2

DO MORE, THINK LESS

Like us, neuroscientist Adam Kepecs is searching for confidence. But, unlike us, he has a preference for small, furry rodents. Rats, says Kepecs, are less complicated than people. They don't bury their basic instincts in layers of tangled thought and emotion. People will tell you they are confident, when, inside, they're quivering wrecks. Or the opposite. They'll tell you they feel insecure, but then their actions suggest boldness. As research subjects, Kepecs finds people unsatisfactory.

He is trying to get to a notion of confidence that is very basic: He calls it "statistical confidence," or, in layman's terms, the measure of our certainty about a choice we've made. His groundbreaking studies have caught the attention of psychologists because they suggest confidence is a quality all species possess. Who knew rats could be confident, too?

We were intrigued by Kepecs's work, and hoped that what he explores in rats might help us understand what constitutes basic confidence in humans. Confident decision making in rats, he believes, shares many similarities with human decision making.

Imagine, he told us, that you're driving to a new restaurant. You've been given the directions and, at the light, you make a turn. You drive a mile, and then another mile. No restaurant. At some point you start thinking, "I'm sure I should be there by now. Did I make a wrong turn?" Whether or not you stick it out and keep driving depends on how confident you are of that turn you made. It's that "sticking it out" piece that Kepecs measures in the rats' behavior, and it suggests that confidence, stripped down, is a pretty basic commodity.

What is confidence, really? Well, it's certainly not what we anticipated it was when we started researching this book.

Confidence is not, as we once believed, simply feeling good about yourself, saying you're great, perfect just as you are, and can do whatever you want to do. That way of thinking hasn't really worked for us, has it? Just saying "I can do that" doesn't mean that you believe it or will act on it. If it did, therapists would be out of business pretty quickly. And hearing "You are wonderful" from someone else doesn't help, either. If all we needed were a few words of reassurance, or a pat on the back, we'd all be productive, thin, and nice to our in-laws as we commandeered the corner office.

We also had a vision of confidence as a set of mannerisms and an expression of power. The most confident person seems to be the one who speaks the loudest and the most often. The friend who always knows he is right or the colleague who dominates every meeting. Aren't those the most confident people, the ones who just, well, sound so confident?

We were counting on Kepecs to help us out, and we met him at Cold Spring Harbor Laboratory, a dazzling setting, right on the ocean on Long Island, forty-five minutes east of Manhattan.

Dangling over our heads as we wound our way to his upstairs office was an enormous, Dale Chihuly glass sculpture—a gift to DNA pioneer James Watson, who transformed the research center into one of the best in the world. The swirl of luminous yellow and green tentacles, capped with bubbles of varying sizes and shapes, demanded a moment of contemplation. Extremely Dr. Seuss, we remarked. Kepecs, a blue-jeans clad, boyish thirty-nine, with dark curls and a hint of Hungarian in his voice, laughingly explained that the sculpture is actually an ode to the shape of neurons. Naturally.

For the next few hours, he was our generous translator of this unfamiliar world—helping us look for connections between his rodents and the human confidence code.

We watched as Kepecs put a rat in a large box. The rat was wearing what is essentially a permanent white top hat housing an array of electrodes. It had been surgically attached, and Kepecs assured us that the rats no longer feel it at all. Inserted into one side of the box, level with the rat's nose, were three white containers, or ports, about two inches wide. The middle one released odors. The rat put its nose into that port and sniffed a mix of two smells. The mix varied in percentages; sometimes the stronger smell was clear and, at other times, teasing apart the combination was trickier. The rat's job was to figure out the predominant smell, and then put his nose in either the left or right port to indicate his decision. If he gets it right, Kepecs explained, and chooses the correct port, he'll get a drop of water as a reward. But the rat has to wait for the drop of water. If he's sure about his decision, he'll wait as long as it takes for the water to come. If he's doubtful, he can give up on getting that particular drop, and start a new round. But giving up means the rat loses not only the chance of getting the drop, but also all of the time it already invested in waiting for the drop. The rat faces a real trade-off, a fundamental, familiar dilemma, and one that turns out to be shared across species. We watched our rat put his nose to the left, and then wait for what seemed an endless . . . eight seconds. That's a long wait for a rat, and so there was plenty of confidence on display. Would it prove to be justified?

Bravo! We exchanged a smile as the drop of water materialized. Kepecs warned us not to get any ideas about how "smart" the furry creatures were. The rats in this particular experiment had done the drill countless times, and they were all pretty good at figuring out which odor corresponded to the left or right port. Kepecs, remember, isn't focused on *whether* his rats make the right choice. He's measuring *how firmly they believe* they've made the right choice. That is the confidence Kepecs works to isolate—the strength of a rat's belief in its decision. It's a confidence that is demonstrated by a rat's act of waiting, and then measured by the length of time it's willing to stick it out, braving a real risk of failure, waiting for that drop of water. It was extraordinary to us that not only could these rodents apparently make what

was a calculation about odds and stakes, but that they were then willing, essentially, to bet on their decision.

