jack up your stress hormones, and slowly dismantle your resilience until you feel hollowed out and exhausted from the inside out.

Dr. John Cacioppo, a pioneer in social neuroscience, studied the impact of loneliness over many years. He and his colleagues found something staggering. When people were placed in an experiment and made to feel acutely alone, their bodies responded with a stress reaction as severe as if they were under physical attack (Cacioppo et al., 2006, 2008, 2010; Hari, 2018). In fact, loneliness drives cortisol levels through the roof. It hits the hypothalamic-pituitary-adrenal (HPA) axis, the very center of your stress system, and floods your body with the same neurochemical

chaos you would experience if someone had just jumped you in a dark alley. Only this threat comes from within. And it lingers.

Lisa Bergman's long-term research confirms just how deadly loneliness can be. Over a nine-year period, she found that socially isolated individuals were two to three times more likely to die during lonely periods than their connected counterparts. Heart disease, cancer, respiratory illness—almost everything became more fatal during seasons of social disconnection (Pinker, 2015).



Impact of Loneliness

- **Air pollution:** 5% increased risk of dying early
- **Obesity:** 20% risk of dying early
- **Alcoholism:** 30% risk of dying early
- **Loneliness:** 45% risk of dying early

• Cacioppo (2013)

Cacioppo went even further. In a five-year longitudinal study, his team showed that loneliness is not merely a byproduct of depression. It is a direct contributor. He found that when a person moved from moderate loneliness to a slightly higher threshold—say, from 50 percent to 65 percent on their loneliness scale—their risk of becoming clinically depressed increased eightfold (Cacioppo et al., 2010). Eightfold. Not double. Not triple. Eight times more likely to spiral into depression. That should stop us in our tracks.

And yet, we live in a culture that often glamorizes independence. We quietly accept the slow drift into isolation, chalking it up to busy schedules, modern life, or personality. But make no mistake—loneliness kills. As Cacioppo said in his TED Talk (2013), a meta-analysis of over 100,000 participants found that social isolation increased the risk of early death more than obesity, smoking, or lack of exercise.

This is not just data. This is real life. How many people quietly ache every evening when they come home to an empty house, scroll endlessly on their phones, or eat dinner alone in front of the TV? How many sit in church or at work surrounded by people and yet feel invisible? You do not have to be physically alone to be lonely. You just have to feel that no one truly sees you.

And the enemy of our souls loves to work in the shadows of loneliness. He whispers lies into that void, telling you that you do not matter, that no one cares, that this ache will never go away. But it can. And it must.

Scripture tells us that we were never meant to do life alone. In Psalm 68:6 (NIV), we read, *“God sets the lonely in families.”* That is not just poetic. It is a profound spiritual truth. God places us in community for a reason. He knows that connection is not optional—it is vital for the health of our souls, our bodies, and our minds.

And if you are reading this and you feel isolated, please hear this: your loneliness is not a reflection of your worth. It is a wound, not a verdict. And wounds can be healed.

Start small. Reconnect with someone. Join a group. Let someone in. Serve. Show up. Ask for help. Speak the truth about how you are really

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doing. The only way out of loneliness is through relationship, and that takes risk. But the reward is life. And life abundantly.

Because at the end of the day, it is not good for man to be alone. We were created for connection. And when we restore that, healing can begin.

Disconnection from Childhood Trauma



As we have explored in earlier chapters, unresolved childhood trauma often lies at the heart of depression and anxiety. Even when the memories fade or the events seem buried, their impact lingers, silently shaping the way we think, feel, and react. Johann Hari (2018) captured this powerfully when he wrote, “There’s a house fire inside many of us.” That’s not an abstract metaphor. It’s a living reality for countless men and women who walk through life with an inner burn, a gnawing ache, a silent alarm that never shuts off.

And it is not only childhood trauma. Many adults carry the layered burden of additional trauma. It may be the slow erosion of dignity from

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a toxic marriage, the moral injury of betrayal, the loss of a loved one, or the long grind of life that never gave back what it took. Trauma compounds. What begins as one wound often leads to others. And when those layers go unrecognized, the fire spreads deeper.

This inner fire may not be visible to others. You may go to work, raise your children, serve at church, smile at neighbors, and still feel like something inside you is cracking under pressure. Trauma, especially when unresolved, does not stay in the past. It lives in the nervous system. It changes the way the brain processes stress, danger, and even love. It keeps you hyper-alert or emotionally numb. It whispers lies about your worth, your safety, and your ability to be loved.

Hari makes this clear—you cannot disconnect from your trauma and expect to heal. Numbing it, denying it, or burying it only deepens the pain. You might escape the fire for a little while, but eventually, the smoke fills the house.

But there is hope.

Healing is not only possible; it is promised. Jesus did not shy away from the wounded. He moved toward them. He did not tell the weary to tough it out. He invited them to come. *“Come to me, all you who are weary and burdened, and I will give you rest”* (Matthew 11:28, NIV). That is not poetic suggestion. That is lifeline truth for the anxious, the depressed, the overwhelmed, and the soul-weary. You were never meant to carry this alone.

The LORD makes a consistent promise throughout the Scriptures—He is our healer. *“I will heal My people and will let them enjoy abundant peace and security”* (Jeremiah 33:6 NIV).

"I am the Lord, who heals you" (Exodus 15:26 NIV).

True recovery goes deeper than symptom management. It requires you to stop running from your pain and start bringing it into His light. It means surrendering the survival strategies that no longer serve you and asking Jesus to touch the places in you that have long been locked away. It means letting God speak truth where lies have taken root. And it nearly always requires doing this work in the presence of others, in counseling, in trusted friendships, and within the body of Christ.

Too often, the church has not known what to do with trauma. We have offered quick prayers and surface solutions, sometimes unintentionally shaming those who still struggle. But trauma is not healed by spiritual shortcuts. It is healed by Spirit-empowered presence. The church is called to be a refuge. A place where brokenness is not hidden but embraced, where healing is not rushed but walked out with patience and grace. *"Therefore encourage one another and build each other up, just as in fact you are doing" (1 Thessalonians 5:11, NLT). "Therefore confess your sins to each other and pray for each other so that you may be healed" (James 5:16 NIV).*

Healing may not come in a single moment. It looks like learning to breathe again. Letting yourself be seen. Crying tears that you swallowed years ago. Showing up for counseling even when your entire body tells you to stay home. Choosing connection over withdrawal. Opening your heart to receive comfort instead of managing everything alone. And in time, it looks like peace. Not numbness. Not performance. Real, grounded, soul-deep peace.

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Because your trauma is not your identity. You are not your symptoms, your past, or your mistakes. You are a child of God, dearly loved, made for restoration. Through faith, through support, and through truth spoken in love, healing can begin. The fire can be put out. The walls rebuilt. The soul restored.

“He will give you a crown of beauty for ashes, a joyous blessing instead of mourning, festive praise instead of despair” (Isaiah 61:3, NLT).

Christ is not afraid of your ashes. He builds beauty from them.

Disconnection from Status and Respect



Sometimes, the roots of depression and anxiety are not hidden in childhood alone. They are alive in the present moment, shaped by social dynamics, power structures, and the very human need to feel seen and valued. The need for belonging and self-respect is not shallow. It is built into our biology. When that need goes unmet, the nervous system lights up with stress, and the heart begins to sink.

Neuroscientist Robert Sapolsky offers one of the clearest windows into this reality. In his decades-long research on baboon social hierarchies, he observed a pattern that should give all of us pause. Low-status baboons, those shoved to the bottom of the social ladder, began to behave in ways that uncannily resembled human depression. They hung their heads, moved less, stopped grooming, lost appetite, and isolated themselves. And it was not just behavior. Sapolsky found a dramatic surge in cortisol, the primary stress hormone, coursing through their systems. Their brain chemistry mirrored the patterns we see in depressed and anxious humans (Sapolsky, 1992, 2002).

What makes this so profound is that it reveals something ancient about our wiring. Social rank matters, not because we are obsessed with popularity, but because we are designed to live in communities where our contribution and place have meaning. When we believe we do not matter, when we feel ignored or excluded, our bodies interpret that as a survival threat. The result is often depression, anxiety, or both.

Although this pattern is clearly observable in adolescents, we are not speaking here about teenagers. We are speaking to adults, men and women who may still be carrying the same old wounds, the same silent stories of exclusion and social diminishment that began years ago but never truly healed. These hierarchies do not end after high school. They continue into our adult relationships, our workplaces, our churches, our families, and our digital lives. The need to be seen, respected, and valued does not evaporate with age. If anything, the stakes grow higher.

Now throw modern life into the mix. What once was a temporary season of status anxiety in youth has, for many adults, become a chronic undercurrent. The digital age has created a world where the scoreboard

never turns off. Whether it is social media, professional hierarchies, neighborhood comparisons, or subtle status cues in friend groups, adults are constantly reminded of where they rank. And for those who feel unseen, undervalued, or sidelined, the psychological toll can be profound.

You might never call it by name, but you feel it. That creeping sense of invisibility. The quiet belief that your life does not matter as much as someone else's. You scroll past images of success, beauty, and connection, and silently absorb the message that you are falling behind. This kind of chronic social comparison does not just cause dissatisfaction. It can fuel depression and anxiety, especially when your life lacks meaningful avenues for purpose, contribution, or affirmation.

Jean Twenge (2006) speaks to this deeply. Self-esteem, she writes, is not built through applause or attention. It is formed through real-world mastery, through doing hard things, making a difference, and becoming competent in something that matters. Adults, just like adolescents, need to know that their life has weight, that their effort makes a dent in the world, that they can still grow, contribute, and earn respect in real and lasting ways.

When those opportunities are stripped away, through job loss, toxic workplaces, fractured relationships, or quiet social exclusion, many adults begin to lose not only the respect of others but their own internal sense of dignity. And that is where depression and anxiety often take root. Not in one traumatic event but in the slow erosion of value, identity, and place.

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This is not about ego. It is not about being impressive or achieving status. It is about the sacred human need to belong, contribute, and be seen. Without it, the nervous system stays on high alert. Cortisol rises. The body grows weary. And the soul begins to flicker under the weight of feeling unworthy.

As the psalmist cried out, *“Turn to me and be gracious to me, for I am lonely and afflicted. Relieve the troubles of my heart and free me from my anguish”* (Psalm 25:16–17, NIV). That cry is as ancient as Scripture and as present as this morning. It is the honest voice of a soul that knows isolation, invisibility, and the ache of lost dignity. But it is also a cry that is heard. God sees. He turns. And He answers.

Disconnection from Meaningful Values



When a person feels unmoored, when their days are filled with motion but empty of meaning, the soul begins to erode. For adults today, especially in Western culture, this erosion is no longer subtle. It is widespread and devastating. You see it in the hollow look of burnout, the anxious searching for novelty or pleasure, and the quiet despair that shows up in addictions, disordered habits, or flat-out exhaustion.

Tim Kasser (2002), in his research on values and psychological well-being, found something profoundly sobering. When people organize their lives around materialistic goals such as appearance, image, money, social status, or fame, they become significantly more prone to depression, anxiety, and chronic dissatisfaction. These extrinsic values promise happiness, but they deliver emptiness. And in a culture driven by screens, comparison, and consumerism, these false promises are

everywhere. You are told you can curate your best life, but the more you chase validation, the less peace you seem to have.

This reality is especially concerning in adolescence, where the brain is already wired to seek novelty, identity, and belonging. But the damage does not stop there. Adults, too, are suffering in large numbers. In fact, many adults never moved past adolescence in the realm of values. They continue to chase status, beauty, and validation long after their twenties have ended. It is no surprise, then, that we are seeing record levels of adult depression and anxiety, particularly among those who have become disconnected from anything resembling transcendent purpose.

As a culture, we have drifted. We have moved away from deep-rooted structures that gave people identity and stability. Many have walked away from the church. Others have grown disillusioned with tradition or with organized religion. We have told people to find their own truth, but we have failed to provide the tools or the context for doing so. The result is not more freedom. It is more confusion. More loneliness. More despair.

In my (Jeff) work as a therapist, particularly with families, adolescents, and pediatric populations, this theme has surfaced again and again. I would often ask families one simple question: “What are your values?” The answers were usually vague. “To be kind,” or “To work hard.” But when I asked whether those values were ever talked about at the dinner table, written down, taught intentionally, or practiced together, the answer was often no.

One intervention I used with families was to help them create a family coat of arms, an artistic representation of who they were and what they stood for. It became a project in defining identity, and children especially responded to it. They lit up when they realized they could name what they believed. It gave them a sense of pride, direction, and place. That same principle holds true for adults. We are not too old to reclaim clarity about what we believe and why it matters. In fact, it may be one of the most healing things we can do.

When we lose sight of our values, we lose our compass. And when you live without a compass for too long, it becomes easy to drift into despair. Depression creeps in when your days feel meaningless. Anxiety thrives in the absence of direction. If you do not know what you stand for, then every decision becomes overwhelming. Every conflict feels like a threat. Every setback feels like personal failure.

Adults need to reconnect with values that are not imposed by trends or measured by social comparison. They need values that are rooted in something larger than ego or preference. For some, that will mean a return to faith, to a biblical worldview that offers purpose, moral clarity, and hope. For others, it might begin with rediscovering the lost art of community, or committing to service, creativity, hospitality, integrity, or stewardship.

But regardless of where a person starts, the truth remains. We were never meant to live rootless lives. When people are connected to intrinsic values such as love, compassion, purpose, creativity, and responsibility, they thrive. Their suffering has context. Their work has meaning. Their relationships are more resilient. And when suffering

comes, as it always does, they do not collapse. They draw strength from the foundation beneath their feet.

So, the invitation is simple but not easy. Reconnect with your values. Write them down. Talk about them with your children. Display them in your home. Rebuild the structure that modern life has quietly dismantled. In doing so, you might just find that some of the fog begins to lift, and with it, the anxiety and depression that has taken up residence where meaning used to live. It quiets the heart and fills it with the joy of being connected with the God who created all things.

Then you will call upon Me and come and pray to Me, and I will listen to you. You will seek Me and find Me when you seek Me with all your heart.”
(Jeremiah 29:12-13 NIV)

Disconnection from the Natural World



Our children no longer learn how to read the great Book of Nature from their own direct experience or how to interact creatively with the seasonal transformations of the planet. They seldom learn where their water comes from or where it goes. We no longer coordinate our human celebration with the great liturgy of the heavens.

-Wendell Berry

Sometimes, healing does not begin in a therapist's office or with a new journal or book. Sometimes, it begins with stepping outside and standing still long enough to hear the wind move through trees or watch the way light scatters on the surface of water. Sometimes, healing begins by coming back to the world God made—not the digital one we created, but the real one we were made for.

Many of us have forgotten this. We wake up to artificial light, move through our day surrounded by screens and concrete, and fall asleep to

the low hum of electronics. We move faster, work longer, scroll endlessly. But we rarely step outside without an agenda. We rarely notice the living world beyond our own. Nature becomes a backdrop, not a participant in our lives. And that disconnection comes with a cost.

Nature is not a luxury. It is a biological necessity.

Research affirms what our souls have long known. Berman et al. (2012) demonstrated that even brief walks in natural environments—not hours of hiking, just a stroll through trees or along a riverbank—can lead to marked improvements in mood, concentration, and cognitive clarity. These effects are particularly strong in those struggling with depression. Nature appears to quiet the default mode network; the brain system associated with rumination and anxious self-focus. In other words, it gently lifts the mental fog and eases the internal noise.

And yet, many people, especially teens and young adults, now spend over 90 percent of their time indoors, disconnected from the natural world, immersed in artificial light and curated, filtered realities. The human brain, especially in its formative years, was never designed to be confined within walls and glowing screens.

Richard Louv (2005) called this phenomenon “*nature deficit disorder*,” not as a clinical diagnosis but as a cultural wound. When people are severed from wildness, wonder, and the grounding rhythms of God’s creation, they become more anxious, more distracted, and more lost. Teens who never touch soil, hear birdsong, or feel the stillness of a forest are not just missing a recreational experience, they are missing neural nourishment. Adults, too, suffer in similar ways. We get stuck

inside, physically and emotionally, and our bodies begin to echo that stuckness.

In my own clinical work (Jeff's work), I have seen time and again that the simple act of encouraging someone to walk outdoors, to breathe real air, or to sit near water can serve as a catalyst for change. Not because nature is magic but because it is *ordered*. It brings us back into harmony with something deeper than ourselves. It resets the nervous system. It reminds us that we are part of something vast and beautiful and still unfolding.

And it is not just biological. It is spiritual.

The book of Job speaks to this with profound clarity. *"But ask the animals, and they will teach you, or the birds in the sky, and they will tell you... In his hand is the life of every creature and the breath of all mankind"* (Job 12:7–10, NIV). God's creation is not incidental. It is instructional. It is alive with His presence. To be in nature is to return, in some small way, to the garden we lost and to the rhythms that still whisper of Eden. *"Shout for joy, O heavens; rejoice, O earth; burst into song, O mountains! For the Lord comforts His people and will have compassion on His afflicted ones"* (Isaiah 49:13, NIV)"

When we step outside and slow down, we remember who we are. We remember that healing is not always about doing more, fixing faster, or thinking harder. Sometimes, it is about receiving. Listening. Letting beauty work on us. Letting stillness stretch our breath and open our hearts. *"The Lord is my shepherd; I shall not be in want. He makes me lie down in green pastures, He leads me beside quiet waters, He restores my*

soul. He guides me in paths of righteousness for His name's sake” (Psalm 23:1-2 NIV).

For those who suffer from depression and anxiety, reconnecting with nature is not a silver bullet. But it is one powerful thread in the tapestry of healing. It can quiet the overactive mind. It can lower cortisol. It can invite awe back into a weary spirit. And it can provide something most of us didn't realize we were starving for—real, unscripted, untamed presence.

So, step outside. Step barefoot onto the grass. Sit with the silence. Watch the clouds. Let your soul recalibrate. You were made for this. And creation is waiting.

Disconnection from Hope and the Future



Hope is not wishful thinking. It is not naïve optimism or positive vibes. Hope is oxygen. When it goes missing, we suffocate slowly.

Many adults today are doing just that, suffocating under the weight of hopelessness they cannot always name. Life has become a blur of responsibilities, disruptions, and unanswered questions. People go through the motions, but inside, they are losing connection with something essential. They do not look forward to tomorrow. They have stopped imagining something better. They no longer believe that change is possible. They are alive but not really living.

This quiet erosion of the future is not always loud or dramatic. Sometimes, it shows up as chronic fatigue, irritability, withdrawal, or a gnawing sense of dread. Other times, it looks like perfectionism or

overachievement, a frantic attempt to outrun the fear that nothing they do will matter. Beneath both postures, collapse and overdrive, is the same hollow center, a loss of meaningful hope.

Psychologist C.R. Snyder (1991) described hope as more than just a feeling. He defined it as a combination of agency and pathways, the will and the way. Agency is the belief that you have the power to move toward a goal. Pathways are the strategies and steps that get you there. When both are present, hope thrives. But when either one is missing, despair quietly moves in.

This theory maps perfectly onto the inner world of depression and anxiety. When a person feels powerless and unable to take action, their mind begins to spiral into paralysis. When a person feels there are no paths forward, even their strongest will can collapse. Over time, they stop trying. They stop dreaming. They stop believing anything can change.

This reality is not limited to teenagers. Adults are especially vulnerable to this kind of psychological foreclosure. The longer someone has lived without progress, or with repeated failure, or through seasons of chronic stress or trauma, the easier it is to internalize the message that tomorrow will simply be more of the same. Eventually, the soul begins to shut down.

And let's be honest. We live in a cultural moment that does not help. Institutions have eroded. Public trust is at an all-time low. The future feels uncertain in every direction. People carry silent grief over what the world has become or what their lives have not become. Many are still haunted by wounds that never got time to heal. Some feel stuck in

jobs that deplete them. Others are reeling from lost relationships, financial pressures, or just the sense that they are running out of time.

And all of it adds up to one painful question: What is the point?

But the truth is, we were never meant to live without hope. We were never meant to white-knuckle our way through life without vision, direction, or a greater purpose.

God designed the human heart to live forward, to aim toward something bigger than the moment we are in. That forward motion is not about chasing success or achievement. It is about knowing that your life still has meaning, that your effort still counts, and that your future is not yet finished.

The Apostle Paul captured this perfectly when he wrote, *“May the God of hope fill you with all joy and peace as you trust in him, so that you may overflow with hope by the power of the Holy Spirit”* (Romans 15:13, NIV).

Even if your hope has gone quiet, it is not gone forever. With the help of God, it can return. You can learn to dream again. You can begin to move again. You can believe, once more, that the story is not over. Because it isn't. *“Let us hold unswervingly to the hope we profess, for He who promised is faithful”* (Hebrews 10:23 NIV).

Disconnection from Faith and Meaning



Johann Hari identified many vital forms of disconnection that feed modern despair. He wrote of our loss of meaningful work, community, hope, nature, and purpose. But there is one form of disconnection that, while not explicitly named in his list, we believe deserves to be included. In fact, it may be the most important of all.

We are speaking of the spiritual.

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When a person loses connection with the transcendent, when they can no longer sense God's presence, love, or guidance, something vital inside begins to dim. Adults who once believed they were part of a larger story now find themselves adrift. Others never had that story to begin with and carry a quiet ache that they cannot explain. They live untethered, disconnected not just from people or purpose but from the One who created them.

This spiritual vacuum is not merely philosophical. It is physiological and psychological. As Dr. Lisa Miller (2021) has demonstrated in her groundbreaking research, a strong spiritual life is one of the most robust protective factors against depression. In adolescents and adults alike, spiritual engagement reduces the risk of suicide, increases resilience, and dramatically improves the brain's capacity to process trauma. Spirituality does not bypass suffering. It reframes it. It says, you are not alone, your pain is not pointless, and your story is not over.

And that message matters more than ever.

We live in a time when organized religion is often viewed with suspicion. Church attendance has declined. People claim to be spiritual but not religious. Yet in this individualized spirituality, many find themselves more isolated, not less. The deep communal and theological roots that once grounded generations are now fractured. People are free to choose their own path, but many no longer know where to begin.

In my (Jeff) clinical work, it became evident that when spiritual language and relationship with God were removed from the healing process, something essential was missing. People could improve functionally, but their inner world remained dry. The fire of hope never

quite returned. But when the soul was given permission to speak again, when we brought Scripture, prayer, and the presence of God into the therapy room, something shifted. Healing became not just behavioral but redemptive.

Depression and anxiety are often misunderstood as purely chemical problems or purely psychological problems. But many times, they are cries of the soul, silent alarms going off inside us, saying something is wrong. Something is missing. The NeuroFaith® model recognizes this. It sees healing not just as a clinical process but as a relational, spiritual, and embodied one. We are not brains in jars. We are image-bearers. And we are not meant to heal alone.

All of these disconnections, whether from meaning, people, nature, or God, are invitations. They are not indictments. They are not moral failures. They are the body and the spirit calling us back to what we were made for. Community. Purpose. Stillness. Hope. Eternity. And God Himself.

Spiritual reconnection does not require perfection or ritual. It begins with turning. Turning away from the lies and deceptions of this world. Turning toward the presence of God, even with doubt. Turning toward Scripture, even with questions. Turning toward love, even when you feel unworthy of it. The invitation is open. And the moment we take even the smallest step; we find that we were never abandoned.

