Chapter 1

THE MINDSETS

When I was a young researcher, just starting out, something happened that changed my life. I was obsessed with understanding how people cope with failures, and I decided to study it by watching how students grapple with hard problems. So I brought children one at a time to a room in their school, made them comfortable, and then gave them a series of puzzles to solve. The first ones were fairly easy, but the next ones were hard. As the students grunted, perspired, and toiled, I watched their strategies and probed what they were thinking and feeling. I expected differences among children in how they coped with the difficulty, but I saw something I never expected.

Confronted with the hard puzzles, one ten-year-old boy pulled up his chair, rubbed his hands together, smacked his lips, and cried out, "I love a challenge!" Another, sweating away on these puzzles, looked up with a pleased expression and said with authority, "You know, I was hoping this would be informative!"

What's wrong with them? I wondered. I always thought you coped with failure or you didn't cope with failure. I never thought anyone loved failure. Were these alien children or were they on to something?

Everyone has a role model, someone who pointed the way at a critical moment in their lives. These children were my role models. They obviously knew something I didn't and I was determined to figure it
out—to understand the kind of mindset that could turn a failure into a gift.

What did they know? They knew that human qualities, such as intellectual skills, could be cultivated through effort. And that’s what they were doing—getting smarter. Not only weren’t they discouraged by failure, they didn’t even think they were failing. They thought they were learning.

I, on the other hand, thought human qualities were carved in stone. You were smart or you weren’t, and failure meant you weren’t. It was that simple. If you could arrange successes and avoid failures (at all costs), you could stay smart. Struggles, mistakes, perseverance were just not part of this picture.

Whether human qualities are things that can be cultivated or things that are carved in stone is an old issue. What these beliefs mean for you is a new one: What are the consequences of thinking that your intelligence or personality is something you can develop, as opposed to something that is a fixed, deep-seated trait? Let’s first look in on the age-old, fiercely waged debate about human nature and then return to the question of what these beliefs mean for you.

**WHY DO PEOPLE DIFFER?**

Since the dawn of time, people have thought differently, acted differently, and fared differently from each other. It was guaranteed that someone would ask the question of why people differed—why some people are smarter or more moral—and whether there was something that made them permanently different. Experts lined up on both sides. Some claimed that there was a strong physical basis for these differences, making them unavoidable and unalterable. Through the ages, these alleged physical differences have included bumps on the skull (phrenology), the size and shape of the skull (craniology), and, today, genes.

Others pointed to the strong differences in people’s backgrounds, experiences, training, or ways of learning. It may surprise you to know that a big champion of this view was Alfred Binet, the inventor of the IQ test. Wasn’t the IQ test meant to summarize children’s unchangeable intelligence? In fact, no. Binet, a Frenchman working in Paris in the early twentieth century, designed this test to identify children who were not profiting from the Paris public schools, so that new educational programs could be designed to get them back on track. Without denying individual differences in children’s intellects, he believed that education and practice could bring about fundamental changes in intelligence. Here is a quote from one of his major books, *Modern Ideas About Children*, in which he summarizes his work with hundreds of children with learning difficulties:

> A few modern philosophers . . . assert that an individual’s intelligence is a fixed quantity, a quantity which cannot be increased. We must protest and react against this brutal pessimism . . . With practice, training, and above all, method, we manage to increase our attention, our memory, our judgment and literally to become more intelligent than we were before.

Who’s right? Today most experts agree that it’s not either—or. It’s not nature or nurture, genes or environment. From conception on, there’s a constant give and take between the two. In fact, as Gilbert Gottlieb, an eminent neuroscientist, put it, not only do genes and environment cooperate as we develop, but genes require input from the environment to work properly.

At the same time, scientists are learning that people have more capacity for lifelong learning and brain development than they ever thought. Of course, each person has a unique genetic endowment. People may start with different temperaments and different aptitudes, but it is clear that experience, training, and personal effort take them the rest of the way. Robert Sternberg, the present-day guru of intelligence, writes that the major factor in whether people achieve expertise “is not some fixed prior ability, but purposeful engagement.” Or, as his forerunner Binet recognized, it’s not always the people who start out the smartest who end up the smartest.
WHAT DOES ALL THIS MEAN FOR YOU? THE TWO MINDSETS

It's one thing to have pundits spouting their opinions about scientific issues. It's another thing to understand how these views apply to you. For twenty years, my research has shown that the view you adopt for yourself profoundly affects the way you lead your life. It can determine whether you become the person you want to be and whether you accomplish the things you value. How does this happen? How can a simple belief have the power to transform your psychology and, as a result, your life?