There is something elemental to this expression of confidence. The rats are making an informed prediction, almost robotic in its execution. Human brains, too, at times, can also act almost robotically. Every day we make hundreds of decisions, almost unconsciously, that require basic confidence —how quickly to reach out to hit the snooze button on our alarm clock, how far to bend over to load the dishwasher. Kepecs has pinpointed the part of the brain that rats use for these decisions, the orbitofrontal cortex, and he thinks statistical confidence for humans will be found to hail from the same region.

What we saw in Kepecs's lab at Cold Spring Harbor sharpened our picture of confidence. For one thing, if the rats were to be believed, it was not merely a brand of aggressive behavior, or an endless focus on feeling good about oneself. A rat's confidence might be broadly described as a belief that it can create a successful outcome (drops of water) through its action (waiting). We saw a hint of self-efficacy in that. It's a chain of events that all starts, we observed, with that very basic, perhaps unconscious, confidence calculation, which then encourages the rest of the action.

Kepecs gave us a deeper take on confidence, for both rats and humans. In his view, confidence has a distinctive double nature, or shows "two faces." One face is objective: that basic calculation process, a critical confidence tool we'd watched the rats employ. The other face, Kepecs told us, is subjective. Confidence is also something we experience as a feeling. *That's* the confidence we're more familiar with, and spend a lot more time around, at least consciously. It's the more emotional element, its alluring promise yet illusory nature constantly tripping us up. Rats too, Kepecs believes, *feel* their confidence in some ways.

It occurred to us, in the middle of this engrossing and enlightening session, that women would be well served by spending a bit more time rubbing shoulders with Kepecs's version, or really any of confidence's other lesser-known, less glamorous, more workman-like renderings. Maybe

confidence shouldn’t be so mysterious and glamorous and perversely aspirational-only. How refreshing to view it, at least in part, as a simple, concrete tool: an extremely useful compass, perhaps, if we could just get the darn thing working.

Naturally, we started wondering how we measured up. Were we as confident as the rats, at least? We asked the ever-patient Dr. Kepecs whether he could measure our basic, objective confidence somehow, without surgically implanting electrodes or forcing us to inhale a lot of questionable odors. Kepecs had been running some similarly themed tests on students using only computer games. That sounded good to us. As we attempted the various, unfamiliar screen challenges though, we were each surprised to feel considerable anxiety about how we were performing. We found out pretty quickly that we’d both scored extremely well—both in our statistical confidence (measured by how long we took to rate our confidence in each answer) and in our actual accuracy. But just before we got that news, the two of us compared notes, confessed our nerves, and predicted to each other that we’d both bombed. And, at that moment, we really meant it. Sigh.

It was our own twisted version of that familiar paradox. We found our participation in it hard to believe. We’d read so much research about women doubting and underestimating their performance on tests, but we still couldn’t fully avoid experiencing it. There we had been, performing perfectly well, not only answering questions fairly accurately, but also simultaneously reporting high levels of confidence in those answers, and yet we still experienced palpable self-doubt, and *told ourselves*, and each other, that we expected we’d done poorly. What is that? Maybe, we speculated, the female subjective and objective confidence wiring is just totally crossed somehow. We also wondered whether this disturbing pattern of behavior is confined to the human female.

We were starting to stray into the psychological, the philosophical and the bizarre with a host of human-specific questions when Kepecs reminded us that the rat/human comparison is limited. Confidence is clearly more labyrinthine for higher-order, abstract thinkers. Rats don’t brood, for

example, second-guess themselves, or lie in bed frozen with indecision. And they don't suffer from a gender-driven confidence gap either. There was only a certain amount Kepecs, and his influential work, could explain for us. It was time to look at confidence outside the lab.

Into the Wild

On a day when the rest of the Georgetown student body was outdoors, enjoying an unseasonably warm spring sun, we found a dozen young women cooped up in a classroom, learning how to run a political campaign. They were there thanks to a nonprofit organization called Running Start, which was founded to train college-age women to run for public office. The women were smartly dressed and not timid exactly, but quiet and serious. When we arrived, they were huddled in groups of three or four discussing their motivations for running for college positions.

One girl was upset that condoms weren't sold on campus; another that there were no rape kits. One student worried about how the college endowment was used; another about how research positions were allocated. A Running Start facilitator, Katie Shorey, led the conversation, gently guiding the separate discussions: "If you were to run, what would you talk about and try to change? How passionately do you feel about this issue?"

These were women who wanted to change the world, and they were nurturing aspirations of running for political office. They were among the best and the brightest, or they wouldn't be at Georgetown. We joined the class that day expecting to meet some of the country's most self-assured young women, hoping they'd help us define confidence.

