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## THE GOLDEN RULE OF HABIT CHANGE

## Why Transformation Occurs

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The game clock at the far end of the field says there are eight minutes and nineteen seconds left when Tony Dungy, the new head coach of the Tampa Bay Buccaneers—one of the worst teams in the National Football League, not to mention the history of professional football—starts to feel a tiny glimmer of hope.

It's late on a Sunday afternoon, November 17, 1996. The Buccaneers are playing in San Diego against the Chargers, a team that appeared in the Super Bowl the previous year. The Bucs are losing, 17 to 16. They've been losing all game. They've been losing all season. They've been losing all decade. The Buccaneers have not won a game on the West Coast in sixteen years, and many of the team's current players were in grade school the last time the Bucs had a victorious season. So far this year, their record is 2–8. In one of those games, the Detroit Lions—a team so bad it would later be described as putting the “less” in “hopeless”—beat the Bucs 21 to 6, and then, three weeks later, beat them again, 27 to 0. One newspaper column-

nist has started referring to the Bucs as “America's Orange Door-mat.” ESPN is predicting that Dungy, who got his job only in January, could be fired before the year is done.

On the sidelines, however, as Dungy watches his team arrange itself for the next play, it feels like the sun has finally broken through the clouds. He doesn't smile. He never lets his emotions show during a game. But something is taking place on the field, something he's been working toward for years. As the jeers from the hostile crowd of fifty thousand rain down upon him, Tony Dungy sees something that no one else does. He sees proof that his plan is starting to work.

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Tony Dungy had waited an eternity for this job. For seventeen years, he prowled the sidelines as an assistant coach, first at the University of Minnesota, then with the Pittsburgh Steelers, then the Kansas City Chiefs, and then back to Minnesota with the Vikings. Four times in the past decade, he had been invited to interview for head coaching positions with NFL teams.

All four times, the interviews hadn't gone well.

Part of the problem was Dungy's coaching philosophy. In his job interviews, he would patiently explain his belief that the key to winning was changing players' habits. He wanted to get players to stop making so many decisions during a game, he said. He wanted them to react automatically, habitually. If he could instill the right habits, his team would win. Period.

“Champions don't do extraordinary things,” Dungy would explain. “They do ordinary things, but they do them without thinking, too fast for the other team to react. They follow the habits they've learned.”

How, the owners would ask, are you going to create those new habits?

Oh, no, he wasn't going to create *new* habits, Dungy would answer. Players spent their lives building the habits that got them to the NFL. No athlete is going to abandon those patterns simply because some new coach says to.

So rather than creating new habits, Dungy was going to *change* players' old ones. And the secret to changing old habits was using what was already inside players' heads. Habits are a three-step loop—the cue, the routine, and the reward—but Dungy only wanted to attack the middle step, the routine. He knew from experience that it was easier to convince someone to adopt a new behavior if there was something familiar at the beginning and end.

His coaching strategy embodied an axiom, a Golden Rule of habit change that study after study has shown is among the most powerful tools for creating change. Dungy recognized that you can never truly extinguish bad habits.

Rather, to change a habit, you must keep the old cue, and deliver the old reward, but insert a new routine.

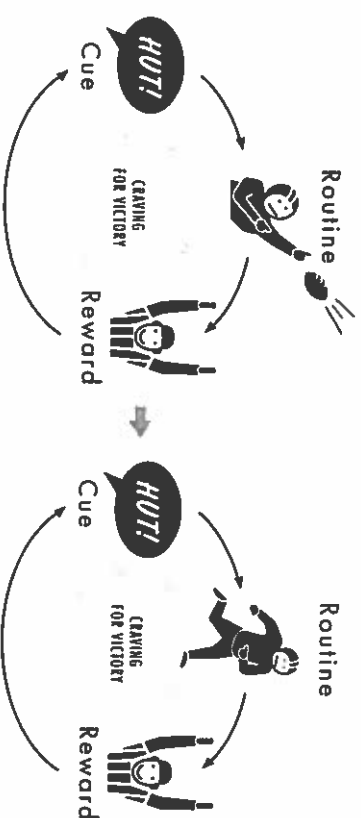
That's the rule: If you use the same cue, and provide the same reward, you can shift the routine and change the habit. Almost any behavior can be transformed if the cue and reward stay the same.

The Golden Rule has influenced treatments for alcoholism, obesity, obsessive-compulsive disorders, and hundreds of other destructive behaviors, and understanding it can help anyone change their own habits. (Attempts to give up snacking, for instance, will often fail unless there's a new routine to satisfy old cues and reward urges. A smoker usually can't quit unless she finds some activity to replace cigarettes when her nicotine craving is triggered.)

Four times Dungy explained his habit-based philosophy to team owners. Four times they listened politely, thanked him for his time, and then hired someone else.

Then, in 1996, the woeful Buccaneers called. Dungy flew to Tampa Bay and, once again, laid out his plan for how they could win. The day after the final interview, they offered him the job.

You Can't Extinguish a Bad Habit,  
You Can Only Change It.



HOW IT WORKS:  
USE THE SAME CUE.  
PROVIDE THE SAME REWARD.  
CHANGE THE ROUTINE.

Dungy's system would eventually turn the Bucs into one of the league's winningest teams. He would become the only coach in NFL history to reach the play-offs in ten consecutive years, the first African American coach to win a Super Bowl, and one of the most respected figures in professional athletics. His coaching techniques would spread throughout the league and all of sports. His approach would help illuminate how to remake the habits in anyone's life.

But all of that would come later. Today, in San Diego, Dungy just wanted to win.



From the sidelines, Dungy looks up at the clock: 8:19 remaining. The Bucs have been behind all game and have squandered opportunity after opportunity, in typical fashion. If their defense doesn't make something happen right now, this game will effectively be over. San Diego has the ball on their own twenty-yard line, and the

Chargers' quarterback, Stan Humphries, is preparing to lead a drive that, he hopes, will put the game away. The play clock begins, and Humphries is poised to take the snap.

