## How Permanent Behavior Change Really Works

Iteration is the key to sustainable behavior change.

## **KEY POINTS**

- Traditional SMART behavior changes methods often fail in part because they trigger the habenula brain region.
- The habenula detects feelings of failure and subsequently kills the motivation to put in effort.
- The Iterative Mindset focuses on continuous and adaptive, ongoing improvements.
- By treating behavior change as a series of small experiments, one can maintain sustainable results.

What do a former smoker, a successful entrepreneur, and a champion <u>athlete</u> have in common? They've all mastered the art of iteration—the key to lasting behavior change.

In a world of constant flux and uncertainty, our ability to adapt is everything. Yet, when it comes to transforming our health habits, we often find ourselves We may set lofty goals, dive in headfirst, and expect perfection from the get-go. We've bought into the myth that success means never faltering, that progress is a straight line from A to B. But when life inevitably throws us curveballs and our <u>motivation</u> wanes, we eventually backslide into old patterns, convinced we've "failed" yet again.

In reality, true change is messy, nonlinear, and full of unexpected detours. The problem isn't lack of effort or discipline. It's that our society's current approaches to behavior change work against groundbreaking new science on our brain (which we will cover later).

That's where the power of iteration comes in. Iteration is the process of continuously experimenting, assessing, and adjusting our efforts based on real-time feedback. It's about treating behavior change as a never-ending series of better versions that keep us going long-term—rather than the win-or-lose of fixed goals or tracking. With each tweak and tinker, we learn, improve, and hone our next version—all while keeping our motivation alive.

stuck in a loop of negative thoughts and yo-yo results.

In my research on many thousands of people, I discovered what I have defined as the "iterative mindset"—an organic process of practicing healthy behaviors, assessing their

effect, and iterating on their healthy behavior. From our study findings, this mindset is the most sure antidote I have seen in my <u>career</u> for the backfiring and short-term results that sabotage so many well-intentioned attempts at change.

The brain's reason why behavior changes backslide.

Over 30 years as a public health physician, I have tested every modern intervention, program, or gadget out there. But in the long term, every one of these solutions resulted in high rates of <u>relapse</u>. This high failure rate of current approaches is an open secret in my field.

For example, a recent study on long-term weight loss (six-plus years out) showed that the gold standard of lifestyle changes programs, the Diabetes Prevention Program (DPP), yielded a mere 1 percent difference in weight-loss maintenance between the intervention and control groups. No wonder our society, with over 70 percent of people classified as overweight or obese, is turning in droves to the quick fix of injectable and expensive GLP-1 weight-loss drugs. (While these drugs have a role in fighting obesity, merely killing someone's <u>appetite</u> but leaving them with their old habits of unhealthy eating, without behavior change support, risks eventual malnourishment and poor health.)

<u>Neuroscience</u> reveals what is happening. Traditional behavior changes programs all use something researchers call "performance-based" goals or tools, like SMART goals, long-term tracking and counting (of calories, weight, steps, carbs, etc.), financial incentives, challenges, etc.

Although engaging at first, all of these approaches define success so narrowly that it is far more likely that one will fail at their goal in some (little) way or at some point eventually. When this happens, a new brain area called the *habenula* turns on. When it turns on, the habenula essentially kills one's motivation to keep doing the healthy behavior—leading to feelings of self-blame, depression, anxiety, or demoralization.

So, people quit trying. But currently, almost no one knows that they even have a habenula—and the motivation loss is often silent and subconscious. Recent research also shows the habenula is a powerful locus of depression, anxiety, OCD, addiction, hunger, and insomnia—and even controls the dopamine rewards pathway and serotonin—making it perhaps the most powerful behavior controller ever found. Once I learned about the habenula, over eight years ago now, I could finally see why every health program or product I had ever prescribed or tried to earnestly help people backfired.

Reaching permanent change

So, how do we tap into the brain's hard rules for permanent change while avoiding the terminal effects of the habenula? Iteration. In my research on thousands of people who achieve permanent change, they have only this one thing in common: They iterate, i.e., they tweak, adjust, tinker with, and adapt what they are trying as they go, so they never categorically fail. And therefore, theoretically, they also don't trigger their habenula (which, if turned on, would kill their motivation to keep trying). These people's behavior change is uniquely evergreen—updating and moving with them as they age—enabling them to live their best life forever.

Iteration is the antidote to the habenula's motivation-sapping effects. By treating behavior change as a series of experiments, we bypass the brain's failure detection system and keep our drive alive. Instead of aiming for perfect adherence to a rigid goal, we should instead focus on progress over performance. We can celebrate milestones along our path, glean lessons from setbacks, and adjust our approach based on real-time feedback.