God's words to His people are timeless, and they remain true today:

“Do not fear, for I have redeemed you. I have summoned you by name. You are mine. When you pass through the waters, I will be with you, and when you pass through the rivers, they will not sweep over you. When you walk

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through the fire, you will not be burned. The flames will not set you ablaze” (Isaiah 43:1–2, NIV). *“For God did not appoint us to suffer wrath but to receive salvation through our Lord Jesus Christ”* (1 Thessalonians 5:9 NIV),

We will explore the spiritual dimensions of healing more deeply later in this book. But for now, let this truth settle gently in... you are not alone. And you never have been. You are not forgotten. You are not beyond reach. There is a voice that calls you by name. And even in your darkest moments, that voice does not go silent. *“Before I formed you in the womb I knew you, before you were born I set you apart”* (Jeremiah 1:5 NIV).

Let us never underestimate the power of reconnection. For sometimes, all it takes is one prayer, one verse, one sacred moment of stillness, and the tide begins to turn.

Cause Two

Hijacked Minds

How Pornography is Rewiring the Brain



Vice is a monster of so frightful mien
As to be hated needs but to be seen
Yet seen too oft, familiar, with her face,
We first endure, then pity, then embrace.

-Alexander Pope's essay on man

In the words of Stephen Arterburn, world renowned expert on sexual addiction, *"I don't know of any plague to ever reach into the homes and families all over the world and create as much damage or*

heartaches than the struggle of lust, affairs, pornography, perversion, and sexual addiction. It seems that everywhere I look, it gets worse and worse. The Internet exploded the problem, and now cell phones transport pornography more portably than the computer and facilitates affairs with greater accessibility and secrecy” (cited in Roberts, 2008, p.9).

When I entered the field of psychology over three decades ago, I never imagined that pornography would become one of the most urgent emotional and neurological health crises facing men today. What was once hidden behind seedy bookstores and hushed conversations has become mainstream. Pornography is no longer an uncomfortable sidebar. It is the main event in the collapse of male emotional and relational well-being. We are dealing with a cultural plague that is literally rewiring the brain, hollowing out the soul, and tearing apart marriages, families, and faith.

The Adolescent Hook: When It All Begins

For most men, the story doesn't begin in adulthood. It starts in adolescence. Often before age ten. Covenant Eyes (2015) reports that 9 out of 10 boys are exposed to pornography before the age of 18, and the average age of first exposure is just eight years old. At that stage, the brain is still undergoing massive growth and restructuring. The prefrontal cortex—the part of the brain responsible for decision-making, impulse control, and long-term planning—is still under construction.

Ten of the most alarming statistics about teens and pornography

<https://www.covenanteyes.com/2015/04/16/10-alarming-stats-about-teens-and-pornography/>

9 out of 10 boys and 6 out of 10 girls are exposed to pornography online before the age of 18.

90% of teens and 96% of young adults are either encouraging, accepting, or neutral when they talk about porn with their friends.

The first exposure to pornography among boys is 8 years old, on average.

83% of boys and 57% of girls are exposed to group sex online.

32% of boys and 18% of girls are exposed to bestiality online.



Ten of the most alarming statistics about teens and pornography cont.

<https://www.covenanteyes.com/2015/04/16/10-alarming-stats-about-teens-and-pornography/>

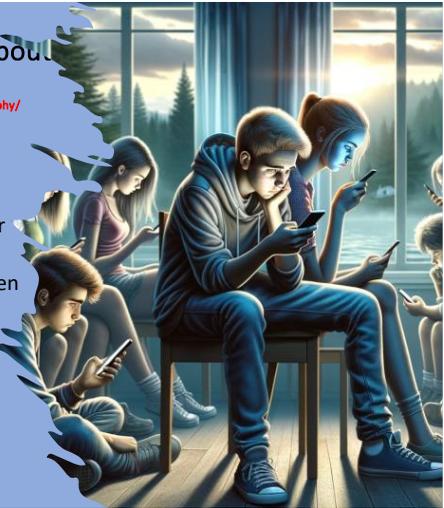
15% of boys and 9% of girls have seen child pornography online.

71% of teens have done something to hide their online activity from their parents.

28% of 16-17-year-olds have unintentionally been exposed to pornography online.

20% of 16-year-olds and 30% of 17-year-olds have received a sext.

39% of boys and 23% of girls have seen sexual bondage online.



To expose that fragile, rapidly developing brain to high-speed, hyper-stimulating pornography is like lighting a fire in dry brush. It changes everything. What begins as curiosity becomes compulsion. What starts as secret fascination evolves into shameful addiction. And for many boys, this secret struggle follows them into adulthood. They grow up, but the wiring remains. The habits remain. The shame calcifies.

The man becomes a husband or a father, or tries to, while carrying an addiction that has etched itself into his neurochemistry. He may not even see it as an addiction. He may call it stress relief, or "just something I do sometimes." But the emotional toll tells the truth.

The Adult Fallout: Depression, Disconnection, Despair

Study after study confirms what clinicians see every day. Pornography use in men is linked to significantly higher rates of depression, anxiety, guilt, and relational disconnection. Dr. David Skinner's study of 450 adult users found that daily users scored an average of 21 on the Beck Depression Inventory—compared to just 6.5 in the general population.

The infographic is set against a dark background. On the left, the title "Excessive Pornography and Depression" is written in white, with a red arrow pointing right. Below the title is a small image of a person looking at a screen in a dimly lit room. To the right, a large white arrow points downwards from a light brown box to an orange box. The light brown box contains text from MetalHelp.net (2016) about compulsive users experiencing guilt, depression, and anxiety. The orange box contains text from Weaver et al. (2011) about greater depressive symptoms and poorer health in users.

Excessive Pornography and Depression

As noted in [MetalHelp.net \(2016\)](#), researchers have concluded that compulsive and at-risk cybersex users experience **guilt, depression, and anxiety**. The writers conclude that this may both result from pornography usage and perpetuate further behavior.

Weaver et al. (2011) found that adult users of pornographic material reported **greater depressive symptoms, poorer quality of life, more mental- and physical-health diminished days, and lower health status** than compared to nonusers.

These aren't isolated findings. They are part of a growing body of evidence. Weaver et al. (2011) found that regular pornography users report greater depressive symptoms, poorer physical health, more days of mental and emotional dysfunction, and lower overall life satisfaction.

Gary Wilson's *Your Brain on Porn* dives into the neurobiology of this crisis. Pornography hijacks the reward system of the brain. It floods the system with dopamine, and over time, the brain begins to require more novelty, more shock, more stimulation just to feel arousal. That's why what started with curiosity can end up in darkness—violent porn, fetish material, or content that directly violates a person's moral code.

The Sexual Price: Dysfunction and Deadening

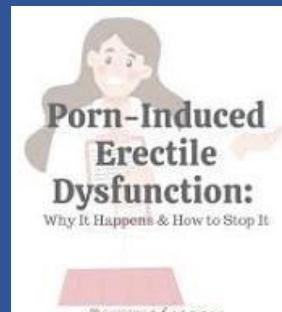
We are facing a new kind of epidemic: men in their twenties and thirties who cannot perform sexually with a real partner. What was once an issue almost exclusively seen in older men has exploded. Rates of erectile dysfunction in men under 40 have gone from 2 to 3 percent (de Boer et al., 2004) to as high as 33 percent (Wilson, 2017; Park, 2016).

A Canadian study (O'Sullivan et al., 2016) found that nearly half of young men aged 16 to 21 report erectile dysfunction. Forty-six percent report low sexual desire. Nearly one-quarter report difficulty climaxing.

The Impact of Pornography on Sexuality

Profound sexual side effects:

- Between 1948 and 2002, the historical rates for ED in men under 40 were consistently around **2% to 3%** and did not go up very much until age 40. (de Boer et al., 2004). However, as noted by Wilson (2014), at least six studies have found **ED rates of about 34% to 39% in young men**, which constitutes a staggering **1000% increase** in just the last 15 years (Park, 2016).
- In fact, adolescents are suffering disproportionately as noted by in a Canadian study which showed that problems in sexual functioning are sadly higher in adolescent males than in adult males. In a two-year period **78.6% of males aged 16-21** reported a sexual problem during partnered sexual activity (O'Sullivan et al., 2016):
 - Erectile dysfunction - **41%**
 - Low sexual desire - **46%**
 - Difficulty climaxing - **24%**
- These problems have led some teens to suicide.**



These are not isolated physical issues. These are neurological issues. These are emotional issues. These are soul issues. And many men carry this silently, shamed and confused, believing something is wrong with them without understanding that the damage was being done, slowly and steadily, from the moment they were handed an unfiltered internet connection in adolescence.

Escalation and Identity Disruption

The brain's craving for novelty doesn't stop. Over time, users escalate to content they once found repulsive. Downing et al. (2016) found that 21 percent of heterosexual men view gay porn, and 55 percent of gay men view straight content. This isn't about orientation. It's about novelty addiction. Many men report shock at what they now find arousing. The resulting shame and confusion feed depressive spirals and self-loathing.

Some men begin questioning their masculinity. Others start doubting their own moral compass. Many feel like they've betrayed something sacred inside themselves, and in many cases, they have. That's what we call moral injury. And moral injury is a major driver of depression.

The Spiritual Vacuum

Pornography promises satisfaction but delivers emptiness. It fragments the soul. It numbs the spirit. It hollows out our capacity for real love. For connection. For joy. And it isolates men from their Creator. As one client put it to me, "I used to feel God's presence. Now I just feel static."

Men who once had vision and fire now feel foggy and passive. They struggle to feel deeply. They grow anxious in real intimacy. They feel

dead inside. Pornography is not just lust. It's grief in disguise. It's a counterfeit form of intimacy that leaves a man lonelier than before.

What's at Stake

This isn't about prudishness or shame. It's about war. A war on male identity, mental clarity, sexual integrity, spiritual vitality. Men are losing their marriages, their peace, their purpose, and their minds.

And make no mistake, the enemy doesn't kick the door down anymore. He slips in quietly, silently, through a screen. And once he's in, he starts taking things. One click at a time.

First, he takes your **connection**. Pornography rewires the brain in such a way that normal, loving intimacy with a real partner becomes foreign, even frustrating. Your partner's touch doesn't excite you anymore. Her realness can't compete with the endless novelty on the screen. Emotional closeness feels less compelling than dopamine-driven arousal. You become disengaged, disinterested, and ultimately disconnected—from her, from yourself, and from God.

Then it takes your **sexuality**. You may still crave sex, but the drive gets twisted. Your desires become shaped by what you watch, not who you love. Before long, you find yourself aroused by things that once disgusted you. You may feel confused. Ashamed. Isolated. And you probably won't talk to anyone about it, which only deepens the hole.

Next, it takes your **potency**. Not just sexual potency, though that's often the first thing to go. We're talking about the full force of your masculine presence—your confidence, your energy, your strength of will. Porn deadens a man. It makes him passive, restless, and checked

out. It feeds anxiety. It fuels irritability. It creates a kind of low-grade despair that's hard to shake and even harder to name.

Then it takes your **soul**. Slowly, silently, it siphons away your passion, your joy, your sense of divine purpose. You begin to feel spiritually numb. You lose clarity about who you are and who you're called to be. Porn doesn't just fracture your attention, it fractures your identity. It is a counterfeit form of intimacy that leaves you feeling hollow, confused, ashamed, and condemned.

And ultimately, it takes your **mental health**. Make no mistake, long-term pornography use is a driver of massive depression. Men caught in its grip report persistent dysphoria, emotional blunting, anxiety, and deep loneliness. You feel disconnected from others, from God, from life. You are no longer authentically related to the people you love. The guilt builds, the anxiety increases, and a slow, gray fog settles in.

That's the path.

It doesn't plateau. It escalates.

And if that's you, if even part of this describes where you are—then this is our plea: get help. Please. Not because we're here to guilt you. Not because we want to heap shame on you. But because we've been there. We've sat with too many men whose lives are quietly imploding under the weight of this silent addiction.

This book isn't about moralizing. It's about saving your life. We are sounding the alarm because we care about your joy, your marriage, your calling, your soul.

There is a way out. It's not easy, but it is possible. With truth, accountability, neuroscience, trauma healing, and the redemptive power of faith, healing can happen. Not just coping, **healing**. You can be restored. Your mind can be renewed. Your relationships can be rebuilt. Your purpose can come alive again.

But first, you have to be honest. If this has a grip on you, you must confront it. Don't minimize it. Don't rationalize it. Don't let it steal another year of your life.

Freedom begins with truth.

And if you're reading this, maybe that freedom starts today.

This chapter is not about condemnation. It's about clarity. If you are caught in this struggle, know this: you are not alone. And you are not broken beyond repair. There is a way back. The NeuroFaith® model offers a practical, spiritual, and neuroscience-informed approach to healing the damage that pornography inflicts. It's a path of honesty, humility, and grace. And it works.

We are not here to shame men or women. We are here to call you back to who you really are. Because you are not what you watch. You are not your past. You are not your lowest moment. You are God's beloved, created for connection, strength, real joy, and authentic love. *"Instead of shame and dishonor, you will enjoy a double share of honor. You will possess a double portion of prosperity in your land, and everlasting joy will be yours"* (Isaiah 61:7 NLT).

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This book will walk you through what it means to reclaim your mind, your body, and your soul. This battle is worth fighting. And you're not fighting alone.

Healing is not only possible. It's already beginning.

Cause Three

Trauma

The Hidden Epicenter of Despair and Addiction



Of all the causes of depression and anxiety, trauma may be the most devastating and the most overlooked. Trauma, particularly in the form of child maltreatment such as neglect, emotional abuse, physical harm, and sexual violation, has been identified as a major contributor to emotional dysregulation and poor mental health outcomes across the lifespan. It is one of the most significant risk factors not only for depression but also for post-

traumatic stress disorder and a wide array of emotional and relational struggles (McLaughlin et al., 2012, 2013).

Multiple studies confirm that trauma compromises the capacity to regulate emotions, starting in early childhood and continuing well into adolescence and adulthood (Langevin et al., 2016; Shields & Cicchetti, 1997; Briere & Rickards, 2007; Dunn et al., 2018). Trauma occurs not just from what we go through, but because of the way we are left to carry that experience, isolated, unsupported, unseen. As Barta (2018) explains, trauma overwhelms the nervous system and prevents integration, leaving the body in a perpetual state of hyperarousal or collapse.

Perhaps one of the most insidious effects of unresolved trauma is the formation of negative core beliefs. These deeply ingrained assumptions, such as "I am not lovable," "I am not worthy," or "I have no value," become etched into the brain's implicit memory systems, particularly within the default mode network (DMN), which governs self-referential thought. Over time, the DMN becomes a carrier of a toxic internal narrative. These are not just painful thoughts, they are internalized lies, what Scripture might call the lies of the enemy, who *"was a murderer from the beginning... for there is no truth in him"* (John 8:44, NIV). These distorted beliefs can shape how both adolescents and adults approach life, relationships, success, and failure. For teens, whose brains are still under construction, and for adults whose early injuries were never addressed, these beliefs can become the lens through which all future experiences are filtered.

As Fletcher points out, trauma is not stored as a narrative or memory alone but in the body itself. It is carried in the nervous system and in relational habits. Those who carry trauma may appear avoidant, perfectionistic, overly compliant, or oppositional, not because they are defiant, but because they are trying to survive. The world feels threatening, and their actions are defensive, not disobedient.

These trauma-driven beliefs quietly sabotage every area of life. They distort how people see themselves, how they interpret others' intentions, and how they engage in relationships. Social cues may feel threatening, academic or occupational challenges may seem overwhelming, and intimacy may feel unsafe. These individuals, whether adolescents or adults, often carry invisible scripts of shame and fear that stain their sense of identity for decades, unless they are directly addressed through healing relationships and integrative therapy.

The impact of trauma is not limited to the emotional realm. The Adverse Childhood Experiences (ACE) Study by Felitti et al. (1998, 2009, 2014) revealed that childhood trauma is directly correlated with increased risk for physical illnesses, substance abuse, and early death. Emotional abuse, in particular, was found to be more strongly associated with adult depression than even sexual abuse. This emphasizes that the way a child is emotionally treated by caregivers is a profound predictor of mental health.

The ACE study identifies ten categories of childhood trauma, including various forms of abuse, household dysfunction, and neglect. For each category of trauma experienced, the risk for depression, anxiety,

suicide, and chronic illness increased significantly. Those with an ACE score of 7 or more were found to be over 3,000 percent more likely to attempt suicide (Felitti et al., 2009). The cumulative effect of trauma reshapes the brain, the body, and the belief systems.

Adverse Childhood Experiences

The ten reference categories experienced during childhood or adolescence are listed below, along with their prevalence in parentheses (Felitti and Anda, 2009):

Abuse

- Emotional – recurrent threats, humiliation (11%)
- Physical - beating, not spanking (28%)
- Contact sexual abuse (28% women, 16% men; 22% overall)

Household dysfunction

- Mother treated violently (13%)
- Household member was an alcoholic or drug user (27%)
- Household member was imprisoned (6%)
- Household member was chronically depressed, suicidal, mentally ill, or in psychiatric hospital (17%)
- Not raised by both biological parents (23%)

Neglect

- Physical (10%)
- Emotional (15%)

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Trauma experts differentiate between "**Big T**" trauma, horrific single events such as violence or disaster, and "**little t**" trauma, repeated relational wounds such as bullying, chronic criticism, or emotional neglect. However, as many in the trauma field have noted, there is nothing "little" about the impact of little t traumas. They quietly devastate. In my (Jeff) own work as a psychologist, I have seen that consistent absence of attunement, of being truly seen and valued by a parent or adult, is often more damaging than overt acts of aggression.

Big T and Little t Trauma



Big T Trauma:

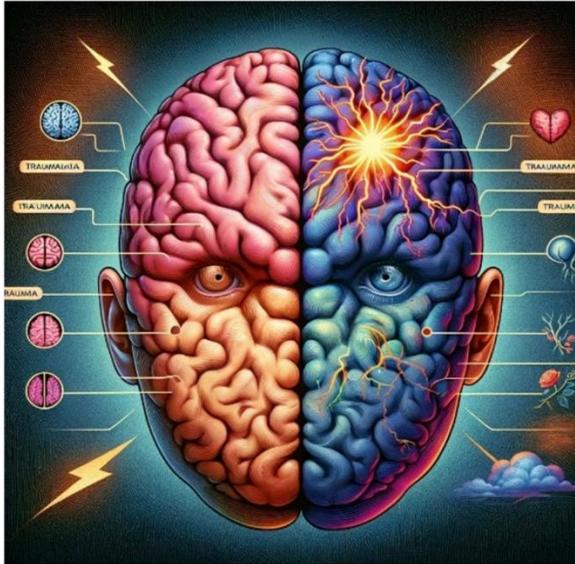
- Natural disasters (e.g., earthquakes, hurricanes)
- Serious accidents/life-threatening illnesses
- Violent personal assaults (e.g., rape, mugging, domestic violence)
- Military combat or war experiences
- Terrorist attacks
- Witnessing a death or severe injury
- Being held hostage or kidnapped
- Torture
- Severe childhood neglect or abuse (physical, sexual, or emotional)

Little t Trauma:

- Bullying or harassment
- Emotional abuse or neglect
- Loss of a significant relationship (e.g., breakups, divorce)
- Non-life-threatening injuries
- Chronic low-level stressors (e.g., ongoing financial stress, job stress)
- Minor surgery or medical procedures
- Legal issues (e.g., lawsuits, custody battles)
- Moving to a new location or frequent changes in living situations
- Persistent conflict in personal or professional relationships

Barta (2015) noted that trauma is not necessarily caused by bad parents but by emotionally unavailable ones. Many parents do the best they can with the tools they have, but when they fail to respond to the emotional needs of their children, the results can be quietly catastrophic. Children raised without emotional mirroring learn to hide, minimize, or distort their emotional experience, skills that later fuel depression, anxiety, addiction, and relational dysfunction.

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Trauma changes the brain neurologically

Dr. Peter Levine (2008) writes, “Trauma is about loss of connection, to ourselves, our bodies, our families, others, and the world around us.” That loss of connection often happens subtly over time. People learn to avoid feelings, people, and places that trigger pain. But in doing so, they also lose access to joy, vitality, and the ability to dream.

Most important to normal development is **“social engagement,”** which is the ability to know, understand, regulate, and express emotions in the present moment. Even though everyone is born with a social engagement system (i.e., a neurological system that promotes human connection), we know that early trauma can disrupt normal development. Anda et al. (2018) note, “Early adverse experiences may disrupt the ability to form long-term attachments in adulthood. The unsuccessful search for attachment may lead to sexual relations with multiple partners with resultant promiscuity and other issues related to

sexuality.” As a result of adverse developmental trauma, the ensuing loss of connection with our inner self, our bodies, others, and the world around us, we are predisposed to engage in maladaptive and/or addictive behaviors to relieve the emotional dysregulation that torments us.

As Dr. Felitti highlighted in an outstanding 2009 lecture, studies reveal numerous alarming long-term consequences of being exposed to ACEs, with the severity of these outcomes increasing exponentially with the number of ACEs experienced. The results indicate that for every category of traumatic experience we have had as a child, we are dramatically more likely to be depressed as an adult. If we have ACE scores of four or higher, we are 260% more likely to have chronic obstructive pulmonary disease than someone with a score of zero, 240% more likely to contract hepatitis, 460% more likely to experience depression, and 1,220% more likely to attempt [suicide](#). If we have had six categories of traumatic events as a child, we are five times more likely to become depressed as an adult, and if we have had seven categories, we are a terrifying 3,100 percent more likely to attempt suicide as an adult (Felitti et al., 2014; Felitti 2004; Felitti and Anda, 2009; Felitti et al., 1998).

ACE Scores and Clinical Outcomes

As Dr. Felitti in a 2009 lecture points out, studies reveal many shocking long-term horrible outcomes when we are exposed to ACEs and this raises exponentially according to how many of them, we have been exposed to.

The results indicate that for every category of traumatic experience we have had as a child, we are dramatically more likely to be depressed as an adult.

If we have ACE scores of 4, we are:

- 260% more likely to have chronic obstructive pulmonary disease than someone with a score of 0
- 240% more likely to contract hepatitis, 460% more likely to experience depression
- 1,220% more likely to attempt suicide

If we have ACE scores of 6, we are:

- Five times more likely to become depressed as an adult

If we have ACE scores of 7, we are :

- 3,100 percent more likely to attempt suicide as an adult (Felitti et al., 2014; Felitti 2004; Felitti and Anda, 2009; Felitti et al., 1998).