But Dungy isn't looking at Humphries. Instead, he's watching his own players align into a formation they have spent months perfecting. Traditionally, football is a game of feints and counterfeints, trick plays and misdirection. Coaches with the thickest playbooks and most complicated schemes usually win. Dungy, however, has taken the opposite approach. He isn't interested in complication or obfuscation. When Dungy's defensive players line up, it is obvious to everyone exactly which play they are going to use.

Dungy has opted for this approach because, in theory, he doesn't need misdirection. He simply needs his team to be faster than everyone else. In football, milliseconds matter. So instead of teaching his players hundreds of formations, he has taught them only a handful, but they have practiced over and over until the behaviors are automatic. When his strategy works, his players can move with a speed that is impossible to overcome.

But only when it works. If his players think too much or hesitate or second-guess their instincts, the system falls apart. And so far, Dungy's players have been a mess.

This time, however, as the Bucs line up on the twenty-yard line, something is different. Take Regan Upshaw, a Buccaneer defensive end who has settled into a three-point stance on the scrimmage line. Instead of looking up and down the line, trying to absorb as much information as possible, Upshaw is looking only at the cues that Dungy taught him to focus on. First, he glances at the outside foot of the opposite lineman (his toes are back, which means he is preparing to step backward and block while the quarterback passes); next, Upshaw looks at the lineman's shoulders (rotated slightly inward), and the space between him and the next player (a fraction narrower than expected).

Upshaw has practiced how to react to each of these cues so many

times that, at this point, he doesn't have to think about what to do. He just follows his habits.

San Diego's quarterback approaches the line of scrimmage and glances right, then left, barks the count and takes the ball. He drops back five steps and stands tall, swiveling his head, looking for an open receiver. Three seconds have passed since the play started. The stadium's eyes and the television cameras are on him.

So most observers fail to see what's happening among the Buccaneers. As soon as Humphries took the snap, Upshaw sprang into action. Within the first second of the play, he darted right, across the line of scrimmage, so fast the offensive lineman couldn't block him. Within the next second, Upshaw ran four more paces downfield, his steps a blur. In the next second, Upshaw moved three strides closer to the quarterback, his path impossible for the offensive lineman to predict.

As the play moves into its fourth second, Humphries, the San Diego quarterback, is suddenly exposed. He hesitates, sees Upshaw from the corner of his eye. And that's when Humphries makes his mistake. He starts *thinking*.

Humphries spots a teammate, a rookie tight end named Brian Roche, twenty yards downfield. There's another San Diego receiver much closer, waving his arms, calling for the ball. The short pass is the safe choice. Instead, Humphries, under pressure, performs a split-second analysis, cocks his arm, and heaves to Roche.

That hurried decision is precisely what Dungy was hoping for. As soon as the ball is in the air, a Buccaneer safety named John Lynch starts moving. Lynch's job was straightforward: When the play started, he ran to a particular point on the field and waited for his cue. There's enormous pressure to improvise in this situation. But Dungy has drilled Lynch until his routine is automatic. And as a result, when the ball leaves the quarterback's hands, Lynch is standing ten yards from Roche, waiting.

As the ball spins through the air, Lynch reads his cues—the di-

rection of the quarterback's face mask and hands, the spacing of the receivers—and starts moving before it's clear where the ball will land. Roche, the San Diego receiver, springs forward, but Lynch cuts around him and intercepts the pass. Before Roche can react, Lynch takes off down the field toward the Chargers' end zone. The other Buccaneers are perfectly positioned to clear his route. Lynch runs 10, then 15, then 20, then almost 25 yards before he is finally pushed out of bounds. The entire play has taken less than ten seconds.

Two minutes later, the Bucs score a touchdown, taking the lead for the first time all game. Five minutes later, they kick a field goal. In between, Dungy's defense shuts down each of San Diego's comeback attempts. The Buccaneers win, 25 to 17, one of the biggest upsets of the season.

At the end of the game, Lynch and Dungy exit the field together.

"It feels like something was different out there," Lynch says as they walk into the tunnel.

"We're starting to believe," Dungy replies.

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To understand how a coach's focus on changing habits could re-make a team, it's necessary to look outside the world of sports. Way outside, to a dingy basement on the Lower East Side of New York City in 1934, where one of the largest and most successful attempts at wide-scale habit change was born.

Sitting in the basement was a thirty-nine-year-old alcoholic named Bill Wilson. Years earlier, Wilson had taken his first drink during officers' training camp in New Bedford, Massachusetts, where he was learning to fire machine guns before getting shipped to France and World War I. Prominent families who lived near the base often invited officers to dinner, and one Sunday night, Wilson attended a party where he was served rarebit and beer. He was twenty-two years old and had never had alcohol before. The only

polite thing, it seemed, was to drink the glass served to him. A few weeks later, Wilson was invited to another elegant affair. Men were in tuxedos, women were flirting. A butler came by and put a Bronx cocktail—a combination of gin, dry and sweet vermouth, and orange juice—into Wilson's hand. He took a sip and felt, he later said, as if he had found "the elixir of life."

By the mid-1930s, back from Europe, his marriage falling apart and a fortune from selling stocks vaporized, Wilson was consuming three bottles of booze a day. On a cold November afternoon, while he was sitting in the gloom, an old drinking buddy called. Wilson invited him over and mixed a pitcher of pineapple juice and gin. He poured his friend a glass.

His friend handed it back. He'd been sober for two months, he said.

Wilson was astonished. He started describing his own struggles with alcohol, including the fight he'd gotten into at a country club that had cost him his job. He had tried to quit, he said, but couldn't manage it. He'd been to detox and had taken pills. He'd made promises to his wife and joined abstinence groups. None of it worked. How, Wilson asked, had his friend done it?

"I got religion," the friend said. He talked about hell and temptation, sin and the devil. "Realize you are licked, admit it, and get willing to turn your life over to God."