In my research, only those who have an iterative mindset align with the brain's natural processes and achieve long-term behavior change. Just as babies learn to walk through trial and error, learning, stumbling, and getting back up, our most natural path to mastering new habits is through a process of practice, assessment, and iterating. Each "failure" is no longer a motivation-killer but instead becomes valuable data to inform the next iteration.

If you're tired of the endless cycle of yo-yo <u>dieting</u>, on-again-off-again exercise, or short-lived self-improvement kicks, build an iterative mindset. Start by practicing a desired behavior, iterate whenever you reach an impasse, and let your setbacks be your teachers. With each iteration, you'll be one step closer to becoming the unstoppable force of nature you were born to be.

## References

Apolzan, John W., Elizabeth M. Venditti, Sharon L. Edelstein, et al., for the Diabetes Prevention Program Research Group. "Long-Term Weight Loss with Metformin or Lifestyle Intervention in the Diabetes Prevention Program Outcomes Study." Annals of Internal Medicine 170 (2019): 682–690. https://doi.org/10.7326/M18-1605

Bobinet, K., Greer, S.M. The Iterative Mindset Method: a neuroscientific theoretical approach for sustainable behavior changes and weight-loss in digital medicine. *npj Digit. Med.* 6, 179 (2023). https://doi.org/10.1038/s41746-023-00910-y

Kyra Bobinet M.D., MPH

## About

Kyra Bobinet, M.D., MPH, has passionately pursued and studied the truth about behavior change for nearly three decades as a physician, public health leader,

healthcare executive, and behavioral expert. An award-winning health innovator and thought leader, Dr. Bobinet has an M.D. from UCSF School of Medicine and an MPH from Harvard University. She belongs to the Stanford Medical School AIM lab, where she has taught health behavior change, and is CEO/founder of Fresh Tri, a behavioral software based on the latest neuroscience of habit formation and lasting change. Her first bestselling book, *Well Designed Life*, is a collection of globally influential brain science and behavior change. Dr. Bobinet is an enrolled member of the Leech Lake Band of Ojibwe in Minnesota. She enjoys meditation, horsemanship, and herbalism and lives with her family and animal and plant teachers in the Santa Cruz Mountains.

Unstoppable Brain: The New Neuroscience that Frees Us from Failure, Eases Our

Stress, and Creates Lasting Change Hardcover - April 30, 2024

by <u>Kyra Bobinet</u> (Author) 4.7 *4.7 out of 5 stars*<sub>\_\_</sub> 63 ratings

4.4 on Goodreads

39 ratings See all formats and editions

We all want the autonomy and power to change our lives for the better and yet many of us feel stuck in the same bad habits, patterns, and short-term fixes. We know what we should do, but often we cannot get ourselves to actually do it.

In *Unstoppable Brain*, Dr. Kyra Bobinet debunks today's over-dependence on performance-driven tools such as calorie counting, SMART goals, and likes/followers that attempt to motivate us into behavior change. These methods work well in the short term but have a long-term downside of negative emotions and harmful behaviors. Yet despite these poor results, we keep using the same performative approaches over and over. Something is missing.

Emerging research into the neuroscience of behavior and motivation has brought to light to a little-understood area of the brain, the habenula; possibly the most powerful controller of behavior ever found. If left untended, the habenula acts as a failure detector and motivation kill switch that can rob you of positive or lasting change, leaving you stuck in relapse, frustration, and suffering.

Understanding the habenula's inner workings is must-have knowledge to obtain the freedom and agency for the life you long for. New research reveals that the habenula is a primary gating mechanism for everything that does or doesn't happen in your life, what you do or do not do and. It is among our biggest obstacles to change.

In this book, you will learn that an activated habenula can dominate even the dopamine and reward systems that the scientific world for decades has esteemed the most powerful behavioral drivers. We will explore exactly what is wrong with today's overly used performative approaches and how you can free yourself to reach your optimal health and best life. Dr. Bobinet unpacks mounting evidence on the habenula and other discoveries that change everything about changing behavior. With this new vision and understanding, your natural tendencies, purpose, and passions can emerge organically and inspire permanent, satisfying, and healthy life change.

Unstoppable Brain frees you from being too performative for others and being too hard on yourself. It provides all you need to restore your sovereignty and empowers you to change your life and habits whenever and however you want. It offers a therapeutic dose of three "medicines" that help you go from stuck to unstoppable. This potent elixir is an antidote to recovering your innate motivation wherever you've been stopped by the past or overwhelmed by the future. Most importantly, this book gives you the key to unlock lasting change.

Dr. Bobinet shares relatable examples from her own story and impactful research studies in resounding instruction for a full, vibrant life. Throughout the book, her engaging voice, relatable vulnerability, and empowering message infuse readers with the tools and reinvigorated power to unlock true, lasting change. Become unstoppable!