In the 2009 lecture, Dr. Felitti offered the following graphs, which nicely detail the dramatic impact that ACEs have on our society:

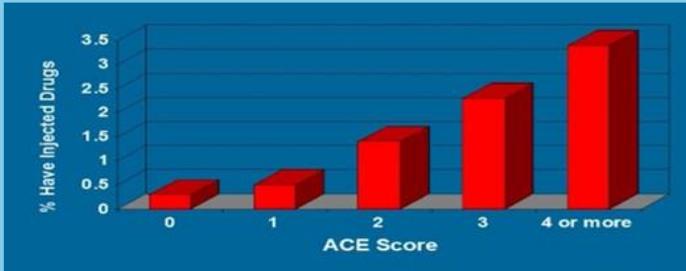
Childhood Experiences vs Adult Alcoholism



Dr Vincent Felitti (2009)

<https://www.youtube.com/watch?v=KEFFThbAYnQ>

ACE Score and Intravenous Drug USE



Dr Vincent Felitti (2009)

<https://www.youtube.com/watch?v=KEFFthbAYnQ>

So how does trauma take root so deeply in our lives, and why is it so difficult to remove? Trauma does not remain in one place; it spreads and embeds itself through multiple pathways that shape who we are and how we live. It shapes the way we relate to others and the patterns we repeat in our closest relationships. It influences how we learn from those around us and how unhealthy behaviors and beliefs get passed from one generation to the next. And it even leaves its mark at the biological level, changing the way our genes are expressed and carried forward.

These three pathways show us why trauma is so powerful, and they also reveal where the greatest opportunities for healing can be found:

- **Attachment**
- **Social Learning**
- **Epigenetics**

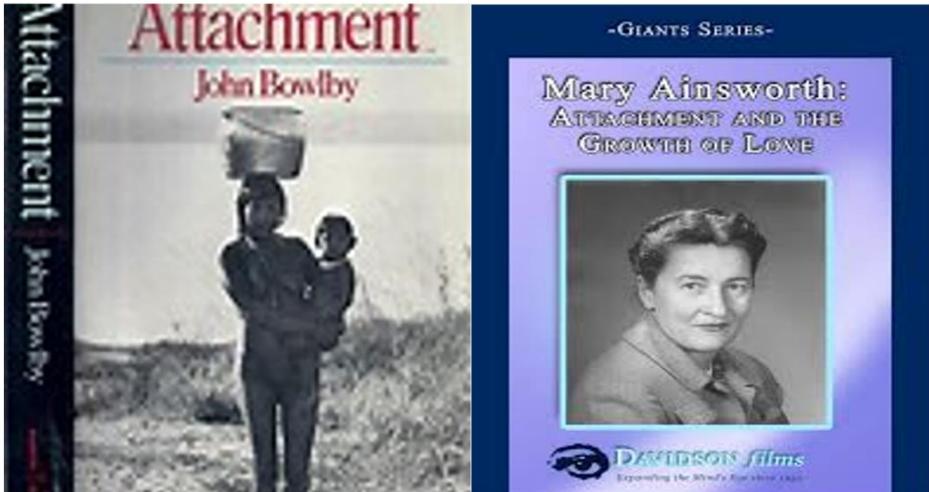
One: Attachment



Attachment is a really big deal and has lifelong implications for all of us. Safe and secure attachment styles are absolutely necessary for developing healthy and secure relationships, emotional health, and the ability to regulate our emotions. Two early pioneers in this field, Dr. John Bowlby (1969) and Dr. Mary Ainsworth (1973), carved the way to our understanding of attachment and child development theory. They defined attachment as a deep and enduring emotional bond that leads to connections between us across time and space. This attachment is not always mutual and can travel in only one direction. For example, a child can attach to a parent, but the parent does not always attach to the child or vice versa (Kain & Terrell, 2018).

The importance of secure attachment echoes a biblical truth. As *Proverbs 22:6* (NIV) says, “Start children off on the way they should go, and even when they are old they will not turn from it.” This verse reflects the profound impact early relationships have on a person’s development

and well-being throughout their life. When children form strong, healthy bonds early on, it can set a foundation that lasts into adulthood.



By way of background on Dr. Bowlby, in an interview with Dr. Milton Stenn in 1977, Bowlby explained that his career began in the field of medicine, following in the footsteps of his father, who was a well-known surgeon in London, and John explained that his father encouraged him to study medicine at Cambridge. He followed his father's suggestion but was not terribly interested in anatomy and natural sciences. However, during his time at Trinity College, he became particularly interested in developmental psychology, which led him to give up medicine by his third year. When John left medicine, he accepted a teaching opportunity at a school called Priory Gates for six months, where he worked with maladjusted children. John explained that one of the reasons why he went to work at Priory Gates was because of the influence of an “intelligent” staff member, John Alford. John explained that his experience at Priory Gates had been very influential on him. *"It suited me very well because I found it interesting."*

And when I was there, I learned everything that I have known; it was the most valuable six months of my life, really. It was analytically oriented."

He added that the experience at Priory Gates was extremely important to his career in research as he learned that the problems of today should be understood and dealt with at a developmental level (Kanter, 2007).

Bowlby was not the only act in town as he collaborated extensively with Dr. Mary Ainsworth. Mary was born in Glendale, Ohio. When she was 15, she read William McDougall's book, *Character and the Conduct of Life*, which inspired her to pursue psychology. While teaching at Johns Hopkins, Mary began working on creating a means to measure attachments between mothers and their children. It was this that led her to develop her famous "Strange Situation" assessment, in which a researcher observes a child's reactions after a mother briefly leaves her child alone in an unfamiliar room. The child's reaction after the separation and upon the mother's return revealed important information about attachment. Based on her observations and research, Mary determined three main styles of attachment: secure, anxious-avoidant, and anxious-resistant. Since these initial findings, her work has spawned numerous studies into the nature of attachment and the different attachment styles that exist between children and their caregivers (VeryWellMind, 2019)

Rudolph Schaffer and Peggy Emerson (1964) analyzed the number of attachment relationships that infants form in a longitudinal study with 60 infants. In their study, infants were observed every four weeks during the first year of life, and then once again at 18 months. Schaffer and Emerson determined that four distinct phases of attachment emerged:

Pre-attachment stage: From birth to three months, infants do not show any particular attachment to a specific caregiver. The infant's signals, such as crying and fussing, naturally attract the attention of the caregiver and the baby's positive responses encourage the caregiver to remain close (Schaffer & Emerson, 1964).

Indiscriminate attachment: From around six weeks of age to seven months, infants begin to show preferences for primary and secondary caregivers. During this phase, infants begin to develop a feeling of trust that the caregiver will respond to their needs. While they will still accept care from other people, they become better at distinguishing between familiar and unfamiliar people as they approach seven months of age. They also respond more positively to the primary caregiver (Schaffer & Emerson, 1964).

Discriminant attachment: At this point, from about seven to eleven months of age, infants show a strong attachment and preference for one specific individual. They will protest when separated from the primary attachment figure (separation anxiety) and begin to display anxiety around strangers (stranger anxiety) (Schaffer & Emerson, 1964).

Multiple attachments: After approximately nine months of age, children begin to form strong emotional bonds with other caregivers beyond the primary attachment figure. This often includes the father, older siblings, and grandparents (Schaffer & Emerson, 1964).

As nicely summarized by Lyons-Ruth (1996), the basic attachment styles culminating from John Bowlby and Mary Ainsworth's research

and the fourth by Drs. Mary Main and Judith Solomon's (Main & Solomon, 1986) work include:

Secure attachment: Secure attachment is marked by distress when



separated from caregivers and joy when the caregiver returns. Remember, these children feel secure and are able to depend on their adult caregivers. When the adult leaves, the child may be upset, but he or she feels assured that the parent or caregiver will return. When frightened, securely attached children

will seek comfort from caregivers. These children know their parent or caregiver will provide comfort and reassurance, so they are comfortable seeking them out in times of need (Lyons-Ruth, 1996).

Ambivalent attachment: Ambivalently attached children usually do not

appear too distressed by the separation, and, upon reunion, actively avoid seeking contact with their parent, sometimes turning their attention to play objects on the laboratory floor. This attachment style is considered relatively uncommon, affecting an estimated 7 percent to 15 percent of U.S. children. Ambivalent



attachment may be a result of poor parental availability. These children cannot depend on their mother (or caregiver) to be there when the child is in need (Lyons-Ruth, 1996).

Avoidant attachment: Children with an avoidant attachment tend to



avoid parents or caregivers. When offered a choice, these children will show no preference between a caregiver and a complete stranger. Research has suggested that this attachment style might be a result of abusive or neglectful caregivers. Children who are punished for relying on a caregiver will learn to avoid

seeking help in the future (Lyons-Ruth, 1996).

Disorganized attachment: Children with a disorganized attachment

often display a confusing mix of behavior and may seem disoriented, dazed, or confused. Children may both avoid or resist the parent. Some researchers believe that the lack of a clear attachment pattern is likely linked to inconsistent behavior from caregivers. In such cases,



parents may serve as both a source of comfort and a source of fear, leading to disorganized behavior (Lyons-Ruth, 1996).

In 1978, Mary Ainsworth and her colleagues reported that studies on the three initial attachment classifications revealed: 70 percent of American infants have been classified as secure, 20 percent as avoidant-insecure, and 10 percent as resistant-insecure (Ainsworth et al., 1978). Kain and Terrell (2018) warn of concerning declines in secure attachment, noting that in more recent research populations, the rates

of secure attachment have declined by 10 percent (Andreassen et al., 2007).

Studies reveal that interactions during the first three years of life can affect cognitive development and will impact the physical, emotional, and mental health of children as they age and develop (Colmer et al., 2011). Typically, a parent's emotional response will serve as a template for helping their child learn about emotion. As parents model appropriate emotion regulation through conversations or actions, children learn to control and regulate their emotions. In contrast, insecurely attached children may learn to mask their emotional distress or exaggerate it to gain their parent's attention, therefore compensating for a parent who is not consistently responsive (Laible, 2010). This type of maladaptive behavior has devastating consequences, resulting in poor social skills, emotional dysregulation, depression, anxiety, peer exclusion, social rejection, and low self-esteem (Lewis et al, 2015; Newman, 2017). So, those of us who are young parents should ensure that we spend lots and lots of time with our infants and children in healthy, safe, and connected ways, particularly early in life, to develop secure attachment so they can have joy, fulfilling relationships, and emotional stability.

Psychiatrist and Internal Family Systems (IFS) leader Dr. Frank Anderson presents a refreshingly new view on attachment as it relates to IFS therapy, which will be explained later in this book in the Therapeutic Pathway to Peace chapter. Anderson (2021) notes that he does not fully subscribe to the concept of attachment styles as such, nor does he believe they are formed solely in the first few years of life. Rather, he posits that different parts of children attach to different

parts of caregivers throughout their lives. He contends that most attachment styles, when seen through an IFS lens, are actually wounds or protective parts that develop as a result of difficult or challenging interactions. They have a tremendous influence on our lives as adults, especially when they are not adequately addressed or healed. Dr. Anderson adds that we each have different parts that relate to different parts of other people. Finally, he posits that we each have experiences with each of these “styles” or “different parts,” which connect to the various parts of people with whom we are in connection (Anderson, 2021).

Takeaway: Attachment is one of the most powerful forces that shapes our emotional lives and relationships, influencing how we connect with others from childhood through adulthood. Secure attachment, formed through safe, consistent, and caring relationships, is key to emotional regulation, building trust, and forming healthy, lasting connections. Early pioneers like Dr. John Bowlby and Dr. Mary Ainsworth showed us just how deep this impact runs. Ainsworth’s famous research identified different attachment styles, secure, avoidant, and anxious, that play a leading role in how we relate to others, manage stress, and navigate relationships throughout life.

When attachment is insecure, whether due to inconsistent, neglectful, or unavailable caregiving, children can struggle with emotional regulation, anxiety, and difficulties forming healthy relationships. These early interactions profoundly shape mental, emotional, and even physical health, laying the groundwork for how we cope with challenges.

However, recent insights, like those from Dr. Frank Anderson, offer a fresh perspective on attachment. Anderson's work in Internal Family Systems (IFS) therapy suggests that attachment patterns aren't set in stone in early childhood. Instead, he proposes that different parts of our personality attach to different parts of others and that these attachment styles reflect emotional wounds and protective parts we develop in response to life's difficulties. According to Anderson, healing and growth are possible at any stage of life as we integrate these parts and form healthier connections (Anderson, 2021).

In short, understanding attachment helps us see how our earliest bonds shape our emotional landscape and set the stage for stable, fulfilling relationships. By nurturing secure attachment, especially early in life, we can promote long-lasting emotional health and resilience, not only for ourselves but for future generations. As *1 John 4:18* (NIV) reminds us, *"There is no fear in love. But perfect love drives out fear, because fear has to do with punishment. The one who fears is not made perfect in love."* Secure attachment, rooted in love and care, can indeed drive out fear, helping us build trusting and fulfilling relationships that last a lifetime.

Two: Social Learning

How Do We Absorb Trauma Through Relationship? Albert Bandura (1977) revolutionized psychology with his theory of social learning. We learn not only through experience but through watching others, especially those closest to us. Children raised in chaotic, emotionally unsafe environments do not just endure trauma; they learn it. They absorb relational patterns, defensive postures, and ways of handling pain. They watch how shame is hidden, how rage is expressed, how

needs are ignored, and then they mimic those patterns in adolescence and adulthood.

These patterns are not just behavioral. They become internalized as *normal*. And unless they are brought into awareness and challenged, they get passed down to the next generation. This is one way trauma moves through families, not through genetics but through modeling, mimicry, and silence.

Three: Epigenetics

The third, and most sobering, pathway is biological. Trauma does not just shape how we think and relate. It can literally change how our genes express themselves through a process called epigenetics. Epigenetics refers to chemical modifications that sit "on top of" our DNA, switching genes on or off without altering the genetic code itself. These changes are triggered by environmental factors, including chronic stress, adversity, and trauma (Moore et al., 2013).



Genes are like instruction manuals stored inside every cell of your body. They tell the cell how to build proteins, which are the building blocks for just about everything, your muscles, your hormones, your neurotransmitters, even your brain chemistry. But here's the key: those instructions have to be **read** in order to be used. If the book stays closed, nothing gets built.

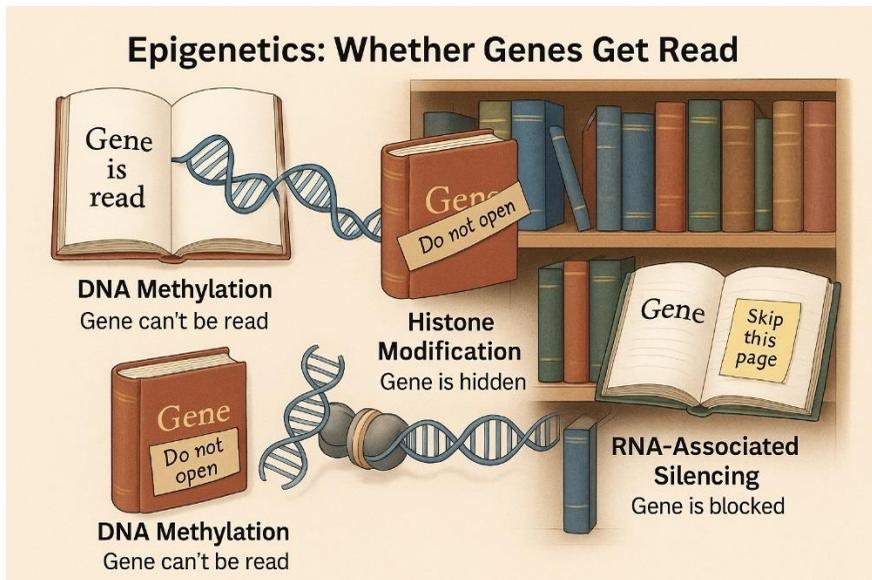
Epigenetics is about whether genes get read or not.

DNA methylation is like putting tape over a book cover. The book is still in the library, but the tape keeps anyone from opening it. The gene is there, but it can't be read, so its instructions are never used.

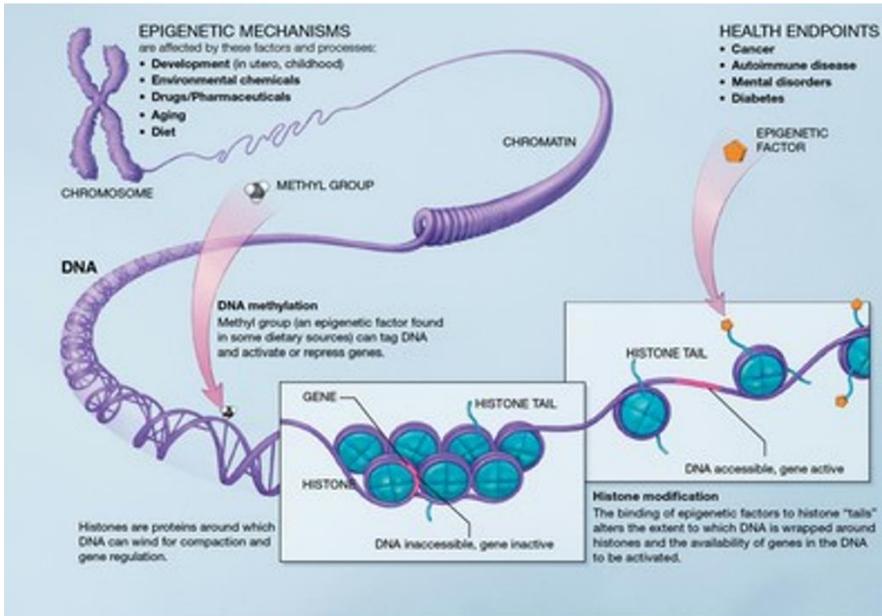
Histone modification is about how tightly the DNA is wrapped around its packaging proteins (the histones). If the DNA is wound too tightly,

it's like books shoved so hard into the shelf that you can't pull them out, those genes stay hidden and unread. But if the DNA is loosened too much, books can be pulled out that maybe shouldn't be read at that moment, and their instructions get used when they're not supposed to.

RNA-associated silencing is like slipping a sticky note over certain pages that says, "Skip this." The words are still printed, but the cell's machinery moves right past them, leaving the instructions unused.



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Wikipedia (2023)

<https://en.wikipedia.org/wiki/Epigenetics>

These processes are vital in early development, but they can also be hijacked by trauma. The impact is not theoretical. It is real, and it is measurable. One of the most sobering examples comes from Holocaust survivors. Dr. Rachel Yehuda and colleagues (1998) found that the children of Holocaust survivors, who never experienced the camps themselves, carried biological imprints of their parents' trauma. Their stress response systems were altered. Their genes carried the memory of fear. The trauma became a biological inheritance.

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Barbed Wire Clipart. The Holocaust ...clker.com. Wikipedia

The Dutch Hunger Winter offers another powerful case. In the winter of 1944 to 1945, the Nazis blockaded food supplies to punish the Dutch resistance, plunging the country into famine. Over 20,000 people starved to death. Pregnant women, in particular, were deeply affected. Their children, still in utero during the famine, were later found to have epigenetic changes in key genes like IGF2, which is linked to growth and metabolism. As adults, these individuals faced higher risks of obesity, heart disease, diabetes, schizophrenia, and even premature death. What they endured in the womb shaped their lifelong health, and remarkably, these changes were also found in their children and grandchildren (Heijmans et al., 2008).

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Food rations that were dropped into the Netherlands in 1945.
Credit...Dutch National Archive

Imagine carrying the biological memory of a winter you never lived through. Imagine being born into a world already marked by scarcity and stress, your body tuned to survive a trauma you did not directly endure. That is the power of epigenetics.

These are not just fascinating stories from history. They reveal something deeply human and deeply spiritual. Trauma writes itself into our biology. It embeds into our nervous system, immune system, hormonal pathways, and even our gene expression. It shapes how we see danger, how we handle emotion, how we connect, or disconnect, from others.

And yet, this is not the end of the story. Because just as trauma can alter our biology, healing can begin to restore it. Studies show that many epigenetic changes are not permanent. The same nervous system

that adapts to survive trauma can also be rewired by safety, love, and truth. Practices like regular physical activity, deep restorative sleep, meaningful spiritual connection, secure attachment relationships, healthy nutrition, and trauma-informed therapy can help reverse or soften these harmful patterns. Over time, healing begins to rewrite and literally rewire what trauma once inscribed. The scars may not disappear completely, but the script can change.

This brings both great responsibility and deep hope. We are not stuck. We are not doomed by our lineage. We are not victims of our past. Through deliberate, faithful choices, we can change the biological legacy we pass on. As we heal, our bodies remember. Our cells respond. And so do the lives of those who come after us.

As Scripture says in *Deuteronomy 30:19*, "Now choose life, so that you and your children may live." And in *Exodus 20:5-6*, "the sins of the fathers are visited upon the children," but also the promise that God "lavishes unfailing love for a thousand generations on those who love [Him] and obey [His] commands."

Trauma may shape a family line, but so can faith. So can love. So can healing. The chain of suffering can be broken. And it begins with a choice.

The NeuroFaith® Response: Reversing the Curse

The NeuroFaith® Model recognizes that trauma is not simply a psychological wound, it is a neurological, physiological, relational, and spiritual rupture. And healing requires access to all four domains. Through polyvagal-informed therapy, HeartMath neurocardiology,

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Internal Family Systems (IFS), and authentic Christian faith, we offer a path to reconnect body, brain, and soul.

This is not about symptom suppression. It is about genuine transformation. It is about taking responsibility for our own healing while clinging to the hope that God can restore what was broken, even at the level of biology. Yes, trauma may run in families but so can healing. Yes, emotional pain may mark our nervous systems, but those patterns can be rewritten. Through God's grace, power, and intentional therapeutic work, the darkness does not win.

There is always hope. And there is always a way forward. That way is not easy, and it will require courage. But we walk it together, with God beside us, rewriting the story, biologically, relationally, and spiritually.

"The light shines in the darkness, and the darkness has not overcome it"
(John 1:5, NIV).

In a fallen world, trauma is common, but healing is possible. The NeuroFaith® model recognizes that the path to healing is not primarily about symptom reduction. It is about reconnection: to self, to others, and to God. It involves helping people rewrite the internalized story that trauma told them. As we ask, "Where were you wounded?" we must also ask, "How can we help you heal and reclaim your story?"

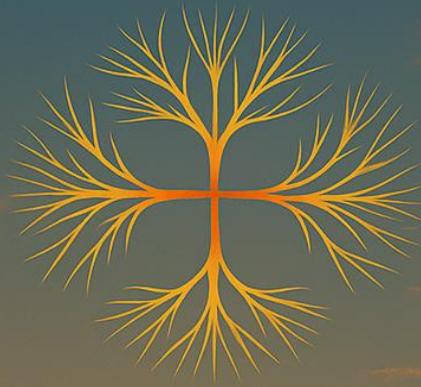
And we must remember, in the words of Isaiah 61:1, that *"The Spirit of the Sovereign Lord is on me, because the Lord has anointed me to proclaim good news to the poor. He has sent me to bind up the brokenhearted... to comfort all who mourn... and to bestow on them a crown of beauty instead of ashes."*

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This is our hope. That what trauma tried to destroy, Christ can restore. That the brain, the body, and the soul can be healed. And that those who once believed they were worthless may one day say, with confidence, "I am loved. I belong. I have purpose. And I matter."

The story is not fixed. What was once shaped by lies can be reshaped by truth. As John reminds us, "*And you will know the truth, and the truth will set you free* (John 8:32 NLT).