Believing that your qualities are carved in stone—the fixed mindset—creates an urgency to prove yourself over and over. If you have only a certain amount of intelligence, a certain personality, and a certain moral character—well, then you'd better prove that you have a healthy dose of them. It simply wouldn't do to look or feel deficient in these most basic characteristics.

Some of us are trained in this mindset from an early age. Even as a child, I was focused on being smart, but the fixed mindset was really stamped in by Mrs. Wilson, my sixth-grade teacher. Unlike Alfred Binet, she believed that people's IQ scores told the whole story of who they were. We were seated around the room in IQ order, and only the highest-IQ students could be trusted to carry the flag, clap the erasers, or take a note to the principal. Aside from the daily stomachaches she provoked with her judgmental stance, she was creating a mindset in which everyone in the class had one consuming goal—look smart, don't look dumb. Who cared about or enjoyed learning when our whole being was at stake every time she gave us a test or called on us in class?

I've seen so many people with this one consuming goal of proving themselves—in the classroom, in their careers, and in their relationships. Every situation calls for a confirmation of their intelligence, personality, or character. Every situation is evaluated: Will I succeed or fail? Will I look smart or dumb? Will I be accepted or rejected? Will I feel like a winner or a loser?

But doesn't our society value intelligence, personality, and character? Isn't it normal to want these traits? Yes, but . . .

There's another mindset in which these traits are not simply a hand you're dealt and have to live with, always trying to convince yourself and others that you have a royal flush when you're secretly worried it's a pair of tens. In this mindset, the hand you're dealt is just the starting point for development. This growth mindset is based on the belief that your basic qualities are things you can cultivate through your efforts. Although people may differ in every which way—in their initial talents and aptitudes, interests, or temperaments—everyone can change and grow through application and experience.

Do people with this mindset believe that anyone can be anything, that anyone with proper motivation or education can become Einstein or Beethoven? No, but they believe that a person's true potential is unknown (and unknowable); that it's impossible to foresee what can be accomplished with years of passion, toil, and training.

Did you know that Darwin and Tolstoy were considered ordinary children? That Ben Hogan, one of the greatest golfers of all time, was completely uncoordinated and graceless as a child? That the photographer Cindy Sherman, who has been on virtually every list of the most important artists of the twentieth century, failed her first photography course? That Geraldine Page, one of our greatest actresses, was advised to give it up for lack of talent?

You can see how the belief that cherished qualities can be developed creates a passion for learning. Why waste time proving over and over how great you are, when you could be getting better? Why hide deficiencies instead of overcoming them? Why look for friends or partners who will just shore up your self-esteem instead of ones who will also challenge you to grow? And why seek out the tried and true, instead of experiences that will stretch you? The passion for stretching yourself and sticking to it, even (or especially) when it's not going well, is the hallmark of the growth mindset. This is the mindset that allows people to thrive during some of the most challenging times in their lives.

A VIEW FROM THE TWO MINDSETS

To give you a better sense of how the two mindsets work, imagine—as vividly as you can—that you are a young adult having a really bad day:
One day, you go to a class that is really important to you and that you like a lot. The professor returns the midterm papers to the class. You got a C+. You’re very disappointed. That evening on the way back to your home, you find that you’ve gotten a parking ticket. Being really frustrated, you call your best friend to share your experience but are sort of brushed off.

What would you think? What would you feel? What would you do? When I asked people with the fixed mindset, this is what they said: “I’d feel like a reject.” “I’m a total failure.” “I’m an idiot.” “I’m a loser.” “I’d feel worthless and dumb—everyone’s better than me.” “I’m slime.” In other words, they’d see what happened as a direct measure of their competence and worth.

