IN THIS CHAPTER

- Discovering the 10 elements of flow and why we should all tap into this state more often
- Debunking the myth of the genius and stopping the self-sabotage
- Distinguishing healthy flow from other states of absorption
- Understanding the science of flow

Chapter 1
Putting Flow in a Nutshell

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Welcome to your pathway to flow. No matter who you are, you've likely experienced flow at some point in your life. At least, you probably remember it from your childhood, when you spent hours lost in play; where time and space disappeared around you, and you later remerged, feeling great. Because you picked up this book, I suspect you want more of that special state but can't really seem to get it. No matter whether you're someone that hasn't felt flow since childhood, or you're a stressed businessperson, a busy parent, a professional artist, or a barista, if you wonder where your flow went, this book is for you.

I'll be your guide on this pathway to flow. I'm a psychologist and neuroscientist, and I've spent the last 15 years working within international research institutions at the intersection of the arts and sciences. As a former professional dancer, I've known flow all my life. But I write this book as a scientist to share the science

of why flow doesn't have to remain this elusive state that happens to you by chance — or that doesn't happen at all. In this chapter we will get acquainted with what flow is, why it benefits us, and how finding back your flow is possible.

Identifying the Benefits of Flow

In this chapter, you can stroll through the science of flow, see how to distinguish it from other good and bad states of absorption (more on that distinction in Chapters 9 and Bonus Chapter 2, found at www.dummies.com/go/flowfd), and why real flow makes you feel so incredibly good. Astonishing scientific discoveries in the recent past reveal that tapping into flow regularly makes people healthier, happier, and nicer to be around.

As an unexpected side effect of having a regular flow practice, you may also become more productive in your work, face less risk of developing burnout, and feel more intrinsically motivated in your chores. And, tapping into flow regularly tends to make people develop a more optimistic outlook on life, kick-starting this little motor called satisfaction in your mind. Satisfaction can propel you forward, even against all odds — and strengthen something inside you that psychologists call *resilience* (successfully adapting to difficult or challenging life experiences). You can read all about the benefits of flow in Chapter 2.

Flow is for everyone: You simply need to know how to get started. And after you start that practice, you can see how its effects ripple through your life — creating feelings of self-confidence, self-relevance, and meaning.

Discovering flow

To clarify what I'm talking about when I talk about flow, *flow* is a state that unites the following ten elements (which I discuss in detail in Chapter 2), according to the father of flow research, the Hungarian scientist Professor Mihaly Csikszentmihalyi. You're in flow when you're actively doing something and you:

- Are completely concentrated and absorbed in the activity
- Have clear goals about what you want to achieve
- Get clear signals that tell you whether you're doing the activity well or need to adjust — you feel in control
- Feel a transformation of time (time zips by or slows down)
- Do what you do because of *intrinsic rewards* (because you enjoy and feel satisfaction from doing the activity)
- Feel effortlessness in what you're doing and perhaps you feel part of something bigger than yourself
- Find the task neither too easy nor too difficult — there is a skills-challenge balance
- Feel fully immersed, like your actions and attention have merged, and you're part of the activity itself — perhaps you feel you *are* the movement or otherwise feel you lose yourself in the action
- Stop experiencing repetitive, looping thoughts and mental replay of the past — rumination recedes
- Feel in control and escape the unpredictability of life — worries recede

Don't we all want more of that?



WARNING

Knowing what flow feels like doesn't necessarily move you any closer to how to get that special feeling. And that's where this book comes in. You can reverse engineer the state that you want by using the newest evidence from psychology and neuroscience. In Chapter 5, I give an overview of eight behaviors that can guide you to flow, and in Chapters 6 to 8, I reveal the science of each of them. In Part 3 and in Bonus Chapters 3 and 4 found at `www.dummies.com/go/flowfd` you can then read about all eight behaviors applied to about 20 different activities and hobbies.

Searching for flow

No matter who you are, having flow in your life has positive effects. Science shows that regular flow helps make people

healthy in mind and body, more balanced, and more productive. Population-based assessments show that the *Cox hazard ratio*, a statistical measure of a person's risk of developing a disease over time, suggests that people who experience flow regularly have a lower risk for some mental and physical ailments, such as burn out and heart disease.