PART III



**THE
NEUROFAITH™
FRAMEWORK
FOR
HEALING**



The Four Pillars of Healing

*A Restorative Pathway
for Adult Depression and Anxiety*

*“Let all that I am praise the Lord;
may I never forget the good things he does for me.
He forgives all my sins
and heals all my diseases.”*

- Psalm 103:2-3

As we have established, depression and anxiety are not simply mental states—they are whole-person afflictions that leave deep wounds across the body, brain, soul, and spirit. These conditions are more than biochemical imbalances or fleeting emotional lows. They often represent years, if not decades, of accumulated sorrow, unresolved trauma, autonomic dysregulation, and disconnection from self, others, and God.

Yet, even in the thickest darkness, light still breaks through. Healing is possible. Not just symptom relief but true restoration, a return to wholeness. There is a way forward, a path that is neither simplistic nor shallow but grounded in both the cutting-edge insights of neuroscience

and the timeless truths of Scripture. As it is written, “*The light shines in the darkness, and the darkness has not overcome it*” (John 1:5, NIV).

Before introducing the four pillars of our healing model, it’s important to understand the difference between **incremental therapies** and **transformational therapies**. Both have value. Cognitive Behavioral Therapy (CBT), Dialectical Behavior Therapy (DBT), and other skill-based interventions can be powerful tools for managing distress. In moments of acute despair, when the weight of depression or anxiety feels crushing, these approaches can help individuals ground themselves, develop emotional regulation, and stay alive. In that sense, incremental therapies can be life-saving.

However, they are often just that—incremental. They offer tools for coping, but they too often don’t reach the root of the pain.

	
INCREMENTAL THERAPIES	TRANSFORMATIONAL THERAPIES
Cognitive Behavioral Therapy (CBT) DBT	4 Polyvagal-Informed Therapy HeartMath® and Neurocardiology Internal Family Systems Faith and Spirituality
Coping	Deep Change

By contrast, the therapies we present in this chapter—the **four pillars of the NeuroFaith® model**—are **transformational**. These are not just

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symptom-management strategies. They invite deep, systemic change. They help rewire the brain, calm the autonomic nervous system and, critically, transform the default mode network—the network of the brain responsible for self-referential thought, shame-based narratives and internal rumination. Transformational therapies reach the inner core. They do not merely equip you to survive; they offer a path toward wholeness.

Although incremental therapies are very necessary and helpful, it is transformational therapies that get you home. The Default Mode Network needs to be updated and only transformational therapies can achieve that.

Incremental Therapies	Transformational Therapies
Focus: Gradual, step-by-step change.	Focus: Profound, holistic changes.
Approach: Behavior modification and symptom management.	Approach: Deeper psychological exploration.
Examples: CBT, DBT, Exposure Therapy.	Examples: Internal Family Systems (IFS), EMDR, Polyvagal-Informed Therapy, Emotion Focused Therapy (EFT)
Goal: Improve specific symptoms or behaviors.	Goal: Transform personal beliefs and selfconcept.
Process: Structured, often shortterm.	Process: Open-ended, usually longerterm.

In this chapter, we introduce four central pillars that form the foundation of a truly integrated healing approach—what we call the **NeuroFaith®™ model**. These therapeutic frameworks are not standalone techniques but synergistic pathways that realign the nervous system, rewire the brain, reawaken the heart, and restore the soul.

This is not merely a roadmap to manage symptoms. This is a journey back to yourself—your truest, God-given self—beneath the layers of

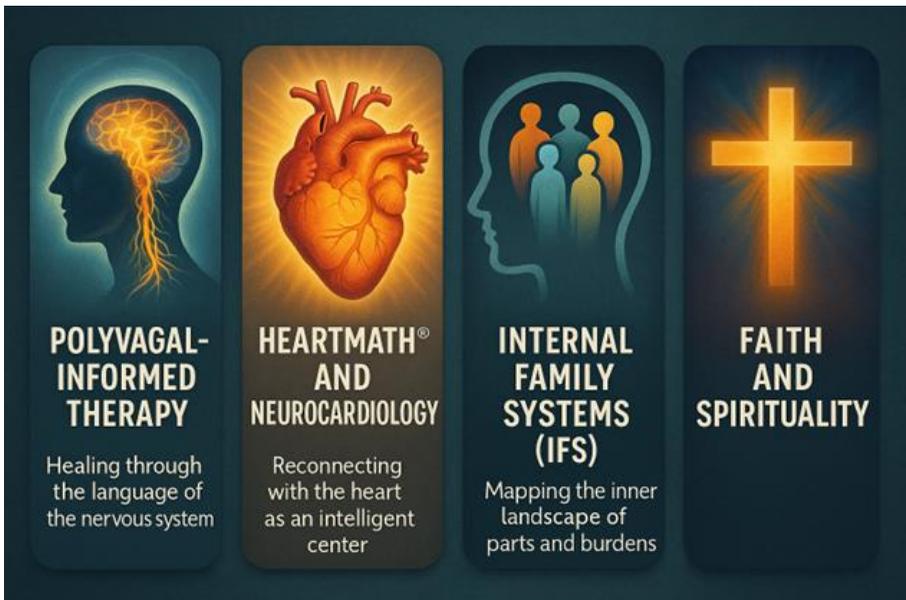
shame, fear, and dysregulation that have defined your experience of depression and anxiety. These approaches invite you to experience the healing of your nervous system, the reintegration of your fragmented parts, and the restoration of deep inner peace.

As Psalm 34:18 reminds us, *“The Lord is close to the brokenhearted and saves those who are crushed in spirit.”* The brokenness of depression is not the end of your story. Healing is possible. And the journey begins here.

In the following sections, we’ll walk through these **four interlocking pillars**:

1. **Polyvagal-Informed Therapy**: Healing through the language of the nervous system, recalibrating the body’s threat response and shifting from survival states to safety and connection.
2. **HeartMath® and Neurocardiology**: Reconnecting with the heart as an intelligent center of emotional processing, coherence, and spiritual resonance.
3. **Internal Family Systems (IFS)**: Mapping the inner landscape of parts and burdens, welcoming even the exiled and protective aspects of the self into compassionate relationship and healing.
4. **Faith and Spirituality**: Rediscovering a living connection with the Divine, where grace replaces shame and love replaces fear. For many, this includes a return to the God who heals and restores.

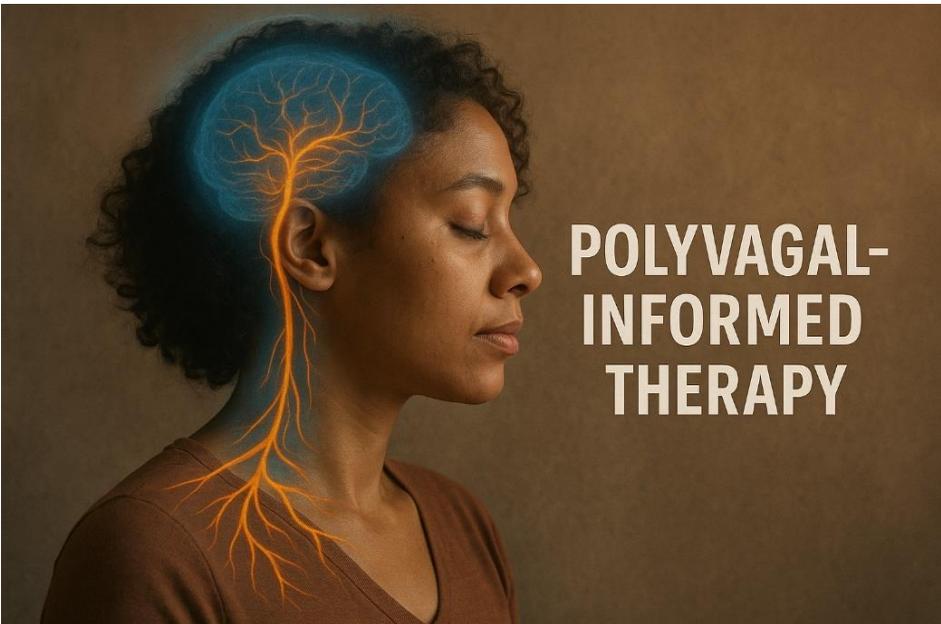
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Together, these four pillars form a holistic, hope-centered framework for recovery. This is not just about coping. This is about transformation.

Pillar One:

Polyvagal-Informed Therapy



Building on what we have previously discussed about the body, specifically the autonomic nervous system, Polyvagal-informed therapy focuses on our body's nervous system and how it responds to stress and safety. It uses the idea that our sense of well-being is closely tied to how our body feels safe, connected, and calm. By understanding and influencing our nervous system's responses, we can more effectively manage our emotions, feel more connected in

relationships, and recover from stress and trauma. In essence, we tune into our body's safety signals to improve our emotional health and resilience.

Dr. Steven Porges and his son, Seth Porges, recently published a marvelous book, *Our Polyvagal World: How Safety and Trauma Change Us*. Unlike Dr. Porges' earlier works, this book is free of scientific jargon and is incredibly readable and useful. Bravo Steven and Seth! They start the book by summarizing Polyvagal Theory in one sentence: **“How safe we feel is crucial to our physical and mental health and happiness”** (Porges & Porges, 2023, p.13).

They later add, “When we feel safe, our nervous systems and entire bodies undergo a massive physiological shift that primes us to be healthier, happier, and smarter; to be better learners and problem-solvers; to have more fun; to heal faster; and generally, to feel more alive” (Porges & Porges, 2023, p.13). Now, how cool is it that - Polyvagal-Informed Therapy can do all of that by helping us achieve regulation through safety! They point out that trauma affects not only our brains but extends throughout our entire nervous system, impacting every part of our body. It alters how our senses perceive, how our organs function, and nearly every aspect of our mental and physical health. As such, trauma changes our bodies in addition to our brains, and Polyvagal Theory gives us an explanation for how specifically these changes occur and, more importantly, how we can deal with them and heal.

Steven and Seth assert that Polyvagal Theory shifts our discussion away from the actual event to how it transforms and becomes embedded in our bodies, with these changes occurring through the vagus nerve.

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Therefore, it is through the vagus nerve that we find a way out of neurological disorder and disruption to a pathway to peace and healing. To quote, “A light at the end of trauma’s tunnel, and a pathway toward healing and happiness in a world that seems designed to threaten and traumatize us at every turn (Porges & Porges, 2023, p.13.” This is neuroscience poetry to me, and my desire for you is that this neuroscience equally inspires you to feel hope and embark on your own healing journey.



Neuroception Perception State Feelings Behavior Story

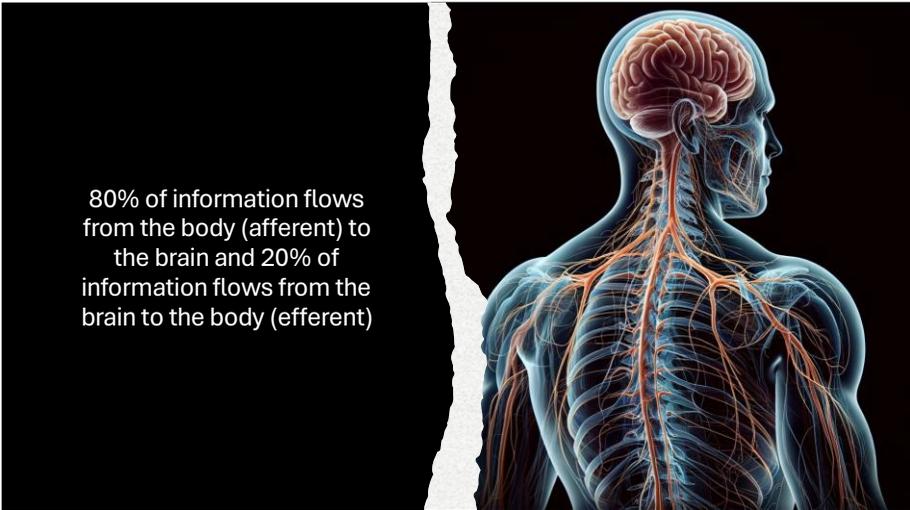


Borrowing from a metaphor of flowing down a stream, the first step in healing is to move our **neuroception** - what our autonomic nervous system is automatically sensing regarding safety and danger without our awareness to awareness of sensing, which is called **perception**. Flowing downstream, we can then appreciate what our **physiological state** is causing us to **feel emotionally** and subsequently change the

behaviors that we engage in. The ensuing **story or narrative** we give to this process to make sense of what we are sensing and feeling, if positive and healthy, helps us correct our autonomic state. On the other hand, if our narrative is false, as it often is (e.g., we often shame and blame ourselves or we catastrophize the situation), then our autonomic state becomes even more activated or shut down, and our subsequent emotions become more anxious or depressed, respectively, and we enter into a negative feedback loop, a process that leads to emotional problems/illness and/or physical problems.

There are two basic approaches to healing: **Bottom-up and Top-down.**

Bottom-up entails working with the body more directly. It is important to appreciate that, as previously noted, 80 percent of the fibers in the vagus nerve are sensory, carrying signals from the organs to the brain, while 20 percent are motor, transmitting signals from the brain to various body organs. (Porges, 2017). This suggests that what our bodies tell us is indeed very important, and we must make every effort to listen and heal on that level. **Top-down** strategies, which involve our thinking and hopefully more rational brain, require a certain level of cognitive development and maturity, so very young children will not be able to benefit from this approach (e.g., Cognitive Behavioral Therapy aka CBT).



As previously noted by Deb Dana, a **ventral vagal state** and a neuroception of **safety** brings the possibility for connection, curiosity, and change. She nicely presents a polyvagal approach, which she calls the four R's (the first three are bottom-up (body to brain) and the last is top down (brain to body) (Dana, 2018):

The Four R's

- **R**ecognize the autonomic state
- **R**espect the adaptive survival response
- **R**egulate or co-regulate in a ventral vagal state
- **R**e-story

Recognize the autonomic state

I recommend making the **Emotion Regulation Chart I developed below** as our companion to help us recognize where we are on that continuum of regulation. In doing so, we can make what is **implicit** (under the table

and outside of our awareness) **explicit** (on the table and in our awareness). We can use the color codes to describe for ourselves and others where we and others are with just one neutral and non-judgmental word. This is also particularly helpful for children as it helps give them a physical and emotional language that connects the mind with the body.

Dimension	Lethargic	Calm	Active/Alert	Fight/Flight	Hyper Freeze	Hypo Freeze
Primary Experience	Shutdown, Depression	Safety, Social engaged	Ready to act	React to danger	Overloaded	Collapse, Numb
Body Response	Low energy, slowed body	Relaxed, steady rhythm	Energized, focused	High arousal, tense body	Rigid, panicked	Flaccid, shutdown
Emotional Tone	Numb, sad, withdrawn	Clear, connected, at peace	Interested, engaged, curious	Fear, anger, urgency	Terror, frozen in fear	Empty, detached, despair
Therapeutic Focus	Gently activate energy	Maintain connection	Channel energy	Ground, create safety	Contain, stabilize	Emergency support

Emotion Regulation Chart

If we find ourselves in the **Orange Zone** to the **Red Zone**, we are overly activated and prone to experience:

- Rapid heartrate
- Hyperventilation
- Panic attacks
- Inability to focus or follow through
- Distress in relationships
- Emotions of fear, terror, rage, anger
- Possible health consequences, including heart disease, high cholesterol, high blood pressure, weight gain, memory impairment, headaches, chronic neck shoulder and back tension,

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stomach problems, and increased vulnerability to illness (lower immune response) (Dana, 2018).

If we find ourselves in the Yellow Zone, we are under activated or shutdown and prone to experience:

- Slow heart rate
- Shallow breathing
- Withdrawal from others
- Emotions of sadness, depression, shame, disgust
- Possible health consequences, including chronic fatigue, fibromyalgia, stomach problems, low blood pressure, type 2 diabetes, and weight gain (Dana, 2018)

If we find ourselves in the **Green Zone**, we experience safety and connection and are prone to experience:

- Regulated heart rate (the vagal brake, the body's built-in calming system that slows the heart by about 20 beats per minute, helps us stay regulated and socially engaged when we feel safe)
- Breath is full
- Feeling regulated
- We take in the faces of others
- We can "tune in" to conversations and "tune out" distractions
- We can see the "big picture"
- We can connect with the world and the people in it
- We are able to reach out to others
- We are able to play and take time to enjoy life and others

- We are able to be productive in work
- We are able to organize and follow-through
- We are able to heal emotionally and physically
- We experience emotions of happiness, joy, love, peace, calm
- Possible health consequences include a healthy heart, regulated blood pressure, a healthy immune system, decreased vulnerability to illness, good digestion, quality sleep, and an overall sense of well-being (Dana, 2018)

Respect the adaptive survival response

One of the beautiful aspects of Polyvagal Theory is that it removes **shame** from the equation. Dr. Porges kindly states in reference to clients, *“I was going to say that depending on the age of my client, but actually, regardless of age, the first thing to convey to the client is that they did not do anything wrong... If we want individuals to feel safe, we do not accuse them of doing something wrong or bad. We explain to them how their body responded, how their responses are adaptive, how we need to appreciate this adaptive feature and how the client needs to understand that this adaptive feature is flexible and can change in different contexts.”* (Porges, 2017, p. 121 - 122). So, rather than shaming a woman for shutting down in dorsal vagal freeze when being molested or raped, which will only fuel her shame, guilt, and emotional pain, we must compassionately inform her that her autonomic nervous system acted brilliantly, interpreting the signals and immobilizing her in a situation where fighting or fleeing might have cost her life. Many a court judge have literally ruined survivors of abuse by blaming them for not running or fighting and invalidated their trauma.

Regulate or co-regulate in a ventral vagal state

Once we recognize that we are dysregulated and have pinpointed which defensive physiological state we are in, and where we are on the emotional regulation continuum (see emotional regulation chart above) i.e., activation or slowing/shutting down, we can act by using **bottom-up** self-regulation strategies and co-regulation strategies.

As Herman Melville once wrote, “*We cannot live for ourselves, a thousand fibers connect us.*” Connection is a biological imperative, according to Porges (2015). Our autonomic nervous system longs for connection, and it is through our biology that we are wired to connect. Co-regulation, as described by Dr. Porges, is the mutual regulation of physiological states between individuals. In life, it occurs first between mother and infant but later extends to friends, partners, co-workers, and groups such as families, to name a few (Porges, 2017).

We humans are social creatures, and “our nature is to recognize, interact, and form relationships” with others (Cacioppo & Cacioppo, 2014, p. 1). As we know, low birthweight babies need to connect for survival and positive co-regulation and connection. When connected, these babies experience improved heart rate and temperature, breathing stabilization, more organized sleep, rapid improvement in state regulation, and reduced mortality, severe illness, and infection (Jefferies, 2012).

Connection is a wired-in biological necessity, and isolation or even the perception of social isolation can lead to a compromised ability to regulate our autonomic state, which diminishes our physical and emotional well-being (Porges & Furman, 2011). We can all appreciate

that when we feel alone, we suffer. In a Ted Talk presentation, Cacioppo (2013) reported a rather shocking meta-analysis study of over 100,000 participants, which found increased risks of dying early due to the following:

- **Air pollution:** 5% increased risk of dying early
- **Obesity:** 20% risk of dying early
- **Alcoholism:** 30% risk of dying early
- **Loneliness:** 45% risk of dying early



Deb Dana notes that when there is ongoing mis-attunement, when ruptures are not recognized and repaired, the autonomic experience of persistent danger ends up moving the system away from connection into patterns of protection, and loneliness is the subjective experience (Dana, 2018).

So, when we recognize that we are suffering and dysregulated, it is very helpful and sometimes lifesaving to seek safe refuge in others.

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Conversely, when we are emotionally regulated ourselves, we can offer our safe regulation to others, whether they're adults or children. This is a particularly important and essential component of good parenting. We can gift our safe regulation to ourselves and others by choosing the following strategies below. Remember, through the process of neuroception, others read our cues of safety just as we read theirs. Quid pro quo, we receive back what we give and vice versa. We would do well to practice these strategies, so they become automatic whenever we move out of the **green zone** and want to return.

Here are some interpersonal behavioral cues to be mindful of, as they influence how others co-regulate with you. While they may come naturally to some, for others, they must be learned. When they're done properly and become a natural flow of your interpersonal style, you will be amazed at how others respond to you. Please do not underestimate the blessings they can bring to your life and the lives of people you care about and/or love.



Kind eyes: As they say, the eyes are the window to the soul.

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Melodious voice: Speak with a more melodious voice, full of prosody and life.



Smiling mouth and eyes: Smile not only with your mouth but with your eyes. Whether or not we are aware, our neuroception scans for congruence between the smiling mouth and smiling eyes. Crow's feet wrinkles are testament to someone who lives a more joyful life. So maybe reconsider that Botox.

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Avoid leaning in: Leaning in can be perceived as very threatening. Most of us don't like it when others enter our personal space uninvited, particularly in western cultures, and the end result is typically defensive activation moving us toward fight or flight or less typically, occasional freeze responses.



Slow and low Breathing: Our lungs are the only internal body organ we can directly control, and proper breathing has a huge impact on our health. Breathe slowly with exhalations longer than inhalations – breathing out slowly accentuates relaxation and actually can slow our heart rate by 20 beats per minute (vagal brake).

Re-story

Now that we, or our loved ones, are in a more regulated state by using the **bottom-up** strategies discussed earlier, we should feel more settled and able to use **top-down** strategies to correct the narrative or re-story the situation—whether it's a current event or something from the distant past. As humans, we naturally seek meaning in our experiences, often creating stories to make sense of our pain (Dana, 2018, 2020; Kain, 2018). Unfortunately, our narratives often skew negative due to the brain's bias toward negativity, a survival mechanism that kept us vigilant for danger (Hanson & Mendius, 2009). While this served us well in the wild, it works against us when the threat is no longer present. Victims of trauma are particularly prone to constructing false narratives about themselves and the world around them (Porges, 2017; Dana, 2018; Kain & Terrell, 2018).

In a more regulated state, however, we can rewrite a new narrative that better reflects our healing journey and the heroic efforts of our nervous system to protect us through our pain. This new story allows us to embrace both the lessons of the past and the bright possibilities of the future.

As the Bible reminds us, *“Do not conform to the pattern of this world, but be transformed by the renewing of your mind”* (Romans 12:2, NIV). By renewing our narratives, we transform our minds and begin to see ourselves and our stories in a new light—one filled with resilience, hope, and purpose.