Wilson thought the guy was nuts. "Last summer an alcoholic crackpot, now, I suspected, a little cracked about religion," he later wrote. When his friend left, Wilson polished off the booze and went to bed.

A month later, in December 1934, Wilson checked into the Charles B. Towns Hospital for Drug and Alcohol Addictions, an upscale Manhattan detox center. A physician started hourly infusions of a hallucinogenic drug called belladonna, then in vogue for the treatment of alcoholism. Wilson floated in and out of consciousness on a bed in a small room.

Then, in an episode that has been described at millions of meetings in cafeterias, union halls, and church basements, Wilson began writhing in agony. For days, he hallucinated. The withdrawal pains made it feel as if insects were crawling across his skin. He was so nauseous he could hardly move, but the pain was too intense to stay still. "If there is a God, let Him show Himself!" Wilson yelled to his empty room. "I am ready to do anything. Anything!" At that moment, he later wrote, a white light filled his room, the pain ceased, and he felt as if he were on a mountaintop, "and that a wind not of air but of spirit was blowing. And then it burst upon me that I was a free man. Slowly the ecstasy subsided. I lay on the bed, but now for a time I was in another world, a new world of consciousness."

Bill Wilson would never have another drink. For the next thirty-six years, until he died of emphysema in 1971, he would devote himself to founding, building, and spreading Alcoholics Anonymous, until it became the largest, most well-known and successful habit-changing organization in the world.

An estimated 2.1 million people seek help from AA each year, and as many as 10 million alcoholics may have achieved sobriety through the group. AA doesn't work for everyone—success rates are difficult to measure, because of participants' anonymity—but millions credit the program with saving their lives. AA's foundational credo, the famous twelve steps, have become cultural lodestones incorporated into treatment programs for overeating, gambling, debt, sex, drugs, hoarding, self-mutilation, smoking, video game addictions, emotional dependency, and dozens of other destructive behaviors. The group's techniques offer, in many respects, one of the most powerful formulas for change.

All of which is somewhat unexpected, because AA has almost no grounding in science or most accepted therapeutic methods.

Alcoholism, of course, is more than a habit. It's a physical addiction with psychological and perhaps genetic roots. What's interesting about AA, however, is that the program doesn't directly attack

many of the psychiatric or biochemical issues that researchers say are often at the core of why alcoholics drink. In fact, AA's methods seem to sidestep scientific and medical findings altogether, as well as the types of intervention many psychiatrists say alcoholics really need.\*

What AA provides instead is a method for attacking the *habits* that surround alcohol use. AA, in essence, is a giant machine for changing habit loops. And though the habits associated with alcoholism are extreme, the lessons AA provides demonstrate how almost any habit—even the most obstinate—can be changed.



Bill Wilson didn't read academic journals or consult many doctors before founding AA. A few years after he achieved sobriety, he wrote the now-famous twelve steps in a rush one night while sitting in bed. He chose the number twelve because there were twelve apos-

\* The line separating habits and addictions is often difficult to measure. For instance, the American Society of Addiction Medicine defines addiction as "a primary, chronic disease of brain reward, motivation, memory and related circuitry. . . . Addiction is characterized by impairment in behavioral control, craving, inability to consistently abstain, and diminished relationships."

By that definition, some researchers note, it is difficult to determine why spending fifty dollars a week on cocaine is bad, but fifty dollars a week on coffee is okay. Someone who craves a latte every afternoon may seem clinically addicted to an observer who thinks five dollars for coffee demonstrates an "impairment in behavioral control." Is someone who would prefer running to having breakfast with his kids addicted to exercise?

In general, say many researchers, while addiction is complicated and still poorly understood, many of the behaviors that we associate with it are often driven by habit. Some substances, such as drugs, cigarettes, or alcohol, can create physical dependencies. But these physical cravings often fade quickly after use is discontinued. A physical addiction to nicotine, for instance, lasts only as long as the chemical is in a smoker's bloodstream—about one hundred hours after the last cigarette. Many of the lingering urges that we think of as nicotine's addictive twinges are really behavioral habits asserting themselves—we crave a cigarette at breakfast a month later not because we physically need it, but because we remember so fondly the rush it once provided each morning. Attacking the behaviors we think of as addictions by modifying the habits surrounding them has been shown, in clinical studies, to be one of the most effective modes of treatment. (Though it is worth noting that some chemicals, such as opiates, can cause prolonged physical addictions, and some studies indicate that a small group of people seem predisposed to seek out addictive chemicals, regardless of behavioral interventions. The number of chemicals that cause long-term physical addictions, however, is relatively small, and the number of predisposed addicts is estimated to be much less than the number of alcoholics and addicts seeking help.)

ties. And some aspects of the program are not just unscientific, they can seem downright strange.

Take, for instance, AA's insistence that alcoholics attend "ninety meetings in ninety days"—a stretch of time, it appears, chosen at random. Or the program's intense focus on spirituality, as articulated in step three, which says that alcoholics can achieve sobriety by making "a decision to turn our will and our lives over to the care of God as we understand him." Seven of the twelve steps mention God or spirituality, which seems odd for a program founded by a onetime agnostic who, throughout his life, was openly hostile toward organized religion. AA meetings don't have a prescribed schedule or curriculum. Rather, they usually begin with a member telling his or her story, after which other people can chime in. There are no professionals who guide conversations and few rules about how meetings are supposed to function. In the past five decades, as almost every aspect of psychiatry and addiction research has been revolutionized by discoveries in behavioral sciences, pharmacology, and our understanding of the brain, AA has remained frozen in time.

Because of the program's lack of rigor, academics and researchers have often criticized it. AA's emphasis on spirituality, some claimed, made it more like a cult than a treatment. In the past fifteen years, however, a reevaluation has begun. Researchers now say the program's methods offer valuable lessons. Faculty at Harvard, Yale, the University of Chicago, the University of New Mexico, and dozens of other research centers have found a kind of science within AA that is similar to the one Tony Dungy used on the football field. Their findings endorse the Golden Rule of habit change: AA succeeds because it helps alcoholics use the same cues, and get the same reward, but it shifts the routine.