What struck us immediately was how polite and considerate they were. They didn't just jump into the discussion; they raised their hands first, asking, "May I add something?" or "Can I suggest this?" We couldn't help thinking how different it would be with a group of men. Would they ask permission before speaking? Most young men would be louder, more

assertive, keener to make sure their opinions were heard. Men's attention to good manners might be lacking, and their rude interruptions annoying (at least to women), but their conversations, we suspected, might be less cautious. Not for the first time, we wondered about the tipping point between assertiveness and jerkiness. To put it bluntly—does one have to be an asshole to be confident?

As the women gathered back into one group, we put a question to this room of diligent, high-scoring achievers: Who among them feels confident about running for a post on the student body? Not a single hand went up. So, we asked: What is it that makes you feel so nervous? And, in their answers, these Georgetown students painted a vivid picture of all the things confidence is *not*.

> "Running for office means we have to self-aggrandize. That's hard because people might think we're pushy."
>
> "If I lose, it'll be about me, because they don't like me."
>
> "I internalize setbacks. The other day a professor criticized my research paper. The guy I'd worked on it with just brushed it off. It didn't seem to bother him. It took me weeks to get over it."
>
> "I ran for a position in high school once with a guy student and we won. I was more shy and he was more confident, but I did all the work. The next year we ran against each other, and I lost. But I know I was the more competent one. I did all the hard work. It was a real blow."
>
> "If a woman is assertive and ambitious, she's seen as a bitch. But for a guy, hey, those are normal qualities."
>
> "I went to an all-girls school. It was so empowering because everyone who raised their hand in class to ask a question was a girl. It was normal. But then, I came here; I saw that the girls didn't speak up in class. And here's what's really sad—started copying them. I started raising my hand less and self-censoring—just in order to fit in."

After the uncomplicated rats (who show no obvious gender bias in confident decision making, by the way), this conversation was a letdown. We recognized, yet again, what a waste of energy and talent all of this agonizing can be. We discussed it with Jessica Grounds, the cofounder of Running Start, who recently joined the powerhouse Ready For Hillary

political action committee to handle all of their outreach for women. She told us that her team had come to realize, over the years, that what these ambitious young women need most isn't a primer in running for office as much as basic confidence training. They have the skills; what they lack is self-belief, and without it they can't turn their *desire* to run into the *action* of running. If they don't take the chance, they will be stuck, spinning around inside their heads like Adam Kepecs's rats on a treadmill. We say this not with contempt, but with the recognition that many of their anxieties rang true to us personally.

We both spent too much of our twenties and thirties stuck in self-doubt, and yes, we both still devote too much time to internalizing setbacks. After delivering a speech not long ago to applause and compliments, Claire spent a good hour wondering why two women, in a room of more than a hundred, had looked somewhat bored. For the sake of their own sanity and happiness, young women have to find a way to interrupt that negative soundtrack—much sooner, we hope, than we've been able to.

Five-Star Confidence

A host of bureaucracy and formality comes with a visit to one of the most senior women in the U.S. military: multiple security checks, multiple escorts through a matrix of endless corridors, thickly paneled with rousing paintings of seminal battles and imposing portraits of heavily decorated, square-jawed, almost exclusively male, generals and admirals. And then there's that mouthful of a title: The Undersecretary of Defense for Personnel and Readiness. When we finally made our way to Major General Jessica Wright, however, in her suite of offices tucked deep inside the Pentagon, she was surprisingly, refreshingly, not what we expected. While her office décor is predictably masculine—leather club chairs and mahogany tables—Wright was anything but. She may be top brass, but she

was down-to-earth, guiding us to a sofa and putting us at ease with a few questions.

The general's eyes were bright and inquisitive, and she made a point of listening carefully. There was no bluster or overly aggressive assertiveness about her; she doesn't condescend. She was also resolutely feminine, no doubt following one of the top ten leadership tips she shares with other women: Enjoy getting your hair and nails done. Just because you're working in a man's world, she laughed, doesn't mean you always have to look like them. We liked that. Wright wasn't curbing her own personality to try to fit into a mold; she had the moxie to be true to herself. Daring to be bold about girlfriendy things like manicures and blowouts while holding a general's rank in the most powerful military in the history of the world seemed pretty confident to us.

Another thing we really liked about Wright's style of confidence: She was prepared to admit to nerves, but she didn't let them stop her from pursuing her goals and ambitions. She described taking command of an army combat brigade in 1997, the first woman to do so, and feeling so nervous she could barely breathe. "My mother taught me to be stoic," she said with a smile, "but my insides were a spaghetti bowl of feelings and confusion and anxiety."