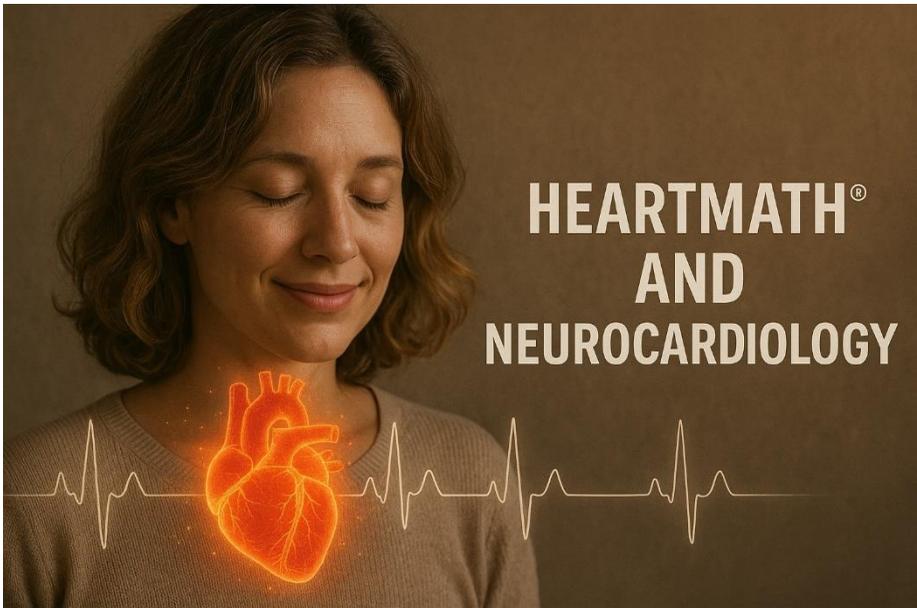
Drs. Kain and Terrell describe this beautifully: “As our capacity increases, our narratives are likely to change, including the sense of

success at meeting challenges, developing curiosity, or a willingness to explore. Eventually, our narratives may also include access to a sense of safety and connection. Rather than ‘I am constantly afraid and unhappy,’ a client will begin telling himself a different story: ‘I am stronger than I thought and able to meet challenges with greater balance and success’” (Kain & Terrell, 2018, pp. 101-192). They add, “At the same time, our somatic narratives will begin to change. We may literally experience changes in our symptoms—decreased inflammation, less pain, fewer migraines. Our illness narratives may alter to include the possibility of being free of pain, free of symptoms that have beleaguered us for most of our lives” (Kain & Terrell, 2018, p. 192).

In this process of re-storying, we not only rewrite our past but also open ourselves to a future of peace and wholeness.

Pillar Two:

HeartMath®



Our heart is an amazing organ and is much more than a pump. It has its own wisdom and intelligence and works cooperatively with the brain. HeartMath® has sought to explore the science of this connection and translate that science into practical ways of healing mental health struggles, thus improving our lives.

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The wisdom of the heart is not new—it was known to the ancients and has been referenced throughout Scripture. *“Above all else, guard your heart, for everything you do flows from it”* (Proverbs 4:23, NIV). This verse reminds us that our heart is central to the essence of life, influencing not only our emotions but the quality of our decisions and actions. In modern times, much of this wisdom was dismissed and then forgotten, but it is being rediscovered through scientific and spiritual lenses alike, leading us toward fuller, more meaningful lives.

Our incredible heart:

- ▶ Beats 101,000 times a day
- ▶ Circulates an astonishing 1,900 gallons of blood
- ▶ Through 60,000 miles of blood vessels, arteries, and capillaries (Braden, 2015).

A composite image. On the left, a grey box contains text about the heart. On the right, a glowing human heart and brain are shown with light trails. Below them, a person is meditating in a lotus position on a grassy bank. In the background, there is a landscape with a castle on a hill under a sunset sky.

Again, the ancients knew of the importance of the heart, but that wisdom was lost with time. Happily, this knowledge is coming back to us and can lead us to fuller and more meaningful lives.

Wisdom of the Heart Across Traditions

Religious and mystery traditions often regard the heart as a path to deep wisdom.

Bible: The heart is mentioned **826** times. It represents our mind, will, and spirit. Proverbs 4:23 says, “Keep your heart with *all* diligence, for out of it spring the issues of life.”

Qur’an: Mentions the heart 132 times, describing it as a center of reasoning, intentions, and decision-making. A healthy or diseased heart shapes human destiny.

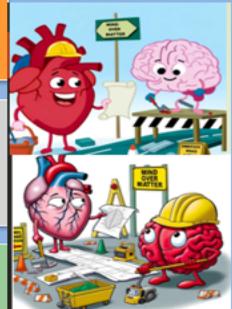
Egyptians: Believed the heart, not the brain, was the seat of wisdom, memory, and the soul. It was where God’s will was heard and

Brain and Heart Working Together

Research shows the heart has its own “little brain,” able to think, remember, and influence our lives in powerful ways.

For years, science said the brain ruled, while artists and intuitive thinkers trusted the heart.

New evidence reveals that the heart and brain work best together (Braden, 2015a, 2015b).



One of my heroes who advocates for new and innovative ways to promote mental health is Gregg Braden. He is an author and speaker

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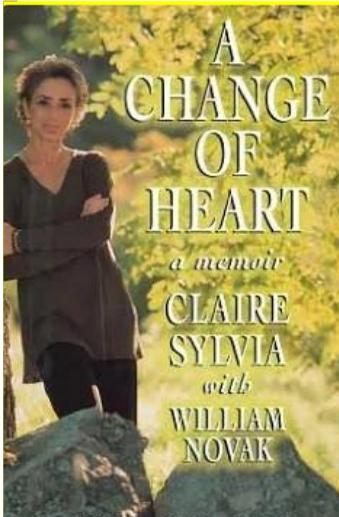
who has actively bridged science and spirituality. He has a background in earth sciences and worked in the aerospace and defense industries during the 1980s. Braden is also widely known for his work in popularizing the concept of HeartMath®. Although not a founder of the HeartMath® Institute, he has been a strong proponent of its work, particularly in the areas of emotional self-regulation and the connection between the heart and brain. Braden's work often explores the role of human emotion in physical health, healing, and the interconnectedness of all life. Braden's approach combines science with spirituality to offer perspectives on personal and collective wellness, emphasizing the importance of harmony within oneself, others, and with the environment. He is a brilliant, sincere, and inspirational speaker, and I encourage you to search out some of his YouTube presentations on HeartMath®. His one entitled "*Practice this Technique to Relieve Daily Stress... Three Keys to Heart - Brain - Earth Harmony*" is one of my favorites. Give it a try, you will love it.

https://www.youtube.com/watch?v=2nsm8SCWjic&t=1088s&ab_channel=GreggBradenOfficial

Braden (2015a, 2015b) eloquently describes the research that supports the concept of heart intelligence, suggesting that when we are in a calm and positive autonomic state, we can access it much more easily.

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Braden nicely narrates two stories detailed in the graphics below about how memories stored in the neural networks in the heart can be transferred to the heart recipients following heart transplant surgeries.

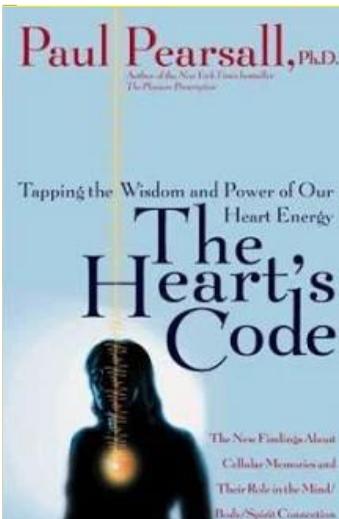


Stories of the Heart:

- ▶ **Clare Sylva**, a professional dancer, in 1998 received the heart and lungs of a young man, Tim, who died in a motorcycle accident.
- ▶ Not long after the transplant, she began to crave new foods such as **chicken nuggets and green peppers** and was specifically drawn to KFC to satisfy her cravings.
- ▶ She was able to eventually visit the parents of this young man and discovered that **Tim precisely loved the same kinds** of foods that she was now craving.
- ▶ Clare had acquired her cravings through the phenomenon of **memory transference** which has become an area of serious study and eventual acceptance.

Please click below for Dr. Braden's enticing discussion:

<https://youtu.be/Hir6t-RfQIY>



Stories of the Heart

- ▶ In 1999, **Dr. Paul Pearsall, a neuropsychologist**, in *The Heart's Code* wrote about an 8-year-old little girl who received a heart from a 10-year-old girl.
- ▶ Almost immediately after the surgery, she started having vivid nightmares of being **chased, attacked, and murdered**.
- ▶ Her mother arranged a consultation with a psychiatrist who after several sessions concluded that she was witnessing actual physical incidents.
- ▶ They decided to **call the police** who used the detailed descriptions of the murder (the time, the weapon, the place, the clothes he wore, and what the little girl he killed had said to him) given by the little girl to find and convict the man in question.

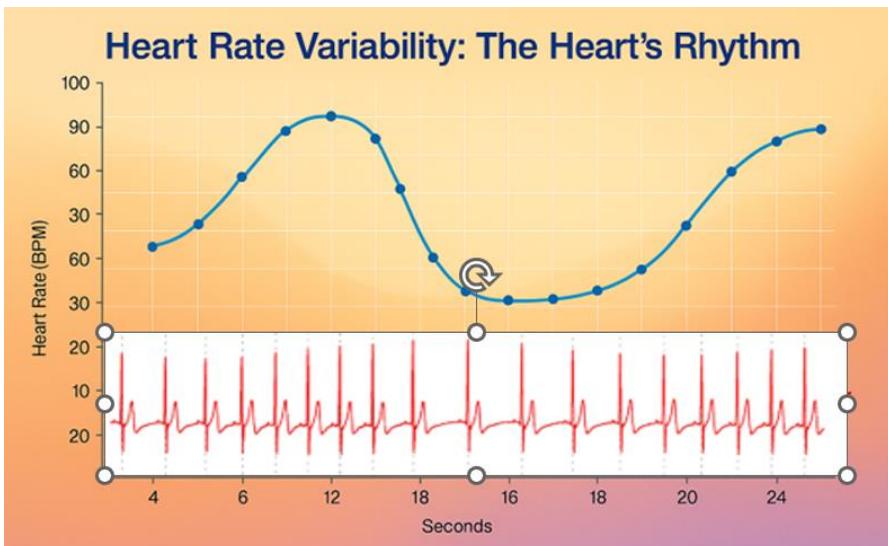
Please click below for Dr. Braden's enticing discussion:

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HeartMath® is a magnificent therapy that uses techniques that focus on heart rate variability and the heart's influence on emotional well-

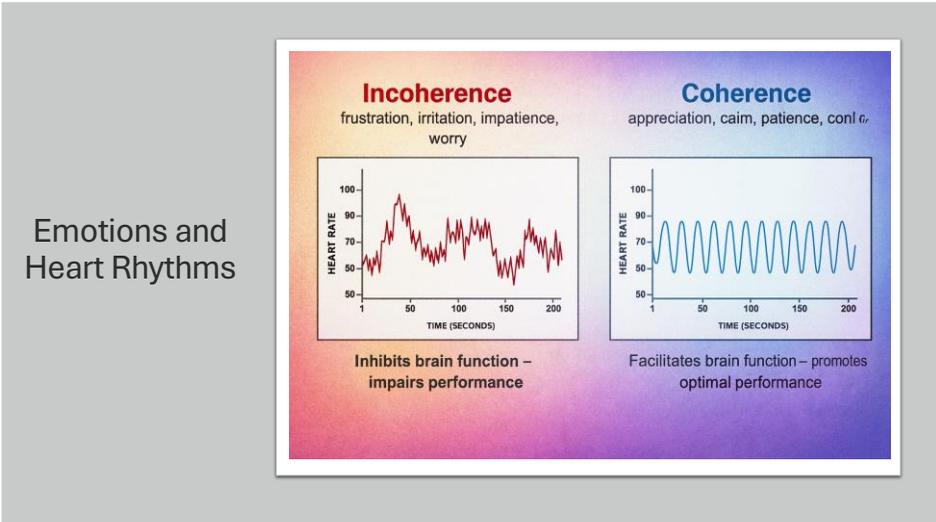
being and stress management. By learning to regulate our heart rhythm, we can achieve a more coherent state, where emotions, mind, and body are in sync. This approach helps reduce stress, enhance emotional regulation, and improve overall health. In therapy, HeartMath® tools teach us how to access our heart's intelligence to foster resilience, improve decision-making, and deepen personal connections. Learning to live more from the heart is a game-changer, allowing you to relate to others in safer, more profound ways, bringing much more groundedness and stability to your life.

HeartMath® defines heart rate variability (HRV) as the measure of the beat-to-beat changes in heart rate, which reflects the heart's ability to adapt to stress, environmental, and physiological changes. HRV is a key indicator of the autonomic nervous system's efficiency and balance, particularly the interaction between the sympathetic (stress response) and the parasympathetic (relaxation response) branches (McCraty, 2023).



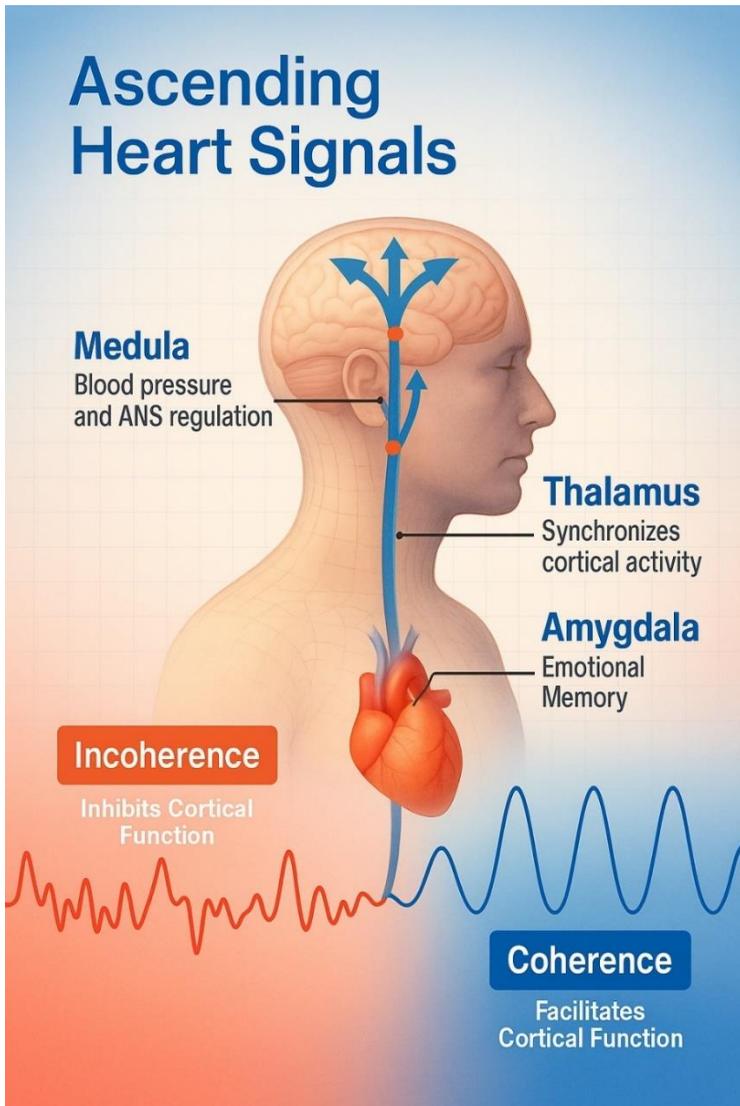
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In practice, HeartMath® uses HRV to assess an individual's level of coherence, a state where the heart, mind, and emotions are in energetic alignment and cooperation. This state is characterized by a smooth, wave-like pattern in the heart rhythm, indicating emotional balance and mental clarity. HeartMath® techniques involve specific breathing practices and the cultivation of positive emotional states to increase coherence, thereby improving HRV. This approach is used to reduce stress, enhance decision-making, and boost overall well-being (McCraty, 2023). The graphic below shows how the heart can shift from a negative and dysregulated state on the left to a more positive and coherent state.

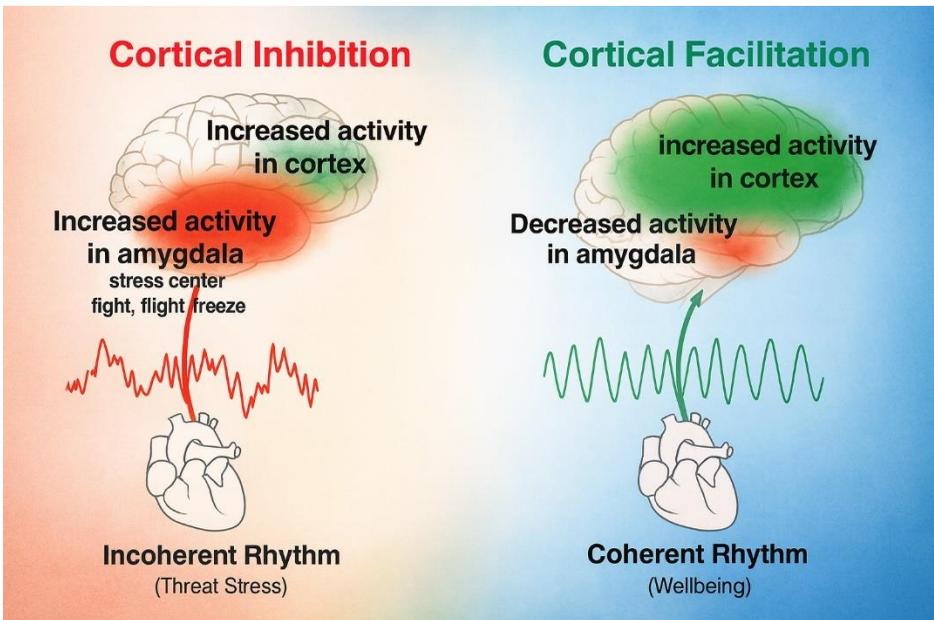


Once we attain coherence in the heart, the coherent heart then communicates in four distinct ways to the brain, enabling it to achieve coherence: (1) nerves connecting the heart to the brain, particularly the vagus nerve, (2) hormones, (3) blood pressure shifts, and (4)

electromagnetic waves (McCraty 2023). This allows the brain to be more integrated and efficient, while an incoherent heart inhibits cortical function. Note that 80% of information flows from body to brain (efferent).



This following graphic nicely illustrates how an incoherent heart increases the activity of the amygdala and diminishes the activity of the prefrontal cortex (thinking brain/executive functioning). In this state, our thinking is governed by lower brain centers, and we thus make impulsive, emotionally driven decisions. On the other hand, the right side of the graphic demonstrates how a coherent heart signals the amygdala to quiet down, allowing the higher order processes of the prefrontal cortex to reign so great decisions can be thereby authored.



One very attractive element of HeartMath® is the concept of one person's heart coherence helping another person achieve coherence, which is grounded in the understanding of interconnectedness and the physiological phenomenon known as entrainment. Here is a brief description of how it works, broken down into key points (McCraty et al., 2009; McCraty et al.; McCraty, 2023; Tiller et al., 1996):

1. **Heart Coherence:** As previously noted, heart coherence refers to a harmonious, ordered pattern in the heart rhythms, characterized by a stable, sine-wave-like pattern in the heart rate variability (HRV). This state is associated with positive emotions, physiological efficiency, and a sense of well-being. It is achieved when the heart, mind, and emotions are in energetic alignment and cooperation.
2. **Interconnectedness and Energy Fields:** The HeartMath® Institute suggests that the heart emits an electromagnetic field of up to a radius of 10 to 15 feet that can affect the people, animals, and environment around us. This field can be detected by others unconsciously. In a coherent state, the heart's electromagnetic field is more ordered and coherent. If ordered or coherent, the effect on others is positive and if disordered or incoherent, the effect on others is negative.
3. **Entrainment and Resonance:** Entrainment is a physics principle where two oscillating systems assume the same frequency. When applied to heart coherence, entrainment suggests that the coherent heart rhythm of one person can influence and synchronize with the heart rhythm of another person when they are in close proximity, leading to mutual coherence. This is a beautiful form of energetic communication, where the heart's electromagnetic field of one person can influence the heart rhythm of another person.
4. **Emotional Contagion:** On a psychological level, this concept mirrors the idea of emotional contagion, where one person's mood and behaviors can lead to the synchronization of feelings

and behaviors in another person. In a positive sense, a person in a state of heart coherence can, through their calm and positive emotional state, help induce a similar state in others, promoting emotional stability and coherence. Thus, this has great implications in helping another person reach the aforementioned autonomic green state when the ventral vagus nerve is active, which promotes social engagement (Hansen, 2021).

5. **Improved Group Dynamics:** When applied in groups, this phenomenon can lead to improved cooperation, understanding, and a collective increase in coherence among individuals. This not only benefits emotional and mental health but can also enhance group performance, creativity, and problem-solving abilities.

The HeartMath® research supports the idea that practicing heart coherence techniques can not only improve one's own health and well-being but also positively influence the people around us, effectively creating a more harmonious environment and thus making the world a better place to live in.



The coherent HRV of one person positively regulates the other

Heart Lock-In® Technique:

The Heart Lock-In® Technique is a practice developed by the HeartMath® Institute, designed to help individuals enter a state of heart coherence, where the heart, mind, and emotions are in alignment. This technique is beneficial for reducing stress, enhancing emotional stability, and fostering a sense of inner peace and well-being. Here is a step-by-step guide we expanded for clarity on how to perform the Heart Lock-In® Technique:

Step 1: Center and Breathe

- Focus your attention on your heart area
- Imagine your breath flowing in and out through your heart or chest
- Breathe slowly and deeply from the abdomen, letting your belly rise with each inhale
- Keep the in-breath shorter, drawing in energy and life. Some find it meaningful to imagine they are breathing in the breath of God
- Let the out-breath be longer than the in-breath. This engages the parasympathetic nervous system and fosters relaxation, calm, and peace

Step 2: Focus on Regenerative Feelings

- While maintaining this rhythm, shift your attention to feelings of gratitude, appreciation, love, care, or compassion
- Hold your focus there
- Allow yourself to fully experience these emotions as they grow stronger and more stable in your heart

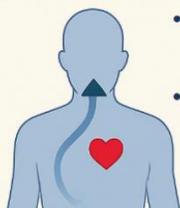
Step 3: Radiate and Receive

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- With each in-breath, take in those renewing feelings. Allow yourself to be filled with love, compassion, and appreciation
- With each out-breath, send those feelings outward, radiating care, compassion, and love to yourself and to others
- Continue this cycle of receiving on the inhale and radiating on the exhale
- Sustain the flow of coherence for several minutes

The Heart Lock-In® Technique

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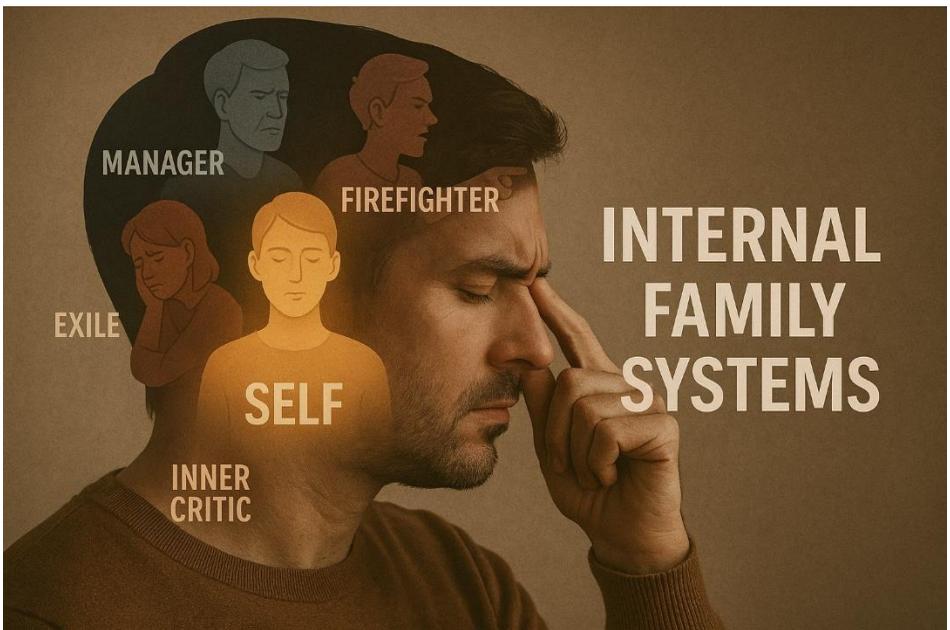
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HeartMath®

Pillar Three

Internal Family Systems (IFS)



There are few discoveries in modern psychology as breathtaking as Internal Family Systems (IFS), developed by the great family therapist, Dr. Richard C. Schwartz, Ph.D. It is as if someone has handed us a map of the soul, showing that what once felt like chaos inside is in fact an intricate design with extraordinary wisdom. For those who have carried trauma, battled addiction, or struggled with the weight of emotional pain, this discovery is nothing short of revolutionary.