Researchers say that AA works because the program forces people to identify the cues and rewards that encourage their alcoholic habits, and then helps them find new behaviors. When Claude Hopkins was selling Pepsodent, he found a way to create a new habit by

triggering a new craving. But to change an old habit, you must address an old craving. You have to keep the same cues and rewards as before, and feed the craving by inserting a new routine.

Take steps four (to make "a searching and fearless inventory of ourselves") and five (to admit "to God, to ourselves, and to another human being the exact nature of our wrongs").

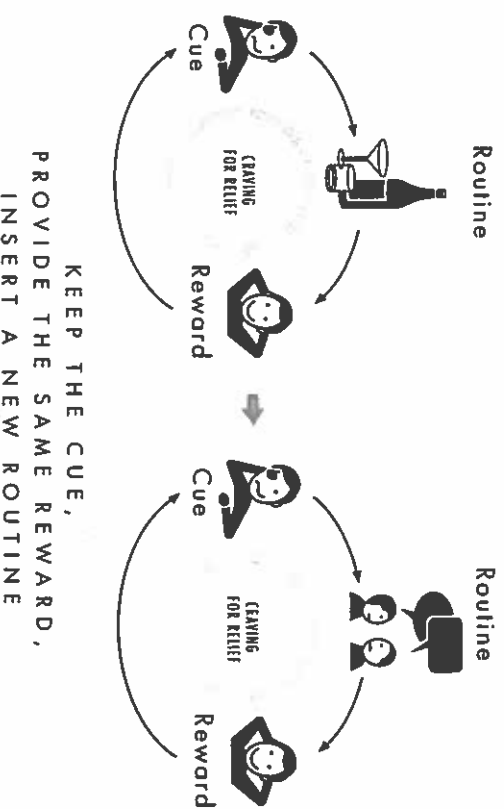
"It's not obvious from the way they're written, but to complete those steps, someone has to create a list of all the triggers for their alcoholic urges," said J. Scott Tonigan, a researcher at the University of New Mexico who has studied AA for more than a decade. "When you make a self-inventory, you're figuring out all the things that make you drink. And admitting to someone else all the bad things you've done is a pretty good way of figuring out the moments where everything spiraled out of control."

Then, AA asks alcoholics to search for the rewards they get from alcohol. What cravings, the program asks, are driving your habit loop? Often, intoxication itself doesn't make the list. Alcoholics crave a drink because it offers escape, relaxation, companionship, the blunting of anxieties, and an opportunity for emotional release. They might crave a cocktail to forget their worries. But they don't necessarily crave feeling drunk. The physical effects of alcohol are often one of the least rewarding parts of drinking for addicts.

"There is a hedonistic element to alcohol," said Ulf Mueller, a German neurologist who has studied brain activity among alcoholics. "But people also use alcohol because they want to forget something or to satisfy other cravings, and these relief cravings occur in totally different parts of the brain than the craving for physical pleasure."

In order to offer alcoholics the same rewards they get at a bar, AA has built a system of meetings and companionship—the "sponsor" each member works with—that strives to offer as much escape, distraction, and catharsis as a Friday night bender. If someone needs relief, they can get it from talking to their sponsor or attending a group gathering, rather than toasting a drinking buddy.

"AA forces you to create new routines for what to do each night instead of drinking," said Tonigan. "You can relax and talk through your anxieties at the meetings. The triggers and payoffs stay the same, it's just the behavior that changes."



One particularly dramatic demonstration of how alcoholics' cues and rewards can be transferred to new routines occurred in 2007, when Mueller, the German neurologist, and his colleagues at the University of Magdeburg implanted small electrical devices inside the brains of five alcoholics who had repeatedly tried to give up booze. The alcoholics in the study had each spent at least six months in rehab without success. One of them had been through detox more than sixty times.

The devices implanted in the men's heads were positioned inside their basal ganglia—the same part of the brain where the MIT researchers found the habit loop—and emitted an electrical charge that interrupted the neurological reward that triggers habitual cravings. After the men recovered from the operations, they were exposed to cues that had once triggered alcoholic urges, such as photos of beer or trips to a bar. Normally, it would have been impossible for

them to resist a drink. But the devices inside their brains "overrode" each man's neurological cravings. They didn't touch a drop.

"One of them told me the craving disappeared as soon as we turned the electricity on," Mueller said. "Then, we turned it off, and the craving came back immediately."

Eradicating the alcoholics' neurological cravings, however, wasn't enough to stop their drinking habits. Four of them relapsed soon after the surgery, usually after a stressful event. They picked up a bottle because that's how they automatically dealt with anxiety. However, once they learned alternate routines for dealing with stress, the drinking stopped for good. One patient, for instance, attended AA meetings. Others went to therapy. And once they incorporated those new routines for coping with stress and anxiety into their lives, the successes were dramatic. The man who had gone to detox sixty times never had another drink. Two other patients had started drinking at twelve, were alcoholics by eighteen, drank every day, and now have been sober for four years.

Notice how closely this study hews to the Golden Rule of habit change: Even when alcoholics' brains were changed through surgery, it wasn't enough. The old cues and cravings for rewards were still there, waiting to pounce. The alcoholics only permanently changed once they learned new routines that drew on the old triggers and provided a familiar relief. "Some brains are so addicted to alcohol that only surgery can stop it," said Mueller. "But those people also need new ways for dealing with life."

AA provides a similar, though less invasive, system for inserting new routines into old habit loops. As scientists have begun understanding how AA works, they've started applying the program's methods to other habits, such as two-year-olds' tantrums, sex addictions, and even minor behavioral tics. As AA's methods have spread, they've been refined into therapies that can be used to disrupt almost any pattern.