In a 2024 study by a group of scientists, including Dr. Miriam Mosing and her student Emma Gaston at the Max Planck Institute for Empirical Aesthetics in Frankfurt, they combed through a large dataset that contained information about thousands of individuals to see whether the risk of receiving a diagnosis of something bad was different in flow-prone people and people who aren't prone to flow. (Flip to Chapter 3 for discussion of flow-proneness.) They found a correlation between being flow-prone and having fewer medical issues:

- **Depression:** Sixteen percent lower risk
- **Anxiety:** Sixteen percent lower risk
- **Schizophrenia:** Fourteen percent lower risk
- **Bipolar disorder:** Twelve percent lower risk
- **Stress-related diseases:** Nine percent lower risk
- **Cardiovascular disorders:** Four percent lower risk

Everyone struggles with something; no matter who you are, life can be tough. For instance:

- Work demands productivity and loyalty, regardless of all adversity.
- Family demands quality time, solutions, and a constant flow of good vibes (or cash).
- Institutions insist on their cumbersome bureaucracy, regardless of your family duties, neurodiversity, or feelings of overwhelm.
- Your body wants a good amount of exercise, care, and healthful food to function properly — especially if you're north of 50 or have a chronic health condition.

In the turmoil of the many things that your life demands of you, you can struggle to drop your attention into a fountain of creative focus, feel good, and live out your full potential.



REMEMBER

Regular flow makes it possible to have a happy, productive life. And that's because of some very welcome side effects of the delicious feeling of being in flow. For example, scientific assessments reveal:

- Regular flow experiences train your attention to last; you can reclaim your focus in other domains of your life.
- The flow after-glow makes you better able to handle what feels like too much if you don't have flow; your perspective changes. You become more optimistic.
- If you can experience flow during your work, sport, or art, you can improve both your creativity and productivity; you can think outside of the box.
- When you have flow experiences, you can rekindle your energy and sense of authentic self. You come back to yourself, which stokes your *intrinsic motivation* (feeling enjoyment and satisfaction simply from doing the activity, not from an outcome).
- Flow can return a feeling of agency over your life, healing a troubled mind; you take back control, even just for a little while.

The Do's and Don'ts of Flow

So, how do people achieve flow? In the past decades, neuroscientific research has uncovered eight behaviors that anyone can do to help them find flow, which I call the Guiding Stars of Flow (I introduce these behaviors briefly in the section "Discovering flow," earlier in this chapter). And research also points to three behaviors that you should avoid while you try to find flow (which I call the Gods of Mind-Hooking, discussed in detail in Chapter 9). In Part 3, I unpack all these helpful and unhelpful behaviors in relation to particular flow activities and Bonus

Chapters 3 and 4 (found at www.dummies.com/go/flowfd), string it all together.

You can't just decide to copy these behaviors, and then have flow. It's not that easy. You need to tailor the behaviors to your own life, depending on who you are, what work you do, and what hobbies you enjoy. In Part 4, I discuss ways to apply the Guiding Stars of Flow to different kinds of lives — busy lives, lives on the edge, and in Bonus Chapter 5 (www.dummies.com/go/flowfd), you can discover flow and neurodivergent lives.

Some people can tap into flow particularly easily. I talk about what makes someone flow-prone in Chapter 3. But you don't have to be flow-prone to achieve flow. These eight Guiding Stars of Flow have a strong effect on your brain and body, and can help you set the settings for flow in your mind.

Feeling Flow (Whoever You Are)

Anyone and everyone can tap into flow. That's why I wrote this book. Archeological evidence (which you can find details about in Chapter 2) suggests that humans have always sought flow, by crafting, hunting, dancing, drawing, storytelling, athletic pursuits, music-making, and so on.

Appreciating the benefits of flow revealed through modern scientific research (see Chapter 2), flow may have brought those human ancestors who tapped into flow regularly some advantages — including emotional regulation and the ability to deal with a complex life, full of stresses (maybe that sounds familiar to you). However, you may have some road blocks on your pathway to flow, which I talk about in the following sections.

Dismissing the myth of the genius

People often talk about flow as something creative folks have in common; a curious, all-absorbing state of mind where they feel amazing and can be incredibly productive and creative at the same time.