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Through Faith and Neuroscience

We now know that trauma and addiction are not confined to memory or thought, they live in the body. They are etched into the nervous system, distorting our sense of safety and throwing our inner world into turmoil. The body remembers through racing pulses, shallow breath, restless nights, and desperate escapes into substances or compulsions. These are not failures of willpower but the body's survival strategies, ways of coping when the heart and mind can no longer bear the weight of suffering.

Faced with this unrelenting pain, our inner world organizes itself into defenses. Some parts bury the wounds so deeply they can scarcely be spoken of. Others work tirelessly to control, to manage, to keep us safe at all costs. And when the pain breaks through, other parts rush in like firefighters, dousing the flames with distraction or self-destructive relief. Even the harsh voice of the Inner Critic, which seems to be our enemy, is in its own way trying to protect us from rejection or failure.

This is where IFS shines. It helps us understand that these parts are not enemies to be silenced but allies who need compassion. It shows us that every strategy, even the most damaging, is born from the system's attempt to survive. And here lies the most awe-inspiring truth: beneath all of these layers, untouched by trauma, is the Self, the core of who we are, radiant with courage, clarity, and compassion.

Healing begins when the Self takes the lead. In that moment, exiled pain finds care instead of isolation, protective parts find rest instead of exhaustion, and the nervous system begins to settle into safety. Addiction loosens its grip, trauma releases its hold, and hope rises again.

- **Exiles (Struggles):** These are the wounded parts that carry deep pain, shame, fear, or grief.
- **Managers (Defenses):** Protective parts that try to keep the pain hidden, often through control, perfectionism, or avoidance.
- **Firefighters (Defenses):** Protective parts that jump in when pain breaks through, using quick fixes like anger, numbing, or addiction.
- **Inner Critic (Feedback):** A critical part that constantly evaluates, judges, or shames, often with the intention of keeping us safe but in ways that can feel harsh or defeating.
- **Self (Who we really are):** The core of our being that is compassionate, curious, calm, and capable of leading the internal system toward healing.



(1) **Exiles:** These are vulnerable, often wounded parts that carry painful memories or emotions such as trauma, fear, or shame. In addition to treatment, these might be parts that are deeply hurt or neglected, driving behaviors as a form of escape or coping mechanism. Exiles are often kept out of conscious awareness by the actions of managers and firefighters.

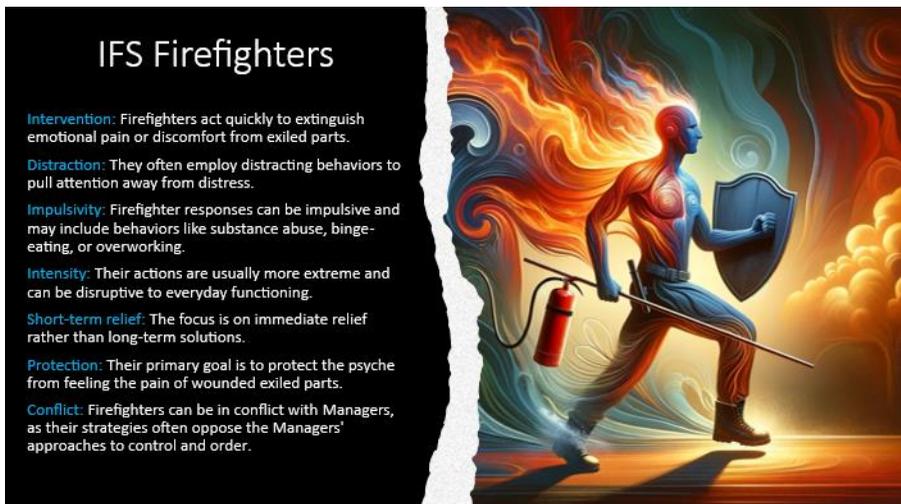


IFS Exiles

- Exiles hold deep emotional **pain and trauma**.
- They are **protected by managers and firefighters to avoid pain**.
- Healing exiles is a goal for reintegration and relief.
- Represent **vulnerability and sensitivity**.
- Need **acknowledgment and compassion** for healing.
- Healing transforms their **roles for positive contributions**.
- Facilitates leadership by the Self, promoting **calm and clarity**.
- Crucial for overall mental health improvement.

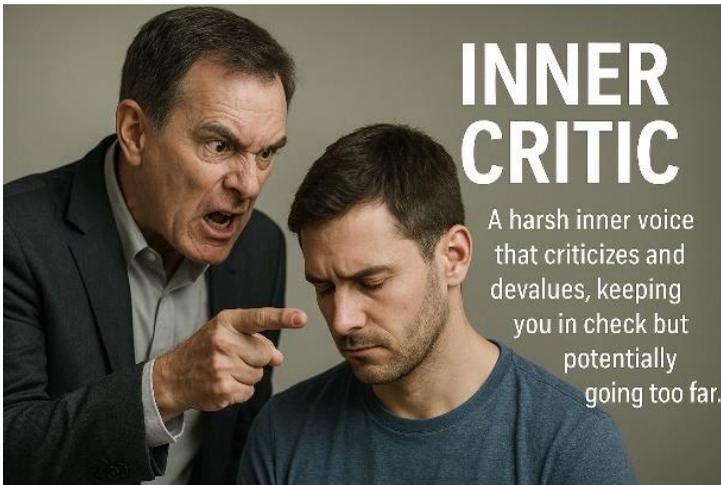
(2) **Managers:** These parts are responsible for maintaining a sense of order and control in a person's life. They anticipate and address problems proactively to protect the individual from harm or pain. In the context of depression, managers might try to keep depressive behaviors in check by overachieving in order to maintain a semblance of control. Managers are all about performance – being the best student, doctor, teacher, employer, employee, or even religious person.

(3) Firefighters: These parts are more reactive than managers. They emerge when an individual's exiled emotions or experiences become too overwhelming. Their role is to distract and extinguish or numb these distressing feelings, often through impulsive behaviors like substance abuse or other addictive actions. Firefighters serve as a short-term solution to emotional pain but often exacerbate problems in the long run. The most extreme firefighter defenses include self-injury or even suicide.



(4) The Inner Critic: The inner critic is a powerful part of our inner world, often taking shape as an internal voice that evaluates, corrects, and warns us. At its healthiest, it can serve a good and necessary function by keeping us in line with values, urging self-reflection, and helping us avoid harmful choices. When balanced and not driven by managers or exiles attempting to shield us from overwhelming pain, the critic provides helpful feedback that can lead us toward growth and integrity. Yet,

when it becomes distorted, the inner critic can turn condemning, harsh, and destructive. In such moments, it often mirrors the voice of the *accuser*, that spiritual force which seeks to tear down and enslave us in shame rather than bring us closer to God's love and truth. As Revelation 12:10 (NIV) reminds us, the enemy is "*the accuser of our brothers and sisters, who accuses them before our God day and night.*" Learning to discern the critic's proper role, and to place it under the authority of Christ, allows us to benefit from its guidance without being crushed by its condemnation.



(5) **Self:** The Self is seen as the core or center of an individual's being, characterized by qualities such as compassion, courage, confidence, calmness, and clarity. The Self is not another part but rather the person's true, balanced essence. In IFS therapy, strengthening the Self is crucial, so it can lead and bring harmony among the parts. In treatment, this means helping the individual to access their Self to understand and heal the exiles,

manage the managers, and redirect the firefighters in healthier ways. The Self is typified by eight qualities called the 8 Cs.



There are many advantages to IFS as an excellent top-down approach, most of which are summarized below (adapted from ChatGPT):

1. **Promotes Self-Leadership:** IFS encourages individuals to lead themselves with their core Self, which is characterized by qualities such as confidence, calmness, clarity, curiosity, compassion, courage, connectedness, and creativity. This helps make healthier decisions and manage parts that are causing psychological distress.
2. **Improves Self-Awareness and Emotional Intelligence:** By identifying and understanding the different parts within oneself, individuals become more aware of their inner workings. This heightened self-awareness leads to better emotional

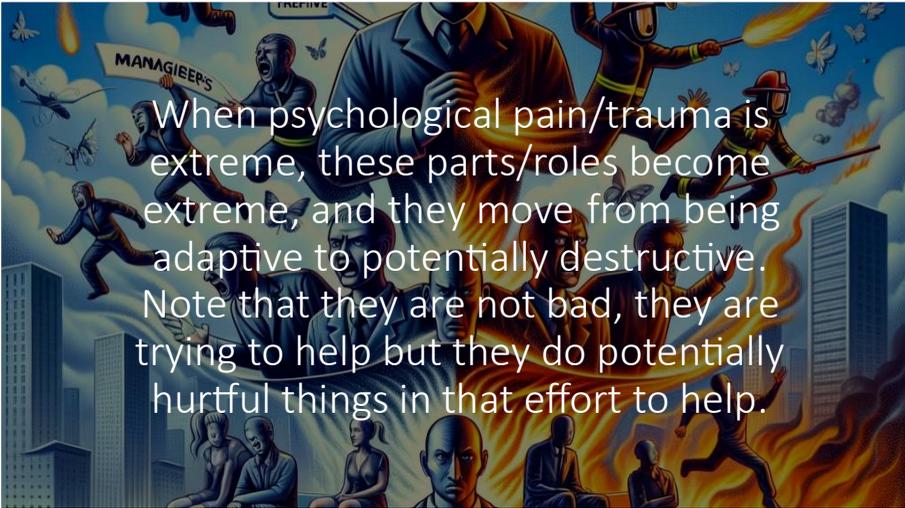
intelligence, as individuals learn how to manage their emotions effectively.

3. **Encourages Compassion and Understanding**: IFS fosters an environment of compassion and understanding, both for oneself and for others. By recognizing that every part has a positive intent, even if its actions are at times counterproductive or harmful, individuals learn how to approach themselves and their parts with kindness and empathy.
4. **Addresses a Wide Range of Psychological Issues**: IFS has been applied to a variety of psychological issues, including anxiety, depression, fears, trauma, and relationship problems. Its flexibility and adaptability make it a suitable approach for many different types of individuals and concerns.
5. **Facilitates Deep Emotional Healing**: IFS therapy goes beyond symptom relief and aims for deep emotional healing. By focusing on the roots of psychological issues, it helps individuals heal the wounds of their parts, leading to lasting changes.
6. **Enhances Relationships**: By improving self-awareness, emotional intelligence, and communication skills, IFS can help individuals build stronger and healthier relationships. Understanding one's own parts can also lead to a better understanding of others, fostering empathy and connection.
7. **Empowers the Individual**: IFS empowers individuals by putting them in the driver's seat for their healing process. The model teaches that individuals have the internal resources they need to heal, and the therapist acts as a guide rather than a rescuer.

8. **Integrates Well with Other Therapeutic Approaches**: IFS is a non-pathologizing and hopeful model that can be integrated with other forms of therapy, including cognitive-behavioral therapy (CBT), dialectical behavior therapy (DBT), faith-based therapies, and more. This makes it a versatile tool in a therapist's toolkit.
9. **Evidence-Based**: Research on IFS is growing, and it has been recognized as an evidence-based practice for treating certain conditions, such as PTSD, demonstrating its effectiveness and reliability.
10. **Cultivates Mindfulness**: The process of identifying and interacting with different parts requires a level of mindfulness, which can improve overall mental health and well-being.

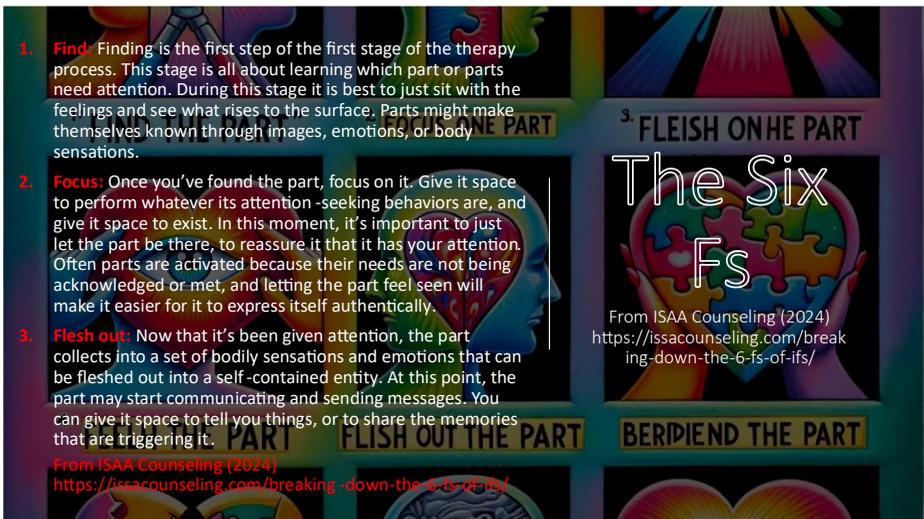
IFS therapy's holistic approach to healing emphasizes understanding and integration of all parts of the Self, including the spirit, leading to profound and lasting psychological change.

In IFS therapy, the goal is to understand the roles of these parts, how they contribute to the problematic behavior, and how to bring them into a harmonious balance under the leadership of the Self. This approach helps individuals address the root causes of their problems and foster a more integrated, healthier state of being.



In order to access and resolve the pain that has been largely exiled out of consciousness, we must access the defensive parts and get them to back off from defending as this keeps us distanced from our true self. There are six important steps involved in this process: Find, Focus, Flesh Out, Feel, Befriend, and Fear. This process is described nicely in the two graphics below as adapted from ISAA Counseling (2024):

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1. **Find:** Finding is the first step of the first stage of the therapy process. This stage is all about learning which part or parts need attention. During this stage it is best to just sit with the feelings and see what rises to the surface. Parts might make themselves known through images, emotions, or bodily sensations.

2. **Focus:** Once you've found the part, focus on it. Give it space to perform whatever its attention-seeking behaviors are, and give it space to exist. In this moment, it's important to just let the part be there, to reassure it that it has your attention. Often parts are activated because their needs are not being acknowledged or met, and letting the part feel seen will make it easier for it to express itself authentically.

3. **Flesh out:** Now that it's been given attention, the part collects into a set of bodily sensations and emotions that can be fleshed out into a self-contained entity. At this point, the part may start communicating and sending messages. You can give it space to tell you things, or to share the memories that are triggering it.

From ISAA Counseling (2024)
<https://issacounseling.com/breaking-down-the-6-fs-of-ifs/>

3. FLEISH ONHE PART

The Six Fs

From ISAA Counseling (2024)
<https://issacounseling.com/breaking-down-the-6-fs-of-ifs/>

BEREIDIEND THE PART

The Six Fs – cont.

- **4. Feel:** This is the second stage. Now it's important to see how other parts feel about this part's presence. They might be upset that this specific part is getting attention or be alarmed that it will further imbalance the system. You must judge if you have enough core Self energy to move forward. If you don't, you may have to do some work with other parts that are in the way before you can proceed.
- Self-energy is measured with the 8 C's: calm, compassion, curiosity, clarity, confidence, courage, creativity, and connection. If any of the 8 C's are present when dealing with the part, it means Self is present and able to care for it. If more negative or extreme feelings like anger or anxiety are present it means that another protector part has stepped in to deal with the part you are trying to target.
- **5. Befriend:** This is the start of stage 3. In the previous steps we created separation between the parts and Self and worked on creating active communication. This step is then about actually forming a relationship between this target part and Self. Work happens much more smoothly when the part trusts Self, so this is a good place to start forming that relationship. Ask the part about its function, what it's trying to accomplish, and how it's trying to help. Let it know that it is valued for its function, and that you respect how it's keeping the system safe. Fear: What is this part protecting you from?
- **6. Fear:** The final step for dealing with protector parts does not feel like a resolution. In this step, we ask the part what it's afraid of. What does it think will happen if it stops being a protector? Here is often where we see the major signs of the exiled parts, those things we keep buried down deep so that they can't overwhelm us. If the rest of the steps have been fully realized, Self will be able to have the part step aside so it can access whichever exile the protector was caring for. This stage opens a door for further exploration that is specific to working with exiled parts. There will be an article on this stage of IFS soon
- Adapted from ISSA Counseling <https://issacounseling.com/contact-us/>).

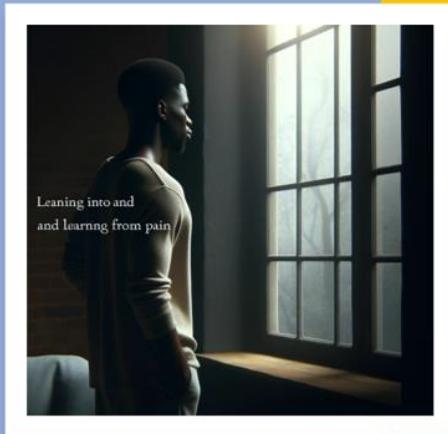
Jenna Riemersma (2020), who holds a master's degree in psychology from Harvard and integrates IFS with faith, in particular, Christianity, is one of my favorite IFS gurus. Her book, *Altogether You* stands among the best and most readable IFS books on the market and is highly recommended. Jenna teaches us that emotions are not to be avoided. Sadly, we live in a culture that teaches us that we should chase the

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positive emotions, such as love, joy and happiness, and run from, suppress, medicate away, and avoid the hard emotions, such as sadness, depression, fear, anxiety, grief, and anger. It has been said that words are the language of the mind, and emotions are the language of the body/heart. Jenna encourages us to listen to our emotions as they can guide us. Snuffing them out cuts us off from truths about our lives, whereas tuning into your emotions can lead us to better truths about our lives and point us to a better way of living. Moreover, they are often the canary in the coalmine, and we know how important they were.

In IFS, we learn to listen to the pain

- I need to listen to my **anger** to know that I have been violated.
- I need to listen to my **anxiety** to know that I have unresolved trauma that needs to be healed.
- I need to listen to my **depression** to know that I need to care for my heart's deepest wounds
- I need to listen to my **fear** to know that I may need to create safety.
- I need to listen to my **stress and irritability** to know that I'm out of balance and need rest or reprioritization (Riemersma, 2020, p 42).



In a wonderful exercise, Jenna suggests that we lean into the pain and do three things, as presented in the graphic below. For more detailed information on this process, I suggest you access her website <https://jennariemersma.com/move-toward/>. It is an amazing resource (Riemersma, 2024). I have used this exercise many times and have found it liberating to re-frame my pain as positive feedback (yes, positive, not negative), as it can lead to vital awareness of what that pain wants us to know and do.

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Lean into pain and ask three questions:

Much of medicine and even psychotherapy teaches us the wrong thing, namely, to avoid or mitigate pain which keeps us stuck. IFS teaches us the contrary, that instead we must move toward the pain and listen to its valuable messages.

1. What body or **physical sensations** do I **notice** and where do I feel them?
2. What does this **pain or emotion** want me to **know**?
3. What does this pain or emotion **need** me to **do**?

Click the link below for a wonderful guide on how to do this by Jenna (start at 48:20):

https://www.youtube.com/watch?v=U0C2dLNWgPA&ab_channel=PureDesireMinistries



A few of my favorite speakers on IFS.



Jenna Riersmesma – Faith and IFS

https://www.youtube.com/watch?v=deqxDq9Xw6g&ab_channel=geoffreyholclaw



Dr. Tori Olds

https://www.youtube.com/watch?v=tNA5qTTXFFA&ab_channel=Dr.ToriOlds



Kenny Dennis – IFS for Kids

https://www.youtube.com/watch?v=Jl7bk3JfEmk&ab_channel=KennyDennis



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The infographic is set against a dark blue background with colorful abstract shapes in shades of pink, light blue, and orange. It is divided into three vertical columns, each with a title in light blue capital letters. Each column contains a list of bullet points, also in light blue, describing the characteristics of the respective part.

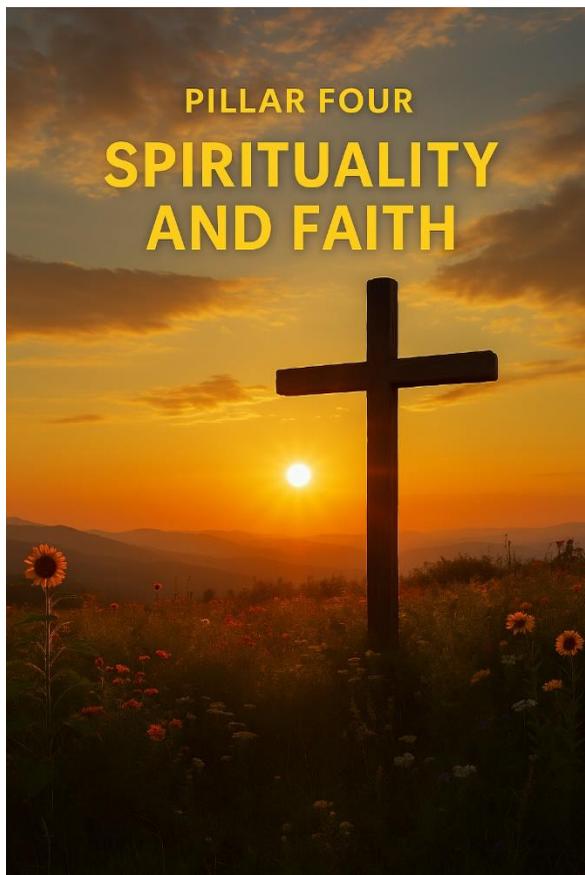
EXILES	MANAGERS	FIREFIGHTERS
<ul style="list-style-type: none">➤ Parts that have experienced trauma and become isolated or suppressed in an effort to protect the individual from feeling the pain, terror, fear, and so on.➤ Exiles are often young parts holding extreme feelings or beliefs that become isolated from the rest of the system ("I'm worthless," "I must be successful to be lovable," "I am a failure.")➤ Exiles become increasingly extreme and desperate as they look for opportunities to emerge and tell their stories.➤ Want to be cared for and loved and constantly seek someone to rescue and redeem them.➤ Can leave the individual feeling fragile and vulnerable.	<ul style="list-style-type: none">➤ Managers are proactive and try to avoid interactions or situations that might activate an exile's attempts to break out or leak feelings, sensations, or memories into consciousness.➤ The primary function of all managers is to keep the exiles exiled.➤ Common managerial behaviors: controlling, perfectionism, high criticism, co-dependency, narcissism, people pleasing, avoiding risks, being pessimistic, constantly striving to achieve, anxiety.➤ Managers will strive to prevent the exile from being triggered.➤ Common symptoms: Emotional detachment, panic attacks, somatic complaints, depressive episodes, hypervigilance.	<ul style="list-style-type: none">➤ Have the same goal as managers: keep exiles under control and handle the pain. BUT firefighters have different strategies.➤ Managers want you to look good and be approved of, but firefighters only care about distracting from the pain, so they are often in conflict.➤ Firefighters are highly reactive and automatically activate when an exiled part is triggered (rejection, isolation, failure, traumatic memories, criticism).➤ The function of a firefighter is to eliminate painful feelings, thoughts, sensations, and memories without regard for the consequences.➤ Common symptoms: drug/alcohol use, self-mutilation, binge-eating, compulsive sexuality, media addictions

Courtesy of my rockstar student, Alayna Collins, M.A., Doctoral Candidate

Pillar Four

Spirituality and Faith

*Transformational Healing Through Faith,
Neuroscience, and the Rewriting of the Soul*



Of all the pillars in the NeuroFaith[®]™ model, this one stands apart. Not because it is less scientific but because it addresses what is beyond the reach of science alone. It reaches into the soul. While polyvagal-informed therapy, neurocardiology, and Internal Family Systems (IFS) offer indispensable tools for healing trauma and addiction, they do not answer the question of ultimate meaning. They cannot rewrite a shattered identity or transfigure the human heart. That work belongs to spirituality. More specifically, to a faith-rooted spirituality grounded in the redemptive power and Person of Christ.