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In the summer of 2006, a twenty-four-year-old graduate student named Mandy walked into the counseling center at Mississippi State University. For most of her life, Mandy had bitten her nails, gnawing them until they bled. Lots of people bite their nails. For chronic nail biters, however, it's a problem of a different scale. Mandy would often bite until her nails pulled away from the skin underneath. Her fingertips were covered with tiny scabs. The end of her fingers had become blunted without nails to protect them and sometimes they tingled or itched, a sign of nerve injury. The biting habit had damaged her social life. She was so embarrassed around her friends that she kept her hands in her pockets and, on dates, would become preoccupied with balling her fingers into fists. She had tried to stop by painting her nails with foul-tasting polishes or promising herself, starting *right now*, that she would muster the willpower to quit. But as soon as she began doing homework or watching television, her fingers ended up in her mouth.

The counseling center referred Mandy to a doctoral psychology student who was studying a treatment known as "habit reversal training." The psychologist was well acquainted with the Golden Rule of habit change. He knew that changing Mandy's nail biting habit required inserting a new routine into her life.

"What do you feel right before you bring your hand up to your mouth to bite your nails?" he asked her.

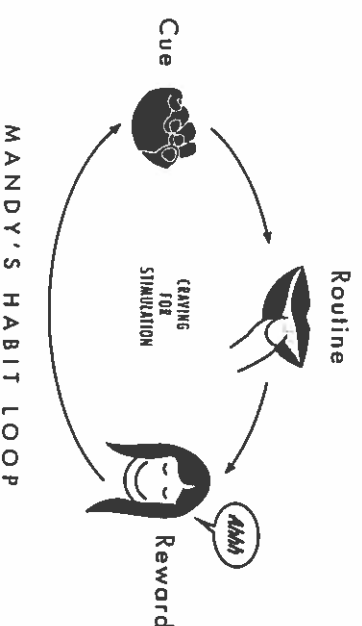
"There's a little bit of tension in my fingers," Mandy said. "It hurts a little bit here, at the edge of the nail. Sometimes I'll run my thumb along, looking for hangnails, and when I feel something catch, I'll bring it up to my mouth. Then I'll go finger by finger, biting all the rough edges. Once I start, it feels like I have to do all of them."

Asking patients to describe what triggers their habitual behavior is called awareness training, and like AA's insistence on forcing alcoholics to recognize their cues, it's the first step in habit reversal

training. The tension that Mandy felt in her nails cued her nail biting habit.

"Most people's habits have occurred for so long they don't pay attention to what causes it anymore," said Brad Dufene, who treated Mandy. "I've had stutterers come in, and I'll ask them which words or situations trigger their stuttering, and they won't know because they stopped noticing so long ago."

Next, the therapist asked Mandy to describe why she bit her nails. At first, she had trouble coming up with reasons. As they talked, though, it became clear that she bit when she was bored. The therapist put her in some typical situations, such as watching television and doing homework, and she started nibbling. When she had worked through all of the nails, she felt a brief sense of completeness, she said. That was the habit's reward: a physical stimulation she had come to crave.

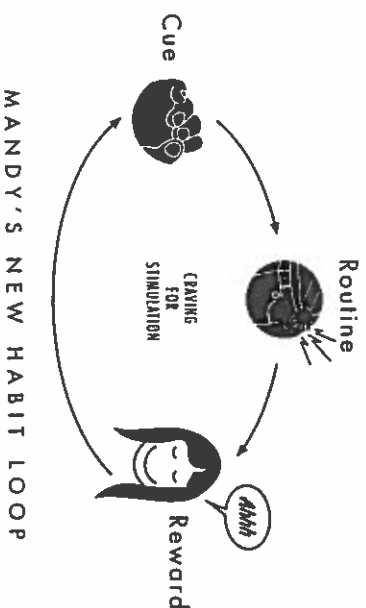


At the end of their first session, the therapist sent Mandy home with an assignment: Carry around an index card, and each time you feel the cue—a tension in your fingertips—make a check mark on the card. She came back a week later with twenty-eight checks. She was, by that point, acutely aware of the sensations that preceded her habit. She knew how many times it occurred during class or while watching television.

Then the therapist taught Mandy what is known as a "competing

response." Whenever she felt that tension in her fingertips, he told her, she should immediately put her hands in her pockets or under her legs, or grip a pencil or something else that made it impossible to put her fingers in her mouth. Then Mandy was to search for something that would provide a quick physical stimulation—such as rubbing her arm or rapping her knuckles on a desk—anything that would produce a physical response.

The cues and rewards stayed the same. Only the routine changed.



They practiced in the therapist's office for about thirty minutes and Mandy was sent home with a new assignment: Continue with the index card, but make a check when you feel the tension in your fingertips and a hash mark when you successfully override the habit.

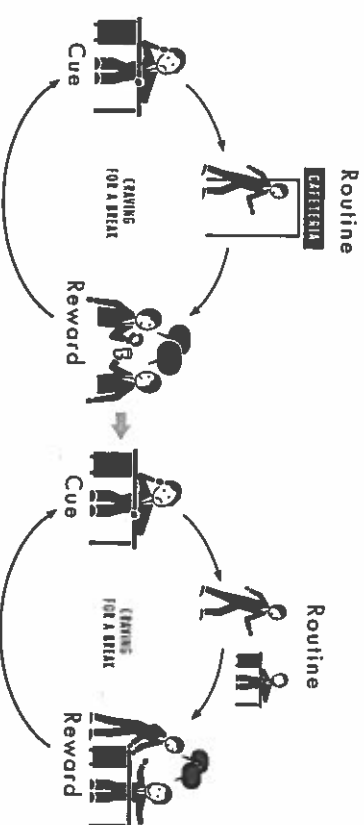
A week later, Mandy had bitten her nails only three times and had used the competing response seven times. She rewarded herself with a manicure, but kept using the note cards. After a month, the nail-biting habit was gone. The competing routines had become automatic. One habit had replaced another.