Take a look at the following list of achievements that have impacted humanity, created by individuals whose minds found flow by doing what they did (but remember that finding flow doesn't mean that you will or have to create something amazing):

- **The printing press:** Invented by Johannes Gutenberg (around 1450) and started off exponential literacy development. This first printing press is the reason that you can pick up a copy of a book you love or haven't yet read and be surrounded by a library of printed books.
- **Antibiotics and vaccines:** Improve the health and well-being of millions. Maybe antibiotics saved your life when you had a terrible infection, or perhaps your great-great-grandmother survived as a child because she received a vaccine for a deadly illness.
- **Moving pictures:** In 1895, the Lumière brothers created the first ever motion picture. Whatever your favorite movie, consider it brought to you by the Lumières.

These accounts of how other peoples' creative flow led to excellence, societal impact, and Nobel prizes might wow you. But those glorious stories can also alienate you from your own potential for tapping into flow and being creative with what you do. If you expect to invent the next big thing, you have too high expectations! The myth that you have to be a genius to find flow definitely doesn't help you find flow. In Chapter 2 (and in many subsequent chapters!) you'll hear me repeat that for tapping into flow, your goal can never be success or a final prize. Focusing on extrinsic rewards and aims makes reaching flow impossible.

Preventing self-sabotage

To prevent self-sabotage that can happen if you buy into the myth of the genius (see the preceding section), remember:

- **Everyone faces uncertainty.** The human mind loves a hero's story, and looking back at history, it can often seem that everyone always knew what they were doing and why until they gloriously reached their goal. But in reality,

everyone goes through a string of failed attempts, slippery slopes, and mysterious crossroads. You need to figure out how to deal with uncertainty. As you can read about in Chapter 16, you need to set up a flexible practice and not get ahead of yourself.

- **Don't aim for fame.** The famous people discussed in the preceding section didn't know they'd achieve what they did. And certainly many more people with dreams and goals never receive recognition (even if they achieve their goals). Anyone can benefit from being in flow, even if the outcomes of their activities remain unknown to the wider world. For flow, make peace with being an unknown hero.
- **Avoid flow-sabotage from the people and popular culture around you.** Families are a huge flow-stopper. In German, there is a saying that goes something like this: 'either you're perfect at it or you better don't do it'. A second-century Greek physician called Galen preached that 'Laziness breeds humors of the blood!' and he'd certainly have grouped 'flow' within mental states to be avoided. There are people who believe that spending time on being in flow for us mere mortals is a waste of time, or that you are lazy and should be frowned upon, if you do. While we experience popular culture around us — 'social learning' takes place inside our brain.

To prevent socially induced self-sabotage, you need to keep a few points in mind about humanity's social brain (I look more closely at the social components of the brain in Chapter 6). Your social brain compels you to fit in:

- **Stressing your brain by not conforming:** When you behave differently than your social group, your brain can switch on a bizarre drama-queen soap opera about loneliness before your inner eye to warn you about social exclusion.
- **Rewarding your brain by following the group:** Evolutionarily ancient circuits in your brain lights up in reward activity when you conform to a social norm. That's why people crave fitting in — it's rewarding to do so.

Your social brain can make your group very strong (that's great!). However, its drama-queen nature can also lead you to self-defeating behaviors that prevent you from achieving your goals just so that you can fit in (that's bad!).

Remember: These processes are beyond your conscious control. You need to trick them — which you can do if you have the right knowledge about the brain.



WARNING

Voices outside and inside your head may tell you that you can't really get into flow, creativity, and other fun mental pursuits. Listening to that narrative is a form of self-sabotage.

Recognizing Flow-Proneness

Scientists have measured peoples' flow-proneness by using specifically designed and validated tests since the mid-2000's (you can read more about these studies in Chapter 3). Researchers asked and answered questions such as these:

- Are flow-prone people more intelligent than others? (No.)
- Do flow-prone people have a special personality? (Yes.)
- Do the brains of flow-prone people have unique features? (Yes.)

These findings provide those who aren't flow-prone with reassurance for three reasons:

- You don't need to be specifically intelligent to find flow. Einstein may well have been very intelligent, but that wasn't what made him flow-prone.
- Knowing your personality type, gets you a step closer to understanding whether you can easily find flow. With that information, you can tailor your personal pathway to flow, taking into account the needs of your personality type.
- If you know how brains differ in terms of flow potential, you can prepare yourself constructively (see also Chapter 4).