Spirituality is not an afterthought or a "nice add-on" in trauma treatment. It is the deep structure beneath every healing process. When integrated into clinical care with clarity and reverence, spirituality activates latent neuroplasticity, regulates the nervous system, restores fractured identity, and reshapes the moral and relational framework of the individual. But not all spirituality is created equal. The NeuroFaith[®]™ model identifies Christ-centered faith as the path of deepest healing—not simply because it is spiritually true but because it aligns with what we now know from neuroscience, developmental psychology, and consciousness studies.

Tim Fletcher and the Default Mode Network: Shame, Narrative, and Inner Healing

To understand the power of spirituality to transform the inner landscape, we must also acknowledge those who are sounding the alarm about trauma's hidden stronghold—the Default Mode Network. One such voice is Tim Fletcher, a Canadian counselor, educator, and founder of RE/ACT, a program dedicated to healing trauma and addiction by focusing on core belief systems and developmental wounding. Fletcher is not a research scientist, but he is a deeply experienced trauma

educator whose public lectures, including those on his YouTube channel "*Tim Fletcher – Trauma and Addiction*", have reached thousands (Fletcher, 2022).

Fletcher asserts what neuroscience has now confirmed: that trauma rewires the **Default Mode Network (DMN)** with *negative core beliefs* that become our operating system. These beliefs often include:

- "I'm not lovable."
- "I'm not safe."
- "I don't matter."
- "I'm bad."

According to Fletcher, these beliefs are not just psychological constructs; they become the emotional and narrative lens through which the traumatized person views all of life. The DMN, which helps us process self-referential thought, becomes hijacked by shame-based scripts that feel permanent, immutable, and unconscious. He emphasizes that until these core beliefs are accessed and replaced, true healing remains incomplete—even if abstinence from substances is achieved.

Fletcher's clinical insight aligns with research by Miller (2021), who found that spiritual experience can shift activity in the DMN and restore meaning, hope, and connection. Fletcher's model integrates well with IFS in that it recognizes exiled parts trapped in shame and fear, as well as protector parts that over-function through perfectionism, anger, or addiction. These parts arise to manage the emotional pain generated by unresolved **negative core beliefs**.

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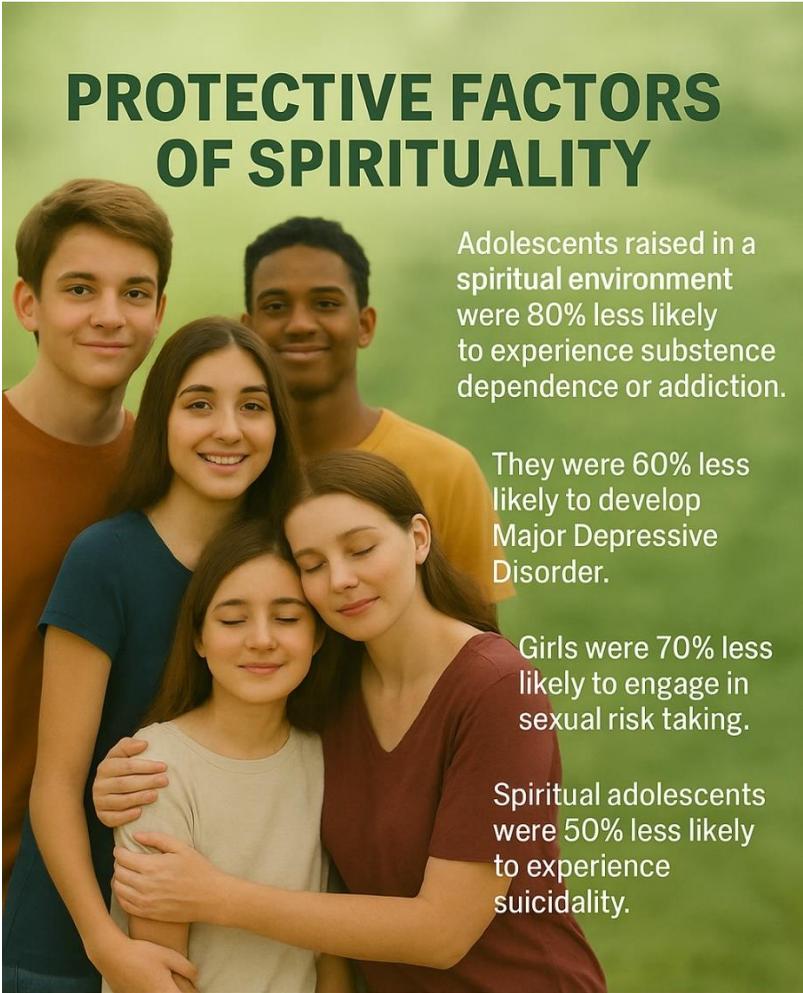
The NeuroFaith®™ model builds on Fletcher’s insights by declaring: spirituality is the most effective means to reach, redeem, and restore these inner narratives. Without healing the Default Mode Network, recovery remains superficial. But when the DMN is reoriented through Christ-centered truth—“*You are loved.*” “*You are forgiven.*” “*You are chosen.*”—the narrative changes, and with it, the neurobiology of the soul.

Lisa Miller’s Research: A New Science of Spirituality

Dr. Lisa Miller, psychologist at Columbia University, has become one of the most respected voices bridging spirituality and neuroscience. In her groundbreaking book *The Awakened Brain* (2021), Miller outlines the robust, peer-reviewed evidence that spirituality is not merely beneficial, it is neuroprotective. Her findings, drawn from over two decades of research and multiple longitudinal and twin studies, include the following:

- Adolescents raised in a spiritual environment were 80% less likely to experience substance dependence or addiction.
- They were 60% less likely to develop Major Depressive Disorder.
- Girls were 70% less likely to engage in sexual risk-taking.
- Spiritual adolescents were 50% less likely to experience suicidality.
- Most powerfully, children whose mothers were also highly spiritual showed an 80% reduction in depression risk.

PROTECTIVE FACTORS OF SPIRITUALITY



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Most powerfully, children whose mothers were also highly spiritual showed an 80% reduction in depression risk.

These numbers are astonishing. They rival or exceed the protective benefits of medication or therapy alone. And the mechanism is now visible through MRI imaging.

Spirituality as a Powerful Protective Factor

Based on Dr. Lisa Miller's research

Children and adolescents raised with meaningful spiritual or religious involvement experience strong mental health protection:

- ✓ **80%** less likely to develop substance dependence or abuse
- ✓ **70%** less likely to engage in sexual risk-taking (in girls)
- ✓ **60%** less likely to develop Major Depressive Disorder
- ✓ **50%** less likely to experience suicidality

“Spiritual development is not just good for the soul, it’s powerfully protective for the mind.”

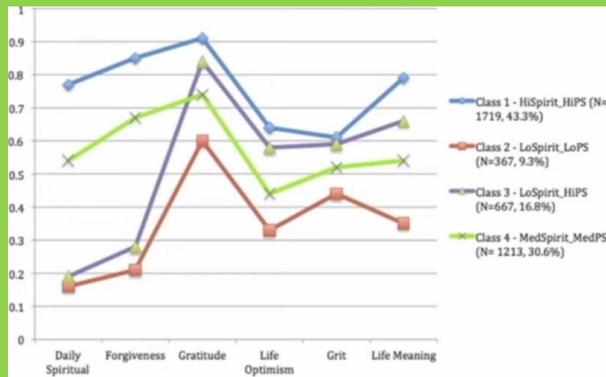
— Dr. Lisa Miller

Miller's research shows that individuals with an awakened, spiritually engaged brain exhibit greater cortical thickness, especially in areas responsible for self-regulation, reflection, and resilience. These areas

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are significantly compromised in those with depression, anxiety, and trauma histories. When activated through spiritual engagement, they buffer the effects of adversity and provide a foundation for moral discernment, emotional regulation, and hope.

Dr. Miller notes research which indicates that high spirituality increases positive core values and life appreciation compared to low spirituality



One region of particular interest is the **Default Mode Network (DMN)**, a resting-state network responsible for self-referential thought and autobiographical memory. This is where our identity narrative lives. In trauma survivors, the DMN becomes encoded with scripts of shame: *"I'm not good enough."* *"I'm broken."* *"It's my fault."* These aren't just cognitive distortions—they are **neural grooves** carved by years of dysregulation and survival-based meaning-making.

Miller (2021) has shown that spiritual experience can rewire the DMN, introducing new narratives of purpose, connection, and divine value. Experiences of awe, gratitude, prayer, and relational communion with God literally restructure this internal narrator. The result is not just a change in belief but a change in brain structure.

The Biopsychosocial-Spiritual Model

The old "biopsychosocial" model is no longer enough. We now recognize that the soul is not an abstraction. It is integrated in every layer of the human experience—biological, psychological, relational, and existential. The biopsychosocial-spiritual model is not an invention of religion. It is a recognition of human wholeness.

*In *The Effect of Spirituality on Health and Healing*, Brian Udermann (2000) concluded from an extensive literature review that spiritual involvement correlates positively with reduced incidence of stroke, cardiovascular disease, cancer, suicide, substance abuse, and general mortality. These outcomes remained significant even after controlling for variables like socioeconomic status and physical health behaviors.*

Udermann writes: "Strong scientific evidence suggests that individuals who regularly participate in spiritual worship services or related activities and who feel strongly that spirituality or the presence of a higher being or power are sources of strength and comfort to them are healthier and possess greater healing capabilities" (p. 194).

Shame: The Soul Killer

In parallel, we must address what spirituality is up against: **shame**. Developmental trauma writes shame into the narrative code of the soul, unlike guilt, which says "I did something wrong," shame says "*I am wrong.*" It is totalizing, isolating, and destructive. It creates an existential rupture that is resistant to reason and immune to self-help.

Dr. David Hawkins (2014, 2020), though controversial, offers a powerful framework for understanding emotional energy states. Using kinesiology, Hawkins mapped shame at the lowest energetic frequency

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of all measurable states—a level of 20 on a scale from 0 to 1,000. According to his data, shame produces a cascade of demoralization, physiological breakdown, and soul despair.

Emotional Frequencies and Health
Unresolved Toxic Shame Kills US!
(Hawkins, 2014; 2020)

Shame (20) and guilt (30) are seen as the heaviest emotions and are the lowest in energy where we feel contracted and stuck.

In contrast, emotions like **love (500) and joy (540)** are lighter, with more energy and movement, creating a sense of openness and lightness.



700+	Enlightenment
600	Peace
540	Joy
500	Love
400	Reason
350	Acceptance
310	Willingness
250	Neutrality
200	Courage
175	Pride
150	Anger
125	Desire
100	Fear
75	Grief
50	Apathy
30	Guilt
20	Shame

Though Hawkins' methodology has been criticized, many clinicians and spiritual leaders have found his conclusions experientially valid. Shame constricts the nervous system, suppresses immune function, and disrupts the default mode network. It leads to addictive behavior, relational sabotage, and hopelessness. It is, in every sense, anti-life.

Psychology can name shame, and at times buffer its effects. But it cannot redeem the soul. Only a transformative encounter with grace can do that.

The Redemptive Work of Christ

This is where the NeuroFaith®™ model becomes explicitly Christian. It does not offer vague spirituality or moralistic performance. It offers the death and resurrection of Jesus Christ as the defining act and moment

of healing. *He was handed over to die because of our sins, and He was raised to life to make us right with God.*" (Romans 4:25 NLT)

Furthermore, Romans 12:2 commands, *"Do not conform to the pattern of this world, but be transformed by the renewing of your mind."* The Greek word for "transformed" is **metamorphoo**, the same used in Matthew 17:2, where Jesus is transfigured before the disciples. It is a word of radical change, like the metamorphosis of a caterpillar into a butterfly. The old is not improved, it is left behind.

In Christ, our shame is not managed. It is crucified. Our new life is not rehabilitated. It is resurrected. 2 Corinthians 5:17 tells us, *"If anyone is in Christ, the new creation has come: The old has gone, the new is here!"*

This isn't metaphor. This is an ontological shift. When a person places faith in Christ, the soul is regenerated. The mind is renewed. The nervous system calms. The default mode network rewrites its script. The trauma narrative is interrupted by a new story—one not of victimhood or survival but of redemption.

A Theology of Integration

Christian anthropology affirms that the human person is composed of body, soul, and spirit. The soul itself has three parts: intellect, will, and emotions. These faculties work together to form identity, process pain, and express action through the body. When trauma strikes, it often severs the link between these layers. The will collapses. Emotions shut down. Intellect becomes distorted. The body enters chronic dysregulation.

Spirituality reconnects these parts. And Christian spirituality does so uniquely. It does not merely offer insight or ritual. It offers a relationship with a living Redeemer. Through prayer, Scripture, worship, confession, and fellowship, in perfect alignment with the Holy Spirit begins to govern the soul again, and the soul restores right order to the body.

Ephesians 4:15 speaks to this integration: *"Instead, we will speak the truth in love, growing in every way more and more like Christ, who is the head of His body, the church."* Titus 3:5-6 describes this relationship in greater detail: *He saved us, not because of the righteous things we had done, but because of His mercy. He washed away our sins, giving us a new birth and new life through the Holy Spirit. He generously poured out the Spirit upon us through Jesus Christ our Savior.*

Philippians 1:6 adds, *"And I am certain that God, who began the good work within you, will continue his work until it is finally finished."* This is not instant healing, but it is ongoing, transformative work.

In Conclusion - The Soul Must Be Healed

The world is treating trauma with shallow tools. A diagnostic checklist. A pill. A support group. These are not evil. But they are insufficient.

What we are seeing in addiction, anxiety, depression, and dysregulation is not just a clinical crisis. It is a spiritual one. The soul has been orphaned. The story has been hijacked. The image of God has been obscured by pain and shame.

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The **NeuroFaith®** model calls us to something deeper. To a science that respects the soul, and to a faith that engages the brain. This model is not just innovative. It is necessary.

Because without Christ, there is no final healing.

The Honorary Pillar

Movement as Medicine



Although not formally listed among the four foundational pillars of the NeuroFaith[®]™ model, physical exercise deserves a prominent place in any serious discussion on healing depression and anxiety. To leave it out would be a disservice not only

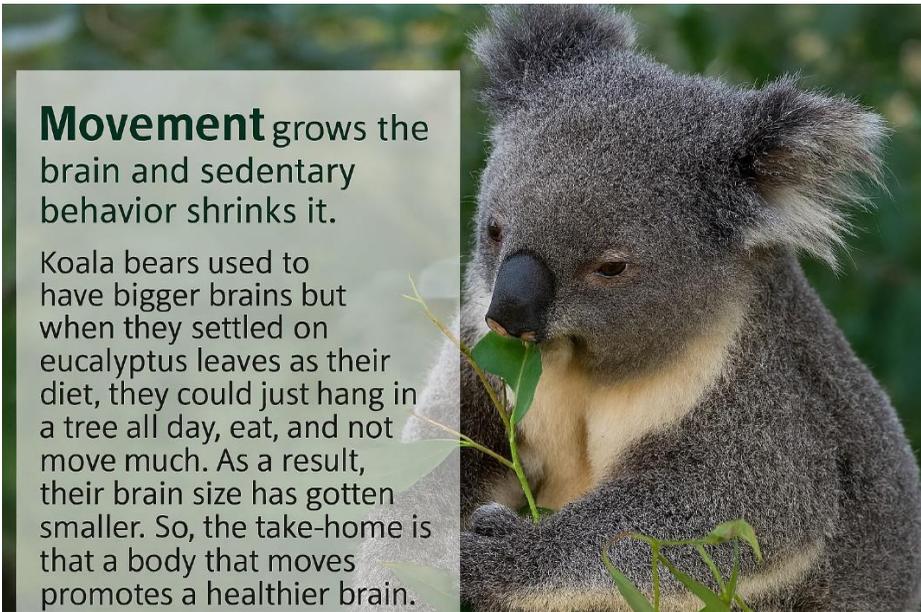
to the science but to the lived experience of those who have found movement to be nothing short of transformational. So, we offer it here, not as a footnote but as an honorary pillar, a companion to our spiritual, neurological, and emotional strategies for healing.

To be clear: if scientists could bottle the effects of exercise and turn it into a pill, it would be hailed as one of the most potent antidepressants ever developed. Regular movement enhances mood, improves sleep, boosts energy, increases cognitive clarity, reduces inflammation, and upregulates brain-derived neurotrophic factor (BDNF)—a key player in neuroplasticity and long-term brain health (Ratey, 2008; Erickson et al., 2011).

“Dear friend, I hope all is well with you and that you are as healthy in body as you are strong in spirit.” (3 John 2 NLT)

Movement as Sacred Participation

Exercise is not merely a physical task. It is an embodied prayer, a declaration of hope, and a direct act of resistance against the immobilizing weight of depression. When someone battling depressive symptoms chooses to get up and move, they are sending a powerful signal to their brain and body that life still matters. In that moment, they are reclaiming agency and affirming their commitment to healing, to becoming, and to living.



Movement grows the brain and sedentary behavior shrinks it.

Koala bears used to have bigger brains but when they settled on eucalyptus leaves as their diet, they could just hang in a tree all day, eat, and not move much. As a result, their brain size has gotten smaller. So, the take-home is that a body that moves promotes a healthier brain.

In Scripture, the body is not a shell to be escaped but a temple to be honored. Paul writes, *"Do you not know that your bodies are temples of the Holy Spirit, who is in you, whom you have received from God?"* (1 Corinthians 6:19, NIV). Movement, then, is not only therapeutic but sacred. It is a return to the rhythms of life and an invitation for the Holy Spirit to inhabit us more fully.

BDNF: The Miracle Molecule

Brain-derived neurotrophic factor, or BDNF, plays a critical role in neural resilience and regeneration. Often dubbed "Miracle-Gro for the brain," BDNF supports the growth of new neurons, protects existing ones, and fosters the synaptic connections necessary for learning and memory. Individuals with depression often show reduced levels of BDNF, which may contribute to cognitive fog, low mood, and difficulty experiencing pleasure (Duman & Monteggia, 2006).



Exercise, particularly aerobic activity such as brisk walking, cycling, or swimming, reliably increases BDNF levels. In one landmark study, Erickson and colleagues (2011) found that one year of moderate aerobic exercise increased hippocampal volume and BDNF levels in older adults. These findings suggest that movement is not simply helpful but essential to reversing the cognitive and emotional shrinkage that often accompanies chronic stress and depression.

Anti-Inflammatory Effects

Emerging research shows that depression is not merely a neurochemical imbalance but also a neuroinflammatory condition. Inflammatory markers such as C-reactive protein (CRP), interleukin-6 (IL-6), and tumor necrosis factor-alpha (TNF- α) are often elevated in individuals with major depressive disorder (MDD) (Miller & Raison, 2016). Chronic low-grade inflammation affects neurotransmitter availability, reduces BDNF, and disrupts the HPA axis, all of which exacerbate depressive symptoms.

Exercise helps reduce systemic inflammation by downregulating these inflammatory cytokines, enhancing antioxidant defenses, and improving immune regulation. The effects are particularly strong with consistent, moderate-intensity movement. In a world where pharmaceuticals dominate the conversation, we must remember that movement is one of the most powerful anti-inflammatory agents known to man.

Restoring Autonomic Balance

As discussed in our chapter on polyvagal theory, the autonomic nervous system (ANS) plays a pivotal role in mood regulation. Depression often correlates with a shutdown of the ventral vagal system and a dominance of dorsal vagal responses—marked by lethargy, immobilization, and despair. Exercise activates the sympathetic nervous system in a healthy way and promotes rebound engagement of the ventral vagus, helping to restore autonomic flexibility (Porges, 2011).

Activities like yoga, tai chi, and mindful walking not only engage the body but also soothe the mind, fostering a sense of embodied safety. When combined with breathwork and intention, movement becomes a powerful gateway to regulation and spiritual attunement.

The Evidence is Overwhelming

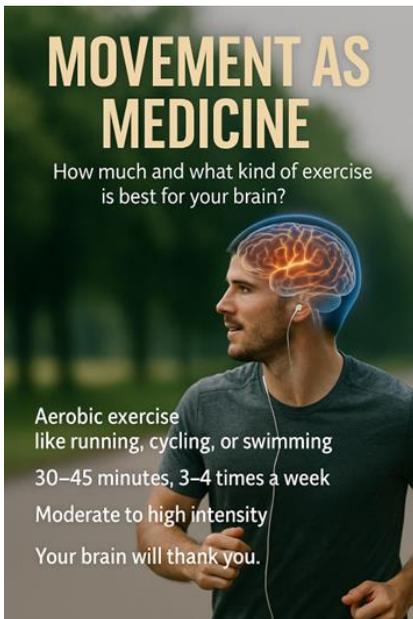
Meta-analyses have confirmed that exercise is as effective, and in some cases more effective, than pharmacotherapy for mild to moderate depression (Blumenthal et al., 2007; Cooney et al., 2013). Unlike medication, which often comes with side effects and long-term

dependency risks, exercise builds capacity, not dependency. It fosters agency, not passivity.

In fact, the most robust outcomes are found when exercise is integrated into a multi-modal treatment approach. This is the very premise of NeuroFaith®™, that no single intervention is enough, but when layered together, each strand forms a cord of healing that is not easily broken.

Hope with Sweat Equity

Healing is not passive. It asks something of us. It asks for courage, consistency, and sometimes, sweat. But this is not the drudgery of self-help performance. It is the joyful declaration that your body still matters, that your soul still yearns, and that your future is not written in stone.



To those struggling with depression: you do not have to run marathons. Start where you are. Walk. Stretch. Breathe. Move. Let your body remind your brain that you are still here and still worthy of wholeness.