"It seems ridiculously simple, but once you're aware of how your habit works, once you recognize the cues and rewards, you're halfway to changing it," Nathan Azrin, one of the developers of habit reversal training, told me. "It seems like it should be more complex.

The truth is, the brain can be reprogrammed. You just have to be deliberate about it."\*

Today, habit reversal therapy is used to treat verbal and physical tics, depression, smoking, gambling problems, anxiety, bedwetting, procrastination, obsessive-compulsive disorders, and other behavioral problems. And its techniques lay bare one of the fundamental principles of habits: Often, we don't really understand the cravings driving our behaviors until we look for them. Mandy never realized that a craving for physical stimulation was causing her nail biting, but once she dissected the habit, it became easy to find a new routine that provided the same reward.

Say you want to stop snacking at work. Is the reward you're seeking to satisfy your hunger? Or is it to interrupt boredom? If you snack for a brief release, you can easily find another routine—such as taking

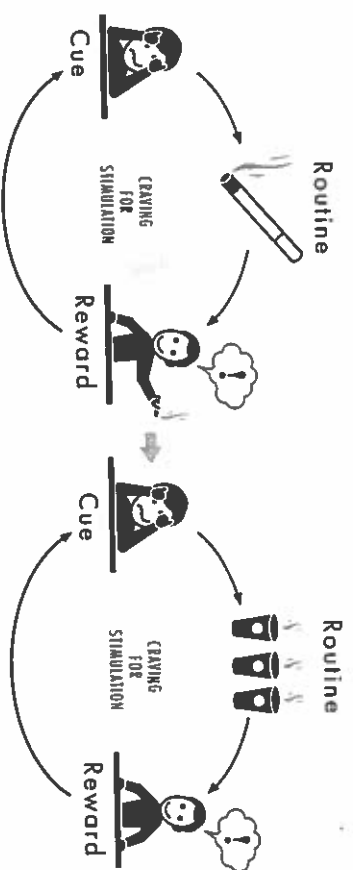


\* It is important to note that though the process of habit change is easily described, it does not necessarily follow that it is easily accomplished. It is facile to imply that smoking, alcoholism, overeating, or other ingrained patterns can be upended without real effort. Genuine change requires work and self-understanding of the cravings driving behaviors. Changing any habit requires determination. No one will quit smoking cigarettes simply because they sketch a habit loop.

However, by understanding habits' mechanisms, we gain insights that make new behaviors easier to grasp. Anyone struggling with addiction or destructive behaviors can benefit from help from many quarters, including trained therapists, physicians, social workers, and clergy. Even professionals in those fields, though, agree that most alcoholics, smokers, and other people struggling with problematic behaviors quit on their own, away from formal treatment settings. Much of the time, those changes are accomplished because people examine the cues, cravings, and rewards that drive their behaviors and then find ways to replace their self-destructive routines with healthier alternatives, even if they aren't fully aware of what they are doing at the time. Understanding the cues and cravings driving your habits won't make them suddenly disappear—but it will give you a way to plan how to change the pattern.

a quick walk, or giving yourself three minutes on the Internet—that provides the same interruption without adding to your waistline.

If you want to stop smoking, ask yourself, do you do it because you love nicotine, or because it provides a burst of stimulation, a structure to your day, a way to socialize? If you smoke because you need stimulation, studies indicate that some caffeine in the afternoon can increase the odds you'll quit. More than three dozen studies of former smokers have found that identifying the cues and rewards they associate with cigarettes, and then choosing new routines that provide similar payoffs—a piece of Nicorette, a quick series of push-ups, or simply taking a few minutes to stretch and relax—makes it more likely they will quit.



If you identify the cues and rewards, you can change the routine. At least, most of the time. For some habits, however, there's one other ingredient that's necessary: belief.

III.

"Here are the six reasons everyone thinks we can't win," Dungy told his Buccaneers after becoming head coach in 1996. It was months before the season started and everyone was sitting in the locker room. Dungy started listing the theories they had all read in the newspapers or heard on the radio: The team's management was

messed up. Their new coach was untested. The players were spoiled. The city didn't care. Key players were injured. They didn't have the talent they needed.

"Those are the supposed reasons," Dungy said. "Now here is a fact: Nobody is going to outwork us."

Dungy's strategy, he explained, was to shift the team's behaviors until their performances were automatic. He didn't believe the Buccaneers needed the thickest playbook. He didn't think they had to memorize hundreds of formations. They just had to learn a few key moves and get them right every time.

However, perfection is hard to achieve in football. "Every play in football—every play—someone messes up," said Herrn Edwards, one of Dungy's assistant coaches in Tampa Bay. "Most of the time, it's not physical. It's mental." Players mess up when they start thinking too much or second-guessing their plays. What Dungy wanted was to take all that decision making out of their game.

And to do that, he needed them to recognize their existing habits and accept new routines.

He started by watching how his team already played.

"Let's work on the Under Defense," Dungy shouted at a morning practice one day. "Number fifty-five, what's your read?"

"I'm watching the running back and guard," said Derrick Brooks, an outside linebacker.

"What precisely are you *looking at*? Where are your eyes?"

"I'm looking at the movement of the guard," said Brooks. "I'm watching the QB's legs and hips after he gets the ball. And I'm looking for gaps in the line, to see if they're gonna pass and if the QB is going to throw to my side or away."

In football, these visual cues are known as "keys," and they're critical to every play. Dungy's innovation was to use these keys as cues for reworked habits. He knew that, sometimes, Brooks hesitated a moment too long at the start of a play. There were so many things for him to think about—is the guard stepping out of forma-

tion? Does the running back's foot indicate he's preparing for a running or passing play?—that sometimes he slowed down.

Dungy's goal was to free Brooks's mind from all that analysis. Like Alcoholics Anonymous, he used the same cues that Brooks was already accustomed to, but gave him different routines that, eventually, occurred automatically.