We should dispel any impression that General Wright is an angst-ridden pushover, though. You don't get to her position without a certain amount of grit. She doesn't hesitate often. She told us that good leadership means being an efficient decision maker, and she doesn't tolerate indecision in others. "When somebody says to me, 'Well, I don't know what to do,' I don't have time for that. Because if I ask you to give me your opinion and you're wishy-washy with me, I'm moving on. We're always on a fast-moving train," she said, crisply, and we got a sense she's not somebody you'd want to let down.

Or underestimate. Because, when pushed, Jessica Wright acts, even when intimidated. She remembers the occasion when she was a brand-new lieutenant, and a superior told her straightaway that he didn't like females in

the military. “There were five hundred things going through my head,” she said. “And I looked at him and said, ‘Sergeant Minski, you have an opportunity now to get over that.’ ” She smiled mischievously at our laughter. “I still don’t know how that came out of my mouth. I really don’t.”

Her bold retort paid off. The misguided sergeant and she became friends, and he even mentored her as a young officer. She puts it down to that first encounter, when she proved she could, and would, stand up for herself.

We’d paid a visit to Wright hoping she’d help us characterize confidence. In the end, she didn’t even have to describe it for us because she demonstrated it so clearly in her style, her stories, and her observations. In our notebooks, in addition to having drawn big bold circles around her Sergeant Minski quote, which we were eager to appropriate, we’d jotted down—*action* and *bold* and *makes decisions*. But we’d also written *honest* and *feminine*. And also this: *comfortable.* General Wright has the layers of emotional complexity we didn’t find in Adam Kepecs’s lab, but she has overcome the torment of those Georgetown students. To us, she had a handle on what we were starting to understand is real confidence.

Life Lessons on a Kiteboard

We had a nascent theory in the works, and we wanted to try it out on the experts, the psychologists who make this subject their life’s work. We started by asking them this seemingly simple question: How do you define confidence? Time and again, we were met with a long pause, followed by, “Well, it’s complicated.”

> “Confidence,” said Joyce Ehrlinger, the University of Washington psychologist, sighing in sympathy, “has become a vague, almost stock term that can refer to any number of things. I can see why you’d be confused.”

> “General confidence is an attitude, a way you approach the world,” suggested Caroline Miller, a best-selling author and positive psychology coach. “More specifically, self-confidence is a sense that you can master something.”

> “One way to think about confidence,” said Brenda Major, the UC Santa Barbara social psychologist, “is how sure are you that you have the skills that you need to succeed in doing a particular thing.”
>
> “It’s a belief that you can accomplish the task you want to accomplish,” Utah State University’s Christy Glass told us. “It’s specific to a domain. I could be a confident public speaker, but not a confident writer, for example.”

Glass’s observation helped us to understand why confidence can seem like such a fleeting quality. In some circumstances, we have it; in others, we don’t. It explains how Andre Agassi, for example, could be so incredibly confident about his tennis but so riddled with self-doubt in the rest of his life. It explains why so many women might feel confident in their personal lives but not at work, and it explains why Claire can be confident in her people skills but not as self-assured when it comes to making decisions. She doesn’t overthink when she’s helping other people solve problems, but has trouble solving her own.

Caroline Miller’s mention of mastery also got our attention. Initially, we were wary, and somewhat suspicious of the term. It sounded undeniably masculine and evoked images of paternalistic gentry lording over their subjects. It also seemed like something we might need power tools for, not to mention a high school shop course. Our real fear, though, was that mastery would just turn out to be a recipe for the endless pursuit of perfection—something to which women are far too susceptible already.

But Miller explained that mastery is none of that. Mastery isn’t about being the best tennis player or the best mom. The resonance of mastery is in the *process* and *progress.* It is about work, and learning to develop an appetite for challenge. Mastery inevitably means encountering hurdles; you won’t always overcome them, but you won’t let them stop you from trying. You may never become a world-class swimmer, but you will learn to swim across the lake. And the unexpected by-product of all of that hard work you put in to mastering things? Confidence. Not only did you learn to do something well, but you got a freebie.

This next point is invaluable. The confidence you get from mastery is contagious. It spreads. It doesn't even really matter what you master: For a child, it can be as simple as tying a shoe. What matters is that mastering one thing gives you the confidence to try something else.

When Katty turned forty, for example, in defiance (or perhaps denial) of middle age, she made the decision to learn to kiteboard. She needed a challenge, and had a naïve fantasy that if she could crack this, she'd soon be a cool (young) surfer chick doing acrobatic jumps high above the waves. She didn't, however, anticipate how often she'd get dragged down a beach attached to a powerful thirty-foot kite, or fall from her board into the saltwater, or the tears and frustration and loud cursing. After the first couple of summers, she was prepared to give up; it was too humiliating and she was too sore. But she stuck with it and, while youth and coolness remain slightly beyond her grasp, she can now kitesurf. Her children, who started long after her, are naturally already ten times better, but that's not the point. Having mastered (sort of) one extreme sport, Katty's now looking around for another to help face down the next decade.