As we continue into the next chapters, we return to our core pillars—faith, neurocardiology, polyvagal regulation, and internal family systems. But let us carry this honorary pillar with us as we go.

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Because when the soul rises, the body often follows. And sometimes,
it is the other way around.

Anchored In Hope

The 12 Steps as a Foundation For Healing



The 12 Steps have long served as a powerful spiritual framework for recovery, and we embrace them as a vital component of healing. In our approach, the Steps are not merely a set of principles, but a lived process of transformation — one that calls us to honesty, humility, and active participation in our own restoration. True redemption in Christ is never passive; it compels us to show up, to take responsibility, and to align our lives with the truth we have received.

What makes this path even more powerful is how the 12 Steps naturally harmonize with evidence-based therapeutic models. We integrate them with Polyvagal-Informed Therapy, HeartMath®, Internal Family Systems (IFS), and Johann Hari's connection-based healing principles. This combination addresses the whole person — spirit, mind, body, and relationships — allowing us to move beyond simply breaking addictive patterns and toward repairing the deeper emotional and relational wounds that often fuel them.

We have adapted the traditional 12-Step process to be unapologetically Christ-centered, with Jesus Christ as our Higher Power. This shift transforms the journey from a vague search for spiritual meaning into a deeply personal relationship with the One who redeems, restores, and renews. Through this integration of biblical truth and therapeutic insight, the 12 Steps become not only a pathway out of addiction, but a way of life grounded in grace, accountability, and lasting freedom.

Over the decades, AA evolved into a community-based model of support, helping individuals surrender control, acknowledge a higher power, and heal fractured relationships. But while the 12 Steps address spiritual and social aspects, they don't always tackle the deep-rooted trauma or neurological changes caused by addiction. This is where we integrate other therapies to enhance and deepen the recovery process.

Polyvagal-Informed Therapy helps individuals better understand how trauma and stress impact their nervous system. Addiction often thrives in an environment of chronic stress, which leads to dysregulation of the nervous system. By calming the body's stress responses and promoting a sense of safety, Polyvagal Therapy allows participants to feel secure enough to engage with the deeper work of the 12 Steps, such as personal reflection, making amends, and rebuilding relationships.

HeartMath® adds another dimension to this process by fostering heart-brain coherence. This science-backed approach teaches emotional self-regulation and stress management, which supports the emotional balance needed to fully engage in recovery. Proverbs 4:23 reminds us, *"Above all else, guard your heart, for everything you do flows from it"* (NIV), reflecting HeartMath®'s emphasis on the heart's pivotal role in emotional well-being and decision-making.

Internal Family Systems (IFS) further enriches the recovery journey by helping individuals recognize and heal the wounded parts of themselves that have contributed to their addiction. IFS teaches that we all have various internal "parts"—some protective, some wounded. The 12 Steps ask us to examine our lives and make amends, and IFS deepens this work by helping individuals approach their past with self-compassion and understanding. By healing these internal parts, individuals can experience greater internal harmony, which reinforces the transformative power of the 12 Steps.

Johann Hari's connection-based model of healing, discussed in *Lost Connections*, offers yet another layer of depth. Hari's research highlights how addiction is often rooted in disconnection—from meaningful work, relationships, and even ourselves. He argues that

reconnection is the key to overcoming addiction. The 12 Steps naturally foster reconnection to a higher power and community, but by integrating Hari's insights, we extend the process to rebuilding connections with nature, meaningful work, and a hopeful future. His model aligns with Ecclesiastes 4:9-10, which says, *"Two are better than one, because they have a good return for their labor: If either of them falls down, one can help the other up"* (NIV).

In short, our integrated approach combines the spiritual foundation of the 12 Steps with cutting-edge therapies like Polyvagal-Informed Therapy, HeartMath®, IFS, and Johann Hari's connection model. This fusion not only addresses the addiction but also the underlying disconnections and traumas that have perpetuated the cycle of addiction. The goal is not just sobriety but the complete restoration of a connected, purposeful, and fulfilling life.

Now that we have explored how our NeuroFaith® approach weaves together the spiritual and emotional strength of the 12 Steps with modern therapies—like Polyvagal-Informed Therapy, HeartMath®, Internal Family Systems, and Johann Hari's connection-based model—let's dive into the 12 Steps themselves. These steps are not just tools for recovery; they are a way to reclaim connection—connection to ourselves, others, and a higher power. They offer a path from isolation to community, from shame to self-compassion, and from chaos to peace.

Each step invites us to take action, reflect deeply, and embrace change. For many, the 12 Steps have been a lifeline—providing hope, structure, and transformation in the face of addiction. When you approach them

with an open heart and a willingness to grow, these steps become a foundation for healing that reaches every part of life.

Here are the 12 Steps with a Christian focus: as eloquently written by Senor Pastor (retired) Earl Heverly and shared with permission (Heverly, 2024).

Step 1: We admit we are powerless over our addictions and compulsive behaviors and that our lives have become unmanageable.

The first step to healing is acknowledging that we can't do life alone. This is where we stop pretending that we're in control of our lives and humbly admit we need help. This is the courageous first move toward healing and freedom.

I know that nothing good lives in me, that is, in my sinful nature. For I have the desire to do what is good, but I cannot carry it out. Romans 1:18 (NIV)

Step 2: We believe that a power greater than ourselves can restore us to sanity.

This is where hope begins. Putting our trust in the belief that healing is possible through Something/Someone greater and bigger than ourselves gives us the strength to keep moving forward.

For God is working in you, giving you the desire and the power to do what pleases Him. Philippians 2:13 (NLT)

Step 3: We make a decision to turn our lives and wills over to the care of God as we understand Him.

Surrender is not about giving up; it's about handing our lives completely over to a loving God who desires to guide and care for us.

Trust in the Lord with all your heart and lean not on your own understanding; in all your ways acknowledge Him, and He will make your paths straight. Proverbs 3:5-6 (NIV).

"I am the resurrection and the life. Anyone who believes in Me will live, even after dying. Everyone who lives in Me and believes in Me will never ever die." John 11:25-26 (NLT)

And the outcome of declaring our commitment to Him:

If you openly declare that Jesus is Lord and believe in your heart that God raised him from the dead, you will be saved. For it is by believing in your heart that you are made right with God, and it is by openly declaring your faith that you are saved. Romans 10:9-10 (NLT)

Sample prayer for you, dear friend:

Dear God, I don't understand everything yet, but I believe You love me and made me for Your purposes. I'm sorry I've lived for myself instead of for You. I ask for Your forgiveness and thank You for sending Jesus to pay for my sins. I want Him to be the Lord of my life. I receive Your gift of eternal life and Your Holy Spirit who will help me serve You and live a life that pleases You. Amen.

Please let us know if you prayed this prayer. We'd like to pray for you and with you and have some additional information to share with you at no charge, to help you grow in your newfound faith in Jesus. Jeff can be reached at jeff.hansenphd@comcast.net. Earl can be reached at revhev@comcast.net

Step 4: We step into the unknown, trusting that God's plan for us is good, even when we can't yet see it.

“For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future.” Jeremiah 29:11 (NIV)

Step 5: We make a searching and fearless moral inventory of ourselves.

This step requires real, deep and complete honesty with ourselves about ourselves. It’s not always easy to look at our mistakes and failures. But with God’s help, it’s a necessary step toward understanding the roots of our struggles.

Test me, O Lord, and try me, examine my heart and my mind; for your love is ever before me, and I walk continually in your truth. Psalm 26:2 (NIV)

Step 6: We admit to God, ourselves, and another human being the exact nature of our wrongs.

There is healing power in confession. By sharing our burdens, we release the shame that often keeps us trapped and experience the forgiveness we so desperately need.

Therefore, confess your sins to each other and pray for each other so that you may be healed. James 5:16 (NIV)

Step 7a: We are entirely ready to have God remove all these defects in our character and replace them with righteousness.

Readiness to change is key. Here, we open ourselves to true transformation, trusting that God helps us shed the things that no longer serve us but harm us, then making us into the people we were meant to be.

Do not conform any longer to the pattern of this world but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is—his good, pleasing and perfect will. Romans 12:2 (NIV)

We know that our old sinful selves were crucified with Christ so that sin might lose its power in our lives. We are no longer slaves to sin. Romans 6:6 (NIV)

Step 7b: We humbly ask Him to remove our shortcomings.

In this step, humility takes center stage. We ask for God's intervention, knowing we cannot change on our own. It's in this moment of vulnerability that we discover the path to strength.

If we confess our sins, He is faithful and just and will forgive us our sins and purify (cleanse) us from all unrighteousness. 1 John 1:9 (NIV)

Step 8: We make a list of all persons we have harmed and become willing to make amends to them all.

Healing broken relationships is an essential part of recovery. We take responsibility for our actions, then prepare to make things right with those we have hurt along the way.

Therefore, if you are offering your gift at the altar and there remember that your brother has something against you, leave your gift there in front of the altar. First go and be reconciled to your brother; then come and offer your gift. Matthew 5:23-24 (NIV)

Step 9: We make amends to such people wherever possible, except when to do so would cause injury or harm to them or others.

Making amends is an act of love and accountability. This step restores broken connections and allows us to rebuild trust one relationship at a time.

Fools mock at making amends for sin, but goodwill is found among the upright. Proverbs 14:9 (NIV)

Step 10: We continue to take personal inventory, and when we are wrong promptly admit it.

Recovery is a journey, not a destination. Staying on track requires regular reflection, allowing us to course-correct and continue growing along the way.

Search me, O God, and know my heart; test me and know my anxious thoughts. Point out anything in me that offends you and lead me along the path of everlasting life. Psalm 139:23-24 (NLT)

Step 11: We seek through prayer and meditation to improve our conscious contact with God as we understand Him, praying only for knowledge of His will for us and the power to carry it out.

Building a relationship with God is ongoing. Through prayer, Scripture reading and meditation, we deepen that connection and find the strength to walk in His will.

May our Lord Jesus Christ Himself and God our Father, who loved us and by His grace gave us eternal encouragement and good hope, encourage your hearts and strengthen you in every good deed and word. 2 Thessalonians 2:16-17 (NIV)

Step 12: Having a spiritual awakening as the result of these steps, we try to carry this message to others and practice these principles in all our affairs.

The gift of recovery is meant to be shared. As we experience healing, we are called to help others along the way. In doing so, we continue to live out the principles of the 12 Steps in everything we do.

We urge you, brothers, warn those who are idle, encourage the timid, help the weak, be patient with everyone. Make sure that nobody pays back wrong for wrong, but always try to be kind to each other and to everyone else. 1 Thessalonians 5:14-15 (NIV)

The gift of recovery is meant to be shared. As we experience healing, we are called to help others along the way. In doing so, we continue to live out the principles of the 12 Steps in everything we do.

These steps, intertwined with the therapies we've discussed, form the heart of our approach. Together, they provide a roadmap not only for overcoming addiction but for reconnecting with life in its fullness, physically, emotionally, and spiritually. You are not alone in this journey, and with these tools in hand, true transformation is possible.

Transformational Change

Healing Shame through Christ Alone

Shame is a profound and often hidden wound that impacts the soul at its deepest level. Unlike guilt, which focuses on what we've done, shame targets who we believe we are, fostering feelings of unworthiness and self-rejection. Dr. David Hawkins' groundbreaking yet controversial research highlights that shame resonates at one of the lowest energies measurable by kinesiology (muscle testing) in the human experience, which he reports is a 20 on a 0 – 1,000 scale (no unit of measurement was specified). This low energy indicates the heavy, debilitating nature of shame, which can manifest physically, psychologically, and spiritually. Over time, the oppressive weight of shame affects not only our mental health but also our physical well-being, contributing to chronic stress, immune system suppression, and even an increased risk of illness.



While psychology can do much to help heal and manage the impact of shame, it is only through Christ that the deepest wounds of the soul can be fully healed. The transformative power of Jesus brings hope and renewal, reaching into the innermost parts of our being to replace shame with grace, love, and a restored sense of worth. Christ's redemptive work offers the wholeness and peace that psychology alone cannot fully provide, lifting the burden of shame and allowing for true freedom and spiritual healing.

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In this chapter, we will explore how the healing power and Person of Christ reaches into the depths of our shame, replacing it with a new identity grounded in grace and love. Only through the restorative work of Jesus can the wounds of shame be fully healed, allowing us to embrace the wholeness, freedom, and peace that He promises.



Step 6 of the Twelve Steps identifies the lynchpin of breaking free from addiction and its consequences: *We are entirely ready to have God remove all these defects in our character and replace them with righteousness.*

The further we dive into this step; we discover its success is dependent on two things: 1. God's ability and desire to 'remove these defects in our character and replace them with righteousness' and 2. our willingness to let Him do so.

Much has been written about this process that seemingly reduces it to a matter of faith (in God to do the work). While faith in Him to do this on our part is key, there is precious little written explaining what exactly transpires. This chapter examines the process that will help anyone going through it understand and embrace it for themselves and others.

Our primary Biblical passage describing this process is also found in Step 6:

"Do not conform any longer to the pattern of this world but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is—His good, pleasing and perfect will" (Romans 12:2. NIV).

The Apostle Paul is instructing us to no longer live our lives in conformity to the patterns, the norms and behaviors, of this worldly system, the culture that determines what is right and wrong, what is acceptable and what isn't. Our culture today embraces an 'anything goes as long as it doesn't harm anyone else' standard of behavior and decision making and has removed many of the consequences that have been the moral guard rails for the American experiment the last 250 years.

The results have been devastating—rampant drug use, overdoses, and death, increased crime, record suicides, abortion and euthanasia of

unwanted members of society, and a coarsening of the American conversation, all of it glossed over by a media that promotes the value of ‘feeling good’ above all else. The error of this view is the consequences aren’t removed and cannot be removed, since it is God who set them in place for our own good.

“For no one can ever be made right with God by doing what the law commands. The law simply shows us how sinful we are” (Romans 3:20, NLT).

Those of us who have been trapped in addiction know all too well the reality of these consequences and our inability to break free from all this on our own. While it was God who put these guard rails in place to protect us, it was also God, by His grace, who gave His Son, Jesus Christ, in our place to suffer the consequences we deserved.

“Christ suffered for our sins once for all time. He never sinned, but he died for sinners to bring you safely home to God. He suffered physical death, but He was raised to life in the Spirit” (1 Peter 3:18, NLT).

“The law was our guardian until Christ came; it protected us until we could be made right with God through faith” (Galatians 3:24, NLT).

Not only are addictions in view—but every life-controlling issue that is contrary to God’s desire and design for us—sin—is covered by the incredible gift of Jesus’ death on the cross in our place.

“He saved us, not because of the righteous things we had done, but because of His mercy. He washed away our sins, giving us a new birth and new life through the Holy Spirit” (Titus 3:5, NLT).

When we confess our sins to God and accept Jesus' work on the cross for ourselves, we open the door to transformation by God Himself, Who does the work inside us!

“And Christ lives within you, so even though your body will die because of sin, the Spirit gives you life because you have been made right with God” (Romans 8:10, NLT).

This life within us is a brand new spirit being that lives for eternity. Our old spirit life is dead because of our sin, and this new life takes its place.

“And I will give you a new heart, and I will put a new spirit in you. I will take out your stony, stubborn heart and give you a tender, responsive heart” (Ezekiel 36:26, NLT)

The result of this exchange is the ability to no longer be governed by the power of sin but to be controlled by the power of God's Spirit

“But now, by dying to what once bound us, we have been released from the law so that we serve in the new way of the Spirit, and not in the old way of the written code” (Romans 7:6, NIV).

Transformation begins when we choose to see ourselves as dead to our old way of living and alive in Christ through our new nature.

“In the same way, count yourselves dead to sin but alive to God in Christ Jesus” (Romans 6:11, NIV).

“Put on your new nature, created to be like God—truly righteous and holy.” Ephesians 4:24, NLT).

Since we have been given a new spirit that lives for eternity, what then, is being transformed? It is our inner self, what the Bible calls our soul.

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Theologically, our soul is comprised of three parts: intellect, will, emotions. We tend to lump these together into our mind and heart, but in truth they work together in forming and delivering our thoughts, speech and actions through our physical self—our body.

God designed our spirit to be closely aligned and connected with Him. Our spirit is to guide and guard our soul, which in turn gives expression to our body. We interact with our world and other people primarily through our body, but we should interact with God primarily through our spirit.

Romans 12:2 says transformation is the complete change of one life form into another. The Greek word for transformation is METAMORPHOO, the basis for our English word metamorphosis, describes the biological process of a tadpole becoming a frog, or a caterpillar becoming a butterfly. The latter life form is nothing like the former. Our new life in Christ will be equally distinct and separate from our old.

It also describes the transformation of Jesus' physical body in Matthew 17:2. As the disciples watched, His appearance was transformed so that His face shone like the sun, and His clothes became as white as light. Our physical bodies will also be transformed when Jesus returns, and we are changed into His likeness in our entirety (see also 1 Corinthians 15:53).

Finally, Paul writes that the renewing of our mind results in our inner man(soul) being transformed: our intellect, will, and emotions, one aspect at a time, as long as we're living on this planet, making us more like Jesus.

“Instead, we will speak the truth in love, growing in every way more and more like Christ, who is the head of His body, the church” (Ephesians 4:15, NLT).

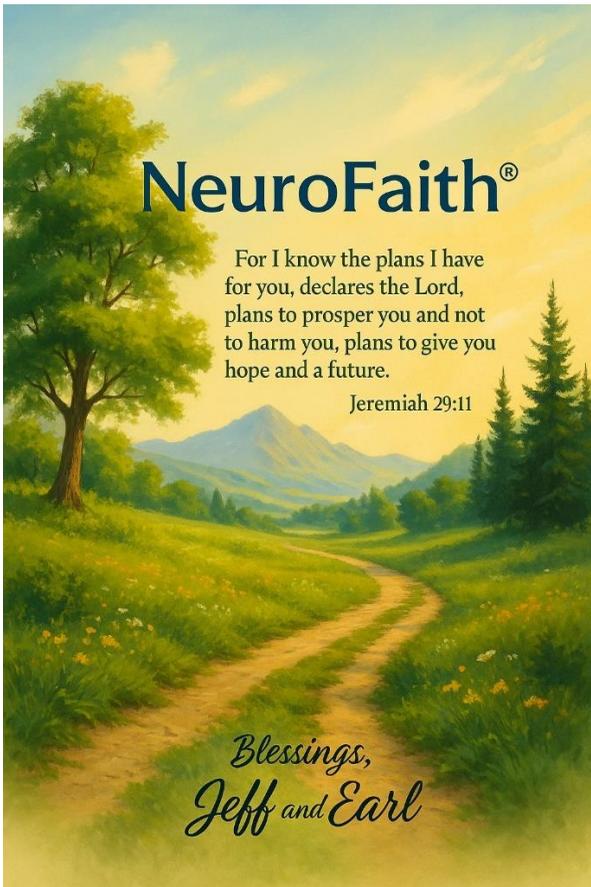
Remember, transformation is not just about changing our behaviors; it’s about renewing our very essence. It is about becoming more like Christ, day by day, choice by choice, as our intellect, will, and emotions align with His divine will. And as we embrace this process, we fulfill the beautiful truth that, through Him, we can truly become new creations.

Let this chapter be a reminder that transformation is possible, promised, and powerful. Keep moving forward in faith, knowing that God’s work in you is not finished—it is only just beginning. May you find strength, courage, and the profound joy that comes from walking in His light and love.

“And I am certain that God, who began the good work within you, will continue his work until it is finally finished on the day when Christ Jesus returns” (Philippians 1:6, NLT).

Conclusion

A Journey of Hope and Healing



As we conclude *NeuroFaith®: The Intersection of Science and Faith in the Healing of Trauma and Addiction*, we want to leave you with a message of deep encouragement and hope. Healing is not only possible—it is within reach. Whether you or someone you love is facing the challenges of addiction or trauma, know that there is a path forward—a path that heals the mind, restores the body, and renews the soul through the powerful combination of science and faith, particularly Christian faith.

Throughout this book, we have explored the complexities of addiction and trauma, but more importantly, we've highlighted the incredible capacity of the brain to heal and the soul to find peace. Faith provides the strength and resilience needed when life feels overwhelming, and together with science, it offers a foundation for recovery, showing us that no one has to face this journey alone.

The Bible reminds us of this truth: “I can do all things through Christ who strengthens me” (Philippians 4:13, NKJV). These words underscore the heart of our message—healing is possible, but it requires faith and the strength that comes from Christ. We believe deeply in the brain's ability to change and heal through the science of neuroplasticity, and even more so in the spiritual renewal that comes from trusting in God's grace and power.

If you ever feel lost, afraid, or uncertain about your ability to overcome addiction or trauma, let us reassure you: healing is not only real but available to you. The brain's power to repair itself, coupled with the healing presence of Christ, offers a hope beyond measure. “For I know the plans I have for you,” declares the Lord, “plans to prosper you and not to harm you, plans to give you hope and a future” (Jeremiah 29:11,

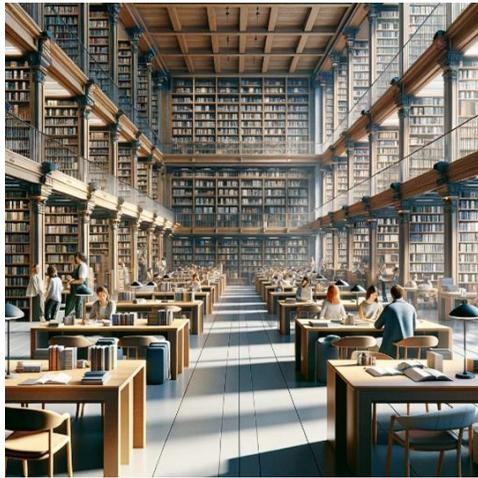
NIV). These promises remind us that no matter how difficult the road may seem, God's plans for us are for healing and restoration.

We wrote this book not only to inform but to invite you to believe in the possibility of transformation—through both the science of the brain and the faith that renews the heart. *"Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God. And the peace of God, which transcends all understanding, will guard your hearts and your minds in Christ Jesus"* (Philippians 4:6-7, NIV). Whether you're on this journey yourself, supporting a loved one, or guiding others professionally, know that every step forward, no matter how small, is a step toward renewal, hope, and restoration.

For those of you who feel overwhelmed by your addiction and trauma we encourage you to seek help from faith-based, neuroscience-informed professional treatment. To that end, we are available to support you in finding resources and guiding you toward healing, with God's love and scientific understanding at the core of every step.

Remember, you are more than your addiction or trauma. You are a child of God, fearfully and wonderfully made, capable of healing and worthy of a life filled with peace, purpose, and connection. Through the power of Christ and the insights of neuroscience, healing is not just possible, it's promised. With faith and science, there is hope. There is healing. And we walk this path alongside you, together, every step of the way.

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Earl Heverly is a retired pastor who served for 46 years in Northern California as an associate pastor, senior pastor, and Bible college instructor. He holds a bachelor's degree in Sociology from the University of Illinois, a Biblical Studies Degree from the Berean School of the Bible, and Ordination Ministerial Credentials through the Assemblies of God USA. Throughout his ministry, Earl has remained deeply committed to Scripture-centered teaching and pastoral care. He is also a co-author of *NeuroFaith®: The Intersection of Faith and Science in the Healing of Trauma and Addiction*.