"I want you to use those same keys," Dungy told Brooks. "But at first, focus only on the running back. That's it. Do it without thinking. Once you're in position, *then* start looking for the QB."

This was a relatively modest shift—Brooks's eyes went to the same cues, but rather than looking multiple places at once, Dungy put them in a sequence and told him, ahead of time, the choice to make when he saw each key. The brilliance of this system was that it removed the need for decision making. It allowed Brooks to move faster, because everything was a reaction—and eventually a habit—rather than a choice.

Dungy gave every player similar instructions, and practiced the formations over and over. It took almost a year for Dungy's habits to take hold. The team lost early, easy games. Sports columnists asked why the Bucs were wasting so much time on psychological quackery.

But slowly, they began to improve. Eventually, the patterns became so familiar to players that they unfolded automatically when the team took the field. In Dungy's second season as coach, the Bucs won their first five games and went to the play-offs for the first time in fifteen years. In 1999, they won the division championship.

Dungy's coaching style started drawing national attention. The sports media fell in love with his soft-spoken demeanor, religious piety, and the importance he placed on balancing work and family. Newspaper stories described how he brought his sons, Eric and Jamie, to the stadium so they could hang out during practice. They did their homework in his office and picked up towels in the locker room. It seemed like, finally, success had arrived.

In 2000, the Bucs made it to the play-offs again, and then again in 2001. Fans now filled the stadium every week. Sportscasters talked about the team as Super Bowl contenders. It was all becoming real.



But even as the Bucs became a powerhouse, a troubling problem emerged. They often played tight, disciplined games. However, during crucial, high-stress moments, everything would fall apart.

In 1999, after racking up six wins in a row at the end of the season, the Bucs blew the conference championship against the St. Louis Rams. In 2000, they were one game away from the Super Bowl when they disintegrated against the Philadelphia Eagles, losing 21 to 3. The next year, the same thing happened again, and the Bucs lost to the Eagles, 31 to 9, blowing their chance of advancing.

"We would practice, and everything would come together and then we'd get to a big game and it was like the training disappeared," Dungy told me. "Afterward, my players would say, 'Well, it was a critical play and I went back to what I knew,' or 'I felt like I had to step it up.' What they were *really* saying was they trusted our system most of the time, but when everything was on the line, that belief broke down."

At the conclusion of the 2001 season, after the Bucs had missed the Super Bowl for the second straight year, the team's general manager asked Dungy to come to his house. He parked near a huge oak tree, walked inside, and thirty seconds later was fired.

The Bucs would go on to win the Super Bowl the next year using Dungy's formations and players, and by relying on the habits he had shaped. He would watch on television as the coach who replaced him lifted up the Lombardi trophy. But by then, he would already be far away.

## IV.

About sixty people—soccer moms and lawyers on lunch breaks, old guys with fading tattoos and hipsters in skinny jeans—are sitting in a church and listening to a man with a slight paunch and a tie that complements his pale blue eyes. He looks like a successful politician, with the warm charisma of assured reelection.

"My name is John," he says, "and I'm an alcoholic."

"Hi, John," everyone replies.

"The first time I decided to get help was when my son broke his arm," John says. He's standing behind a podium. "I was having an affair with a woman at work, and she told me that she wanted to end it. So I went to a bar and had two vodkas, and went back to my desk, and at lunch I went to Chili's with a friend, and we each had a few beers, and then at about two o'clock, me and another friend left and found a place with a two-for-one happy hour. It was my day to pick up the kids—my wife didn't know about the affair yet—so I drove to their school and got them, and I was driving home on a street I must have driven a thousand times, and I slammed into a stop sign at the end of the block. Up on the sidewalk and, bam, right into the sign. Sam—that's my boy—hadn't put on his seat belt, so he flew against the windshield and broke his arm. There was blood on the dash where he hit his nose and the windshield was cracked and I was so scared. That's when I decided I needed help.

"So I checked into a clinic and then came out, and everything was pretty good for a while. For about thirteen months, everything was great. I felt like I was in control and I went to meetings every couple of days, but eventually I started thinking, *I'm not such a loser that I need to hang out with a bunch of drunks*. So I stopped going.

"Then my mom got cancer, and she called me at work, almost two years after I got sober. She was driving home from the doctor's office, and she said, 'He told me we can treat it, but it's pretty advanced.' The first thing I did after I hung up is find a bar, and I was

pretty much drunk for the next two years until my wife moved out, and I was supposed to pick up my kids again. I was in a really bad place by then. A friend was teaching me to use coke, and every afternoon I would do a line inside my office, and five minutes later I would get that little drip into the back of my throat and do another line.

"Anyways, it was my turn to get the kids. I was on the way to their school and I felt totally fine, like I was on top of everything, and I pulled into an intersection when the light was red and this huge truck slammed into my car. It actually flipped the car on its side. I didn't have a scratch on me. I got out, and started trying to push my car over, because I figured, if I can make it home and leave before the cops arrive, I'll be fine. Of course that didn't work out, and when they arrested me for DUI they showed me how the passenger side of the car was completely crushed in. That's where Sammy usually sat. If he had been there, he would have been killed.

"So I started going to meetings again, and my sponsor told me that it didn't matter if I felt in control. Without a higher power in my life, without admitting my powerlessness, none of it was going to work. I thought that was bull—I'm an atheist. But I knew that if something didn't change, I was going to kill my kids. So I started working at that, working at believing in something bigger than me. And it's working. I don't know if it's God or something else, but there is a power that has helped me stay sober for seven years now and I'm in awe of it. I don't wake up sober every morning—I mean I haven't had a drink in seven years, but some mornings I wake up feeling like I'm gonna fall down that day. Those days, I look for the higher power, and I call my sponsor, and most of the time we don't talk about drinking. We talk about life and marriage and my job, and by the time I'm ready for a shower, my head is on straight."