This is what they’d think about their lives: “My life is pitiful.” “I have no life.” “Somebody upstairs doesn’t like me.” “The world is out to get me.” “Someone is out to destroy me.” “Nobody loves me, everybody hates me.” “Life is unfair and all efforts are useless.” “Life stinks. I’m stupid. Nothing good ever happens to me.” “I’m the most unlucky person on this earth.”

Excuse me, was there death and destruction, or just a grade, a ticket, and a bad phone call?

Are these just people with low self-esteem? Or card-carrying pessimists? No. When they aren’t coping with failure, they feel just as worthy and optimistic—and bright and attractive—as people with the growth mindset.

So how would they cope? “I wouldn’t bother to put so much time and effort into doing well in anything.” (In other words, don’t let anyone measure you again.) “Do nothing.” “Stay in bed.” “Get drunk.” “Eat.” “Yell at someone if I get a chance to.” “Eat chocolate.” “Listen to music and pout.” “Go into my closet and sit there.” “Pick a fight with somebody.” “Cry.” “Break something.” “What is there to do?”

*What is there to do?* You know, when I wrote the vignette, I intentionally made the grade a C+, not an F. It was a midterm rather than a final. It was a parking ticket, not a car wreck. They were “sort of brushed off,” not rejected outright. Nothing catastrophic or irreversible happened. Yet from this raw material the fixed mindset created the feeling of utter failure and paralysis.

When I gave people with the growth mindset the same vignette, here’s what they said. They’d think:

“I need to try harder in class, be more careful when parking the car, and wonder if my friend had a bad day.”

“The C+ would tell me that I’d have to work a lot harder in the class, but I have the rest of the semester to pull up my grade.”

There were many, many more like this, but I think you get the idea. Now, how would they cope? Directly.

“I’d start thinking about studying harder (or studying in a different way) for my next test in that class, I’d pay the ticket, and I’d work things out with my best friend the next time we speak.”

“I’d look at what was wrong on my exam, resolve to do better, pay my parking ticket, and call my friend to tell her I was upset the day before.”

“Work hard on my next paper, speak to the teacher, be more careful where I park or contest the ticket, and find out what’s wrong with my friend.”

You don’t have to have one mindset or the other to be upset. Who wouldn’t be? Things like a poor grade or a rebuff from a friend or loved one—these are not fun events. No one was smacking their lips with relish. Yet those people with the growth mindset were not labeling themselves and throwing up their hands. Even though they felt distressed, they were ready to take the risks, confront the challenges, and keep working at them.

**SO, WHAT’S NEW?**

Is this such a novel idea? We have lots of sayings that stress the importance of risk and the power of persistence, such as “Nothing ventured, nothing gained” and “If at first you don’t succeed, try, try again” or “Rome wasn’t built in a day.” (By the way, I was delighted to learn that the Italians have the same expression.) What is truly amazing is that people with the fixed mindset would not agree. For them, it’s “Nothing ventured, nothing lost.” “If at first you don’t succeed, you probably don’t
have the ability." "If Rome wasn't built in a day, maybe it wasn't meant to be." In other words, risk and effort are two things that might reveal your inadequacies and show that you were not up to the task. In fact, it's startling to see the degree to which people with the fixed mindset do not believe in effort.

What's also new is that people's ideas about risk and effort grow out of their more basic mindset. It's not just that some people happen to recognize the value of challenging themselves and the importance of effort. Our research has shown that this comes directly from the growth mindset. When we teach people the growth mindset, with its focus on development, these ideas about challenge and effort follow. Similarly, it's not just that some people happen to dislike challenge and effort. When we (temporarily) put people in a fixed mindset, with its focus on permanent traits, they quickly fear challenge and devalue effort.

We often see books with titles like *The Ten Secrets of the World's Most Successful People* crowding the shelves of bookstores, and these books may give many useful tips. But they're usually a list of unconnected pointers, like "Take more risks!" or "Believe in yourself!" While you're left admiring people who can do that, it's never clear how these things fit together or how you could ever become that way. So you're inspired for a few days, but basically the world's most successful people still have their secrets.