Meet the Confidence Cousins

Confidence was starting to come into focus. We were growing convinced that it involves action—doing, mastering, maybe even deciding, but we still had a jumble of other terms fighting for our attention. (For a while, we even made the rookie mistake of using "confidence" and "self-esteem" interchangeably.) Our experts set us straight. The confidence cousins are all worth having as well, but there are some critical differences between confidence and the other positive attributes that many of us tend to lump together: self-esteem, optimism, self-compassion, and self-efficacy.

Some of these extended family members have been pored over and heavily researched. Others are new to the scene. They each have their detractors and supporters. Some people will tell you that optimism is the

key to life; others are equally adamant that, without self-esteem, you will never be happy. What they do have in common is that each allows us to improve the richness of our life, to function at maximum capacity, to enhance our professional performance, and to deepen our personal relationships. In an ideal world we'd all have all of them in abundance.

Self-Esteem

"I am a valuable person and I feel good about myself." Agree with that and chances are you have pretty high self-esteem. This is a value judgment on your overall character. It's an attitude: "I like myself," or "I hate myself," or more typically something between the two extremes. Self-esteem is what allows us to believe that we are lovable, that we have value as human beings. It's not related to wealth: You can be the richest, most successful CEO in your industry and have low self-worth, and you can be a cashier at a drugstore and have plenty of self-esteem.

In the mid-1960s, sociologist Morris Rosenberg came up with a basic self-esteem scale that is still the worldwide standard. It's a simple list of questions: "I feel I do not have much to be proud of," "I feel that I have a number of good qualities." Answer those, and eight others, and you can quickly measure your self-worth. We've put the scale in the notes, if you are curious about how you stack up.

Self-esteem is essential for emotional well-being, but it is distinct from confidence because confidence is typically tied to feelings about what we can achieve: "I am confident that I can run this race and get to the end." Self-esteem tends to be more stable and more pervasive than confidence. If you have an overall good feeling about your position in the universe, chances are you'll have that for life and it will color much of what you do. It's an invaluable buffer for withstanding setbacks.

There is considerable overlap with confidence, to be sure. A person with high self-esteem will tend to have confidence, and vice versa. There's a particularly close relationship if high self-esteem is based on talents or

abilities. “I think I’m a valuable person because I am smart, fast, efficient, and successful in my field.” If, however, you don’t really care about talents or skills or intelligence or achievements but you care about being a good person, perhaps about being devout, or living up to a moral code, then your self-esteem and your confidence will have looser ties.

It is worth noting that there’s been a self-esteem backlash lately; the concept has developed a bad name in the minds of psychologists (not to mention employers, teachers, parents, and, even some of its former promoters) after a decades-long push into schools, homes, and even workplaces. That’s because the product being pushed was unrealistic self-esteem. The emphasis was on simply telling children, and sometimes adults, they were all winners, all fabulous, and all perfect. After observing a generation of self-esteem-swaddled kids turn into rudderless adults, the experts realized none of that actually gives children any concrete basis for believing they can do anything, or even make decisions on their own.

Optimism

Optimism has muscled self-esteem aside and is the hotter commodity these days. In Latin, the word optimum means most favorable. So an optimistic person is one who expects the most favorable outcome from any given situation. Optimism is a question of interpretation, and that basic glass half-full, half-empty measure still works well. We can experience the same facts—the glass has the same amount of water—but how we interpret those facts depends on our optimistic or pessimistic attitude. Winston Churchill put the difference memorably: “A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.” Another hallmark of optimism is gratitude. If you are an optimist, you notice that good things happen to you, and you feel grateful for them. If you’re a pessimist, you probably don’t pay attention to positive things as often, and when they do happen, you believe them to be chance occurrences. Psychologists suggest this simple test: Open a door for an optimist, and the

chances are she will thank you. A pessimist is much less likely to even notice the door being held for her and, if she does, she will assume it was merely being opened for someone else.

You can be optimistic about a specific event: The marathon will be fun, or the test will be easy for me. Or you could have a general view that things will work out positively. Unlike self-esteem, optimism isn't a judgment on your inner self-worth; it's an attitude you have that is based on your view of the outside world. You're not optimistic because of your talents or your innate goodness; you are optimistic because you interpret the world positively.

Nansook Park is one of the world's leading experts on optimism and a professor at the University of Michigan. She describes confidence and optimism as closely related but with an important distinction—optimism is a more generalized outlook, and it doesn't necessarily encourage action. Confidence does. "Optimism is the sense that everything will work out," she says. "Confidence is, '*I* can make this thing work.' "

One of the most influential voices in psychology today is that of Martin Seligman, one of the founders of the positive psychology movement. He's redefined optimism as something more robust, with a sense of action, tugging it closer to confidence. In his best-selling book *Learned Optimism*, he contends that optimism, like other skills, can be cultivated through, among other things, mastery and hard knocks, which help to develop a sense of personal agency. Optimistic people, in Seligman's view, have a sense that they can effect change. Therefore the world does not appear as bleak.