In Chapter 3, you can look at different personality traits and how they impact your experience of flow. If you have many of the personality traits that make someone flow-prone, your personality may be conducive to flow. If you still don't get flow regularly, you can use this scaffolding to get you more. On the other hand, if you don't have many (or any) of these traits, consider how to keep those aspects of your personality in check when you seek to tap into flow.

Identifying Non-Flow Healthy States

In addition to flow, you can find plenty of practices circling about in the self-help space — and different terms that describe them, all revolving around different states of mind, consciousness, and degrees of absorption. At first glance, these states of mind or practices can seem close to flow:

- Meditation and mindfulness
- Yoga flow
- Trance
- Reverie, daydreaming, and mind-wandering
- Sleep and dreaming

I discuss the similarities and differences of all of these practices in detail in Chapter 10 and Bonus Chapter 2, which is found at `www.dummies.com/go/flowfd`. Sometimes, your brain may not even register a real difference between these practices.



WARNING

Sometimes, one practice or mindset simply works for you, while the other just doesn't. You can find flow with many different activities — yoga or meditation, for example — if that particular activity helps you find the ten Flow Elements (which you can read about in Chapter 2). But if you don't feel the Flow Elements with an activity, you likely can't use it to find flow.

On the Cheat Sheet found at www.dummies.com/go/flowfd you can find a potential flow activity, and Part 3 offers some specific activities that may appeal to you.

Avoiding Unhealthy Mental Absorption

Some activities nudge your brain into a state of highly absorbing arousal, yet it can disrupt your peace of mind, making finding flow almost impossible:

- Media flow
- Rumination (sticky thinking)
- Obsessive-compulsive disorder (OCD)
- Alcohol- or drug-induced time-warp

Chapter 9 explains absorbing activities that prevent flow. I call them *mind-hooks*. In Bonus Chapter 2 (www.dummies.com/go/flowfd), I show you how to identify unhealthy absorption and how to aim for the real thing.

Differential Diagnostics

Take a look again at the 10 Elements of Flow by Professor Mihaly Csikszentmihalyi covered earlier this chapter in the section "Discovering flow." You'll find that while some of the above activities tick some of the 10 Flow Elements on the list, they don't unite all of them. More differences:

- **Creative mindset:** One difference between flow and all of the above is the creative mindset that comes with flow — you are creating something. Just like you can create a dance sequence, you can certainly also create a yoga

sequence or a specific meditation routine. This requires a high level of mastery in these disciplines which most people never reach. Start with something more tangible. See Part 3 for ideas of flow activities that may work for you.

- **Skills-challenge balance:** Just sitting or copying poses is not going to get your mind to tap into flow. This is where Flow Element 7 becomes important — the skills-challenge balance. As we will see in Chapter 7, an important ingredient of flow is mastery and technique. Once you master the technique of a skill, it's a bit like learning a language (see Chapter 11). First you learn individual words (poses or movements in yoga or dance, notes in song and music, and so on), then you learn to combine them into sequences (the sun greeting in yoga — the combination of Grade 1 in the Royal Academy of Ballet system; the tone ladder in music and song).
- **No spirituality:** The largest difference between meditation, mindfulness yoga and flow is that there doesn't have to be any spiritual component in flow at all, no enlightenment path, no greater power. While in flow you can certainly feel like something has taken you over, or that you're part of something bigger than you. But what is likely going on is that the skill you're using is controlled by your implicit memory systems that we will speak about in Chapter 7. Your brain is executing automated skills that you have perfected through technique practice, which now rewards you with unconstrained, effortless *doing*. This is part of the action-awareness fusion of flow (see Chapter 2).
- **Flow is not a basic need:** Clearly, when we sleep, time and space disappear around us, like when we're in flow. However, sleeping is a basic need, if we don't, we collapse. Brief, we cannot function if we don't sleep. Flow is also healthy — but it's not flow that makes you healthy, but what it does to your body while you're in flow, getting rid of stress hormones, for example. Organizing thoughts, escaping ruminative and other sticky thoughts.

Find out how the brain 'makes' the 10 Flow Elements in Chapter 2.

Creating a Better Tomorrow

Having a flow practice in place before life gets tough can really benefit you physically and mentally. One of the best gifts that parents can give to their children is introducing them to a flow practice early on. That way, the child has the right habits logged inside their brain to get them to flow when things turn awry.