Instead, as you begin to understand the fixed and growth mindsets, you will see exactly how one thing leads to another—how a belief that your qualities are carved in stone leads to a host of thoughts and actions, and how a belief that your qualities can be cultivated leads to a host of different thoughts and actions, taking you down an entirely different road. It's what we psychologists call an *Abal* experience. Not only have I seen this in my research when we teach people a new mindset, but I get letters all the time from people who have read my work.

They recognize themselves: "As I read your article I literally found myself saying over and over again, 'This is me, this is me!'" They see the connections: "Your article completely blew me away. I felt I had discovered the secret of the universe!" They feel their mindsets reorienting: "I can certainly report a kind of personal revolution happening in my own thinking, and this is an exciting feeling." And they can put this new thinking into practice for themselves and others: "Your work has allowed me to transform my work with children and see education through a different lens," or "I just wanted to let you know what an impact—one on a personal and practical level—your outstanding research has had for hundreds of students."

**SELF-INSIGHT: WHO HAS ACCURATE VIEWS OF THEIR ASSETS AND LIMITATIONS?**

Well, maybe the people with the growth mindset don't think they're Einstein or Beethoven, but aren't they more likely to have inflated views of their abilities and try for things they're not capable of? In fact, studies show that people are terrible at estimating their abilities. Recently, we set out to see who is most likely to do this. Sure, we found that people greatly misestimated their performance and their ability. But it was those with the fixed mindset who accounted for almost all the inaccuracy. The people with the growth mindset were amazingly accurate.

When you think about it, this makes sense. If, like those with the growth mindset, you believe you can develop yourself, then you're open to accurate information about your current abilities, even if it's unflattering. What's more, if you're oriented toward learning, as they are, you need accurate information about your current abilities in order to learn effectively. However, if everything is either good news or bad news about your precious traits—as it is with fixed-mindset people—distortion almost inevitably enters the picture. Some outcomes are magnified, others are explained away, and before you know it you don't know yourself at all.

Howard Gardner, in his book *Extraordinary Minds*, concluded that exceptional individuals have "a special talent for identifying their own strengths and weaknesses." It's interesting that those with the growth mindset seem to have that talent.

**WHAT'S IN STORE**

The other thing exceptional people seem to have is a special talent for converting life's setbacks into future successes. Creativity researchers con-
PARENTS, TEACHERS, AND COACHES: WHERE DO MINDSETS COME FROM?

No parent thinks, “I wonder what I can do today to undermine my children, subvert their effort, turn them off learning, and limit their achievement.” Of course not. They think, “I would do anything, give anything, to make my children successful.” Yet many of the things they do boomerang. Their helpful judgments, their lessons, their motivating techniques often send the wrong message.

In fact, every word and action can send a message. It tells children—or students, or athletes—how to think about themselves. It can be a fixed-mindset message that says: You have permanent traits and I’m judging them. Or it can be a growth-mindset message that says: You are a developing person and I am interested in your development.

It’s remarkable how sensitive children are to these messages, and how concerned they are about them. Haim Ginott, the childrearing sage of the 1950s through ’70s, tells this story. Bruce, age five, went with his mother to his new kindergarten. When they arrived, Bruce looked up at the paintings on the wall and said, “Who made those ugly pictures?” His mother rushed to correct him: “It’s not nice to call pictures ugly when they are so pretty.” But his teacher knew exactly what he meant. “In here,” she said, “you don’t have to paint pretty pictures. You can paint mean pictures if you feel like it.” Bruce gave her a big smile.
She had answered his real question: What happens to a boy who doesn't paint well?

Next, Bruce spotted a broken fire engine. He picked it up and asked in a self-righteous tone, “Who broke this fire engine?” Again his mother rushed in: “What difference does it make to you who broke it? You don’t know anyone here.” But the teacher understood. “Toys are for playing,” she told him. “Sometimes they get broken. It happens.” Again, his question was answered: What happens to boys who break toys?

Bruce waved to his mother and went off to start his first day of kindergarten. This was not a place where he would be judged and labeled.

You know, we never outgrow our sensitivity to these messages. Several years ago, my husband and I spent two weeks in Provence, in the south of France. Everyone was wonderful to us—very kind and very generous. But on the last day, we drove to Italy for lunch. When we got there and found a little family restaurant, tears started streaming down my face. I felt so nurtured. I said to David, “You know, in France, when they’re nice to you, you feel like you’ve passed a test. But in Italy, there is no test.”