Self-Compassion

Self-compassion is the newest, edgiest member of the extended confidence family and, at first introduction, can seem reminiscent of the groovy, hippie 1960s. The concept springs from the Buddhist theory of loving-kindness and the work of Sharon Salzberg, but was recently pioneered as an

academic pursuit by Kristin Neff, a professor in the educational psychology department at the University of Texas. The central precept is that we should all be kinder to ourselves because doing so makes us healthier, more fulfilled, and more successful in the pursuits we choose.

Self-compassion dictates that we treat ourselves as we treat our friends. If your friend comes to you and says, “I just failed. I blew it,” what do you do? You’re kind, you’re supportive, you’re understanding, and you give your friend a hug. Or if it’s a guy, you give your friend a slap on the back. You try to pick the other person up. But, Neff told us, all too often we don’t do that for ourselves: “Indeed, often the people who are most compassionate toward others are the least forgiving to themselves.”

The second key to self-compassion is that it places our individual experiences in the framework of a shared human experience. It takes our imperfections and sufferings and puts them in the context of simply being human. In our success-oriented world, we tend to think of failure as abnormal. We get a low grade, get turned down for a promotion, lose our job, or get dumped by our boyfriend, and our instinct is to say, “This shouldn’t be happening.” But, of course, these setbacks are just part of being human and if you never had them, you’d be a robot. Putting our disappointments in that context makes them less frightening and less isolating.

So how does self-compassion fit into the confidence clan? At first glance, self-compassion and confidence seemed an ill-suited pair. Confidence, we were now fairly certain, involves action. Self-compassion says, “Don’t beat yourself up; put yourself in the broader human condition, and accept some failure.” We wondered why self-compassion doesn’t just encourage us to accept all our flaws so thoroughly that we become comatose. Why not just stay on the couch and surf the shopping channels? “I was mean to my friend, failed to make dinner, didn’t talk to that lonely-looking person, didn’t do my homework, didn’t go to the gym, didn’t finish my project at work, didn’t take the tough college course. Oh well, I’m only human. Where’s the remote?”

Neff patiently explained that far from being in conflict with confidence, or encouraging sloth-like behavior, self-compassion drives confidence—allowing us to take the very risks that build it. It is a safety net that actually enables us to try for more and even harder things. It increases motivation because it cushions failure.

"Most people believe that they need to criticize themselves in order to find motivation to reach their goals. In fact, when you constantly criticize yourself, you become depressed, and depression is not a motivational mind-set," Neff said.

Having overcome our initial, overachiever reservations, there's something else appealing about self-compassion. It is the acceptance that it's okay to be average sometimes. Many of us spend our lives trying to be the best at everything, whether it's winning soccer games at age five or making partner by age thirty-five. We live in a culture where being anything other than the winner is frowned upon.

"If I were to tell you that your work as a journalist is average, you'd be devastated, right?" Neff said. "Being called average is considered an insult. We all have to be above average. It sets up a very comparative mind-set. But the math doesn't work. It isn't possible for us all to be above average, even though many studies show most Americans think they are."

We live in a world of constant comparisons that extend well beyond the workplace. She's thinner, richer, and more successful than we are. She's a better mom, has a better marriage. But constantly defining yourself through other people's achievements is chasing fool's gold. There is always someone doing it better. Sometimes you fare well by comparison; sometimes not.

Self-compassion recognizes the folly of this. To take risks, we have to know that we won't always win. Otherwise, we'll either refuse to act or be devastated. Self-compassion isn't an excuse for inaction—it supports action, and it connects us to other people, to being human, with all the strengths and the weaknesses that implies.

Self-Efficacy

If self-compassion is the kind, gentle cousin, self-efficacy is the tough, just-get-it-done member of the family.

In 1977, psychologist Albert Bandura's article "Self-Efficacy: Toward a Unifying Theory of Behavioral Change" was published. In the sedate world of academic psychology, this work, with its arcane title, sent tremors throughout the field. For the next thirty years, self-efficacy was one of the most studied topics in psychology. *Self-efficacy* is defined as a belief in your ability to succeed at something. Bandura's central premise was that those beliefs, our sense of self-efficacy, can change the broader way we think, behave, and feel. Self-efficacy, much like mastery, creates spillover effects.

Self-efficacy's goal-oriented nature especially appealed to the success-focused baby boomer generation. But it's also a simple and practical quality. We can all identify specific goals we want to achieve: lose twenty pounds, learn Spanish, and get a pay raise. Bandura says the key to actually putting those aspirations into action is self-efficacy.