But it's never too late to start a flow practice. Your brain has *neuroplasticity,* meaning the capacity for building new neural connections, from birth till death.

Building the Right Memories

Developing a flow practice that allows you to stay present has advantages:

Who creates a beautiful present that they like and cherish, later has a beautiful past to look back to. We construct our memories, with every single day of our life. Memories are built via neural connections between cues that reach our eight senses, our feelings, thoughts, insights . . . Memories are stored via electric impulses in a structure called the 'temporal poles' in your brain. — If you touch your temples and let your fingers slide slightly toward the back of the head — that's where they are. And it's where that dance, that surprise, that birthday, that trip to . . . sits for you to revisit that bubble of blissful being.

Unfortunately, your brain has what psychologists call a "negativity bias." You're much better at remembering negative events. It's an evolutionary left-over, a mechanism that ensured that our ancestors would remember negative stuff quickly, and would be very fast to act upon it — for survival. While you cannot override this ancient mechanism, you can make sure, regardless of how tough your life is, that you create many, many fine little memories of feelings of achievement and well-being — now. One way to do this is via a flow practice.

Perhaps right now, the worst that ever happened to you was the death of a pet. But life moves on, and even the most protected individuals will, at some point in their life, face stuff not going

the way they want or events traumatizing them. A regular flow practice is part of what makes a person resilient, able to deal with hardship. (See Chapter 2 for more benefits of flow.)

If you're currently in a situation of hardship, Chapters 15 and 16 guide you in developing a flow practice while life is unpredictable or very stressful.

Understanding the Science of Flow

So, what happens in the brain when you're in flow? Science doesn't know for certain. One of the difficulties of studying flow in the lab is flow itself. You can recreate many behaviors in the lab and study them (sleep, yoga, trance, and so on). But for the mind to tap into flow, you must meet a series of prerequisites that researchers struggle to recreate in the lab at the time I'm writing.

You can also find flow's neural patterns in other states of mind, meaning they're not specific to flow. What science knows so far about flow and the brain is that no one system in the brain creates flow. Rather, flow seems to be the result of a careful interplay between processes that you can stoke through your behaviors — which I introduce in Part 2 as the eight Guiding Stars of Flow (as well as the three Gods of Mind-Hooking that you need to avoid).



WARNING

I use the words *may*, *some*, and *perhaps* quite a lot throughout this book. Scientific findings provide evidence, but humans have to interpret that evidence (and that interpretation isn't always correct). Studying flow scientifically comes with many complexities.

All over the world, researchers are currently designing experimental setups and tasks to get people to feel flow in the lab.

STUDYING FLOW IN THE LAB CAN BE DIFFICULT

Trying to study flow in a scientific lab is like trying to fix a watch with a hammer: it is impossible. We have not yet found the best scientific methods to study flow. For example, some people need a specific ritual that contains familiar cues around them to achieve flow, such as specific smells or sights, such as incense or a *drishti* stone. Or you may need to do particular movements to get yourself into flow, such as the repetitive movements of your arms in a tennis serve, the steps of a dance, or the actions of your fingers on the piano keys. In a lab, you get submerged in completely new cues, and your movements are constrained.

Besides, you can also find it hard to tap into flow while you wear an itchy *electroencephalogram* (EEG) cap (the electrodes attached to the EEG cap provide scientists with information about the distribution and timing of your brain's electrical activity during a task or during flow), or while lying inside the huge tube of a hammering functional Magnetic Resonance Imaging (fMRI) machine (which monitors how and where the blood flow in your brain changes during a task — or during flow).

Because of the difficulty of studying flow in the lab, scientists have invented many different methods to try to investigate flow. These variations have caused a bit of a problem to the field of flow research. In 2022, Clara Alameda and her colleagues from the University of Granada in Spain reviewed 25 studies that used neuro-imaging techniques (such as EEG and fMRI) to study what happens in the brain during flow (including when people did arithmetic tasks, read a novel, walked on a tightrope, or played video games). They found that they couldn't easily identify a true pattern of results because the studies had such diverse methods and variability in the quality of their research designs. These results even included contradictory findings.

So, the evidence that scientists have about flow and the brain is, in fact, somewhat mixed. Hopefully you can use this book as a bit of a guide to help you navigate this evidence and find your flow.