Parents and teachers who send fixed-mindset messages are like France, and parents and teachers who send growth-mindset messages are like Italy.

Let’s start with the messages parents send to their children—but, you know, they are also messages that teachers can send to their students or coaches can send to their athletes.

PARENTS (AND TEACHERS):
MESSAGES ABOUT SUCCESS AND FAILURE

Messages About Success

Listen for the messages in the following examples:
“You learned that so quickly! You’re so smart!”
“Look at that drawing, Martha, is he the next Picasso or what?”
“You’re so brilliant, you got an A without even studying!”

If you’re like most parents, you hear these as supportive, esteem-boosting messages. But listen more closely. See if you can hear another message. It’s the one that children hear:
If I don’t learn something quickly, I’m not smart.
I shouldn’t try drawing anything hard or they’ll say I’m no Picasso.
I’d better quit studying or they won’t think I’m brilliant.

How do I know this? Remember chapter 3, how I was thinking about all the praise parents were lavishing on their kids in the hope of encouraging confidence and achievement? You’re so smart. You’re so talented. You’re such a natural athlete. And I thought, wait a minute. Isn’t it the kids with the fixed mindset—the vulnerable kids—who are obsessed with this? Wouldn’t harping on intelligence or talent make kids—all kids—even more obsessed with it?

That’s why we set out to study this. After seven experiments with hundreds of children, we had some of the clearest findings I’ve ever seen: Praising children’s intelligence harms their motivation and it harms their performance.

How can that be? Don’t children love to be praised?

Yes, children love praise. And they especially love to be praised for their intelligence and talent. It really does give them a boost, a special glow—but only for the moment. The minute they hit a snag, their confidence goes out the window and their motivation hits rock bottom. If success means they’re smart, then failure means they’re dumb. That’s the fixed mindset.

Here is the voice of a mother who saw the effects of well-meant praise for intelligence:

I want to share my real-life experience with you. I am the mother of a very intelligent fifth grader. He consistently scores in the 99 percentile on standardized school tests in math, language and science, but he has had some very real “self-worth” problems. My husband, who is also an intelligent person, felt his parents never valued intellect and he has overcompensated with our son in attempting to praise him for “being smart.” Over the past years, I have suspected this was causing a problem, because my son, while
he easily excels in school, is reluctant to take on more difficult work or projects (just as your studies show) because then he would think he's not smart. He projects an over-inflated view of his abilities and claims he can perform better than others (both intellectually and in physical activities), but will not attempt such activities, because of course, in his failure he would be shattered.

And here is the voice of one of my Columbia students reflecting on his history:

I remember often being praised for my intelligence rather than my efforts, and slowly but surely I developed an aversion to difficult challenges. Most surprisingly, this extended beyond academic and even athletic challenges to emotional challenges. This was my greatest learning disability—this tendency to see performance as a reflection of character and, if I could not accomplish something right away, to avoid that task or treat it with contempt.

I know, it feels almost impossible to resist this kind of praise. We want our loved ones to know that we prize them and appreciate their successes. Even I have fallen into the trap.

One day I came home and my husband, David, had solved a very difficult problem we had been puzzling over for a while. Before I could stop myself, I blurted out: “You’re brilliant!” Needless to say, I was appalled at what I had done, and as the look of horror spread over my face, he rushed to reassure me. “I know you meant it in the most ‘growth-minded’ way. That I searched for strategies, kept at it, tried all kinds of solutions, and finally mastered it.”

“Yes,” I said, smiling sweetly, “that’s exactly what I meant.”

Parents think they can hand children permanent confidence—like a gift—by praising their brains and talent. It doesn’t work, and in fact has the opposite effect. It makes children doubt themselves as soon as anything is hard or anything goes wrong. If parents want to give their children a gift, the best thing they can do is to teach their children to love challenges, be intrigued by mistakes, enjoy effort, and keep on learning. That way, their children don’t have to be slaves of praise. They will have a lifelong way to build and repair their own confidence.