If you have a strong sense of self-efficacy, you will look at challenges as tasks to be conquered; you will be more deeply involved in the activities you take on, and you will recover faster from setbacks. A lack of self-efficacy leads us to avoid challenges, to believe that difficult things are beyond our capability, and to dwell on negative results. As is the case with confidence, mastery is fundamental to self-efficacy. In other words, try hard, become good at something, and develop self-efficacy—a belief that you can succeed.

Some experts told us they see self-efficacy as interchangeable with confidence. Others maintained that there are distinctions, that confidence can also be a much more generalized belief about your ability to succeed in the world. Self-efficacy also sounded, to us, a bit like Seligman's view of learned optimism. All three are closely tied to a sense of personal power.

Whatever formal label you put on it, whether it's a slice of self-efficacy or a component of optimism or an element of classically defined confidence, that belief that you can succeed at something, that you can make something happen, resonated right away with us. It fit with our observations about action. It seemed to be a central strand of the confidence we were after.

The Real Thing

You know that old saying, "It's all in your head"? Well, when it comes to confidence, it's wrong. One of the most unexpected and vital conclusions we reached is that confidence isn't even close to all in your head. Indeed, you have to get *out of your head* to create it and to use it. Confidence occurs when the insidious self-perception that you aren't able is trumped by the stark reality of your achievements.

Katty discovered this reality in a high-octane, underventilated White House back office. She was called to attend a briefing of Middle East experts at which she *felt* like the only unqualified person in the room. "The high-powered setting made me insecure," she admits. "When it came to question time, I wanted to ask something, but was worried I'd sound uninformed, that I might blush or seem stupid." It was mostly men in the room and they all sounded so sure of themselves. The easiest path was to do nothing and keep quiet; the risky thing, the confident thing to do, was to speak up. Eventually, after a ridiculous amount of internal agonizing, she did get a question out. "I realized I just had to physically force my hand up, keep it there, and get the words out. And guess what, the sky didn't fall on my head! My question was just as smart as anyone else's. Now, whenever I'm in that position I tell myself I *did* it once, I can *do* it again. And every time, it gets a little bit easier."

We'd seen it in the rats, and we heard it from General Jessica Wright and the academics: Confidence is linked to doing. We were convinced that

one of the essential ingredients in confidence is action, that belief that we can succeed at things, or make them happen. Confidence, we saw from the young women in Running Start at Georgetown, is not letting your doubts consume you. It is a willingness to go out of your comfort zone and do hard things. We were also sure that confidence must be about hard work. Mastery. About having resilience and not giving up. The confidence cousins can all support that goal. It's easier to keep going if you are optimistic about the outcome. If you have self-efficacy in one area, and use it, you will create more general confidence. If you have high self-esteem, and believe you are intrinsically valuable, you won't assume your boss thinks you're not worthy of a raise. And, if you fail, self-compassion will give you the chance not to berate yourself, but to take your failure more lightly.

We were at last confident about the way we wanted to define confidence. We felt all the more so when one of our most stalwart guides through this tricky terrain, Richard Petty, a psychology professor at Ohio State University, who has spent decades focused on the subject, managed to put all we had learned into appealingly clear terms: "Confidence is the stuff that turns thoughts into action."

Other factors, he explained, will of course play a role. "If the action involves something scary, then what we call *courage* might also be needed for the action to occur," Petty explained. "Or if it's difficult, a strong will to persist might also be needed. Anger, intelligence, creativity can play a role." But confidence, he told us, is the most important factor. It first turns our thoughts into judgments about what we are capable of, and it then transforms those judgments into actions.

Confidence is the stuff that turns thoughts into action. The simplicity was gorgeous and compelling. It immediately became not only our definition, but an organizing principle for the next phase of our exploration. And what was especially useful was that it somehow, naturally, effortlessly, made proper sense of the other threads we'd been gathering. The critical link between confidence and work and mastery suddenly made sense. They form points on a wonderfully virtuous circle. If confidence is a belief in

your success, which then stimulates action, you will create more confidence when you take that action. And so on and so forth. It keeps accumulating, through hard work, through success, and even through failure.

Maybe Nike has it right. At some point we have to stop thinking, and just do it.

We found a striking illustration of how this might play out in the real world (or in something edging closer to the real world) in Italy, at the University of Milan. There we tracked down psychologist Zach Estes, who's long been curious about the confidence disparity between men and women.

A few years ago, Estes did a series of tests that involved getting five hundred students to reorganize a 3-D image on a computer screen. It looked like a simplified Rubik's cube. He was testing a few things—the idea that confidence can be manipulated and that, in some areas, women have less of it than men.

When Estes had the students, men and women, solve a series of these spatial puzzles, he found that the women scored measurably worse than the men. But when he looked back at their actual answers, he found the reason the women were doing less well was that they didn't even attempt to answer a lot of the questions. They simply ducked out because they weren't confident in their abilities. He then told them they had to at least *try* to solve all the puzzles. And, guess what: The women's scores shot up, and they did as well as the men. Crazy. Maddening. Yet also hopeful.

Estes's work illustrates, in a broad sense, an interesting point: The natural result of under-confidence is inaction. When women don't act, when we hesitate because we aren't sure, even by skipping a few questions, we hold ourselves back. It matters. But when we do act, even when we're forced to act, to answer those questions, we do just as well as men. The women in Estes's experiment skipped questions because they didn't want to try something at which they thought they might fail. In truth, they had no need to worry. They were just as good at manipulating those computer

images as the men. But fear of failure led to inaction, thus guaranteeing failure.

Using a different test, Estes simply asked everyone to answer every question. Both men and women got 80 percent right, suggesting identical ability. He then tested them again and asked them, after each question, to report their confidence in their answer. Just having to think about whether they felt certain of their answer changed their ability to do well. Women's scores dipped to 75, while the men's *shot up* to 93! Are women really that susceptible to seizing any chance to think badly of themselves? One little nudge asking us how sure we are about something rattles our world, while with men, it seems to just remind them that they're terrific.

Finally, Estes decided to attempt a direct confidence boost. He told some members of the group, completely at random, that they had done very well on the previous test. On the next test they took, those men and women improved their scores dramatically. It was a clear measure of what confidence can do—fuel our action, and substantially affect our performance, for better or for worse. And we can all imagine, without much trouble, what this suggests about women and confidence in our everyday lives.

Life's Enabler

Think about it. We are all capable of imagining how great it would be to write that novel, apply for that new position, or just introduce ourselves to that interesting stranger. But how many of us actually do it?

Confidence is life's enabler—professionally, intellectually, athletically, socially, and even amorously. The man you met at a conference is cute; you'd like to call him and arrange a date. But what if he thinks you're boring, unattractive, or too forward? All normal worries and, if you lack confidence, they're paralyzing. You will sit home, nursing a desire to

act/call, but not doing anything about it. Confidence propels you to pick up the phone.

Other traits encourage action, as Richard Petty noted. Ambition, for example, which drives us to pursue measurable success, can work in tandem with confidence toward a goal. Courage routinely compels action, is very much inclined to push for action, and early on we almost thought of courage as another confidence cousin. But confidence provides the basic groundwork for action based on a belief in one's ability to do something or succeed, and courage advocates for action with little regard for risk or success, springing from a very different place—a kind of moral center. Courage though, can be a critical partner to confidence, especially in situations where we are operating without the benefit of a confidence reserve, and we need to take those first, terrifying steps in order to start building it.

And sure, other factors can limit us too. Lack of motivation might stop us from applying for that promotion. Procrastination could stop our training for that marathon. But if we assume the desire is there, the only real inhibitor is a lack of belief in our ability to succeed. And, let's be honest, neither the beckoning of a comfortable couch nor a lack of motivation is likely to be what stops us from speaking out at confrontational moments or from cold-calling a potential client to pitch a sale. Confidence is all that matters there.

A couple of questions had been nagging at us, though, since our intense conversations with Cameron Anderson about the merits of overconfidence. What is the optimum amount of confidence? Is that even knowable? With a clear definition of confidence in hand, this seemed easier to address. We had firm agreement from the social scientists and hard scientists on this one—a slight tilt toward overconfidence is optimal. Adam Kepecs, our rat expert, believes it's fundamentally, biologically, useful. "It is adaptive to have appropriate levels of confidence so one makes the right bets in life," he told us. "And, in fact, it is actually adaptive to have a little extra confidence for good measure in the face of uncertainty." In other words—

better to believe a bit too much in your capabilities than is called for, because then you lean toward *doing* things instead of just *thinking about* doing them.

You probably have a good gut sense of your confidence level already, especially if you've recognized any of the behavior we've been describing. But there are formal measures. We've put two of the most trusted confidence scales in the notes at the end of the book. One was recently created by Richard Petty and his collaborator Kenneth DeMarree of the University of Buffalo. The other is a thirty-year-old survey still in heavy use. They don't take long, if you want to put some numbers on your current state of assurance.

Confidence, we believe, is our missing link. It's what can propel us out of our overworked minds toward the liberating terrain of action. Confident action can take many forms—it is not always as overt as turning in a job application, or learning to skydive. A decision, a conversation, an opinion formed—those are all driven by confidence.

Confidence, ultimately, is the characteristic that distinguishes those who imagine from those who do. It's the stuff that seems to naturally inhabit the minds of the Susan B. Anthonys and the Malala Yousafzais. But we were also coming to see confidence as something we might *all* create. We recognized an encouraging power in the concept of confidence as action, which, when taken, sows and reaps more of the same. Action, we reasoned, is something we are all free to choose. Might it be that acquisition of confidence is basically our choice? Confirming that appealing notion required answering another question first.