The first cracks in the theory that Alcoholics Anonymous succeeded solely by reprogramming participants' habits started appearing a little over a decade ago and were caused by stories from

alcoholics like John. Researchers began finding that habit replacement worked pretty well for many people until the stresses of life—such as finding out your mom has cancer, or your marriage is coming apart—got too high, at which point alcoholics often fell off the wagon. Academics asked why, if habit replacement is so effective, it seemed to fail at such critical moments. And as they dug into alcoholics' stories to answer that question, they learned that replacement habits only become durable new behaviors when they are accompanied by something else.

One group of researchers at the Alcohol Research Group in California, for instance, noticed a pattern in interviews. Over and over again, alcoholics said the same thing: Identifying cues and choosing new routines is important, but without another ingredient, the new habits never fully took hold.

The secret, the alcoholics said, was God.

Researchers hated that explanation. God and spirituality are not testable hypotheses. Churches are filled with drunks who continue drinking despite a pious faith. In conversations with addicts, though, spirituality kept coming up again and again. So in 2005, a group of scientists—this time affiliated with UC Berkeley, Brown University, and the National Institutes of Health—began asking alcoholics about all kinds of religious and spiritual topics. Then they looked at the data to see if there was any correlation between religious belief and how long people stayed sober.

A pattern emerged. Alcoholics who practiced the techniques of habit replacement, the data indicated, could often stay sober until there was a stressful event in their lives—at which point, a certain number started drinking again, no matter how many new routines they had embraced.

However, those alcoholics who believed, like John in Brooklyn, that some higher power had entered their lives were more likely to make it through the stressful periods with their sobriety intact.

It wasn't God that mattered, the researchers figured out. It was belief itself that made a difference. Once people learned how to believe in something, that skill started spilling over to other parts of their lives, until they started believing they could change. Belief was the ingredient that made a reworked habit loop into a permanent behavior.

"I wouldn't have said this a year ago—that's how fast our understanding is changing," said Tonigan, the University of New Mexico researcher, "but belief seems critical. You don't have to believe in God, but you do need the capacity to believe that things will get better.

"Even if you give people better habits, it doesn't repair why they started drinking in the first place. Eventually they'll have a bad day, and no new routine is going to make everything seem okay. What can make a difference is *believing* that they can cope with that stress without alcohol."

By putting alcoholics in meetings where belief is a given—where, in fact, belief is an integral part of the twelve steps—AA trains people in how to believe in something until they believe in the program and themselves. It lets people practice believing that things will eventually get better, until things actually do.

"At some point, people in AA look around the room and think, *if it worked for that guy, I guess it can work for me*," said Lee Ann Kaskutas, a senior scientist at the Alcohol Research Group. "There's something really powerful about groups and shared experiences. People might be skeptical about their ability to change if they're by themselves, but a group will convince them to suspend disbelief. A community creates belief."

As John was leaving the AA meeting, I asked him why the program worked now, after it had failed him before. "When I started coming to meetings after the truck accident, someone asked for volunteers to help put away the chairs," he told me. "I raised my hand.

It wasn't a big thing, it took like five minutes, but it felt good to do something that wasn't all about me. I think that started me on a different path.

"I wasn't ready to give in to the group the first time, but when I came back, I was ready to start believing in something."

## V.

Within a week of Dungy's firing by the Bucs, the owner of the Indianapolis Colts left an impassioned fifteen-minute message on his answering machine. The Colts, despite having one of the NFL's best quarterbacks, Peyton Manning, had just finished a dreadful season. The owner needed help. He was tired of losing, he said. Dungy moved to Indianapolis and became head coach.

He immediately started implementing the same basic game plan: remaking the Colts' routines and teaching players to use old cues to build reworked habits. In his first season, the Colts went 10-6 and qualified for the play-offs. The next season, they went 12-4 and came within one game of the Super Bowl. Dungy's celebrity grew. Newspaper and television profiles appeared around the country. Fans flew in so they could visit the church Dungy attended. His sons became fixtures in the Colts' locker room and on the sidelines. In 2005, Jamie, his eldest boy, graduated from high school and went to college in Florida.

Even as Dungy's successes mounted, however, the same troubling patterns emerged. The Colts would play a season of disciplined, winning football, and then under play-off pressure, choke.

"Relief is the biggest part of success in professional football," Dungy told me. "The team *wanted* to believe, but when things got really tense, they went back to their comfort zones and old habits." The Colts finished the 2005 regular season with fourteen wins and two losses, the best record in its history.

Then tragedy struck.

Three days before Christmas, Tony Dungy's phone rang in the middle of the night. His wife answered and handed him the receiver, thinking it was one of his players. There was a nurse on the line. Dungy's son Jamie had been brought into the hospital earlier in the evening, she said, with compression injuries on his throat. His girlfriend had found him hanging in his apartment, a belt around his neck. Paramedics had rushed him to the hospital, but efforts at revival were unsuccessful. He was gone.

A chaplain flew to spend Christmas with the family. "Life will never be the same again," the chaplain told them, "but you won't always feel like you do right now."

A few days after the funeral, Dungy returned to the sidelines. He needed something to distract himself, and his wife and team encouraged him to go back to work. "I was overwhelmed by their love and support," he later wrote. "As a group, we had always leaned on each other in difficult times; I needed them now more than ever."

The team lost their first play-off game, concluding their season. But in the aftermath of watching Dungy during this tragedy, "something changed," one of his players from that period told me. "We had seen Coach through this terrible thing and all of us wanted to help him somehow."

It is simplistic, even cavalier, to suggest that a young man's death can have an impact on football games. Dungy has always said that nothing is more important to him than his family. But in the wake of Jamie's passing, as the Colts started preparing for the next season, something shifted, his players say. The team gave in to Dungy's vision of how football should be played in a way they hadn't before. They started to believe.

"I had spent a lot of previous seasons worrying about my contract and salary," said one player who, like others, spoke about that period on the condition of anonymity. "When Coach came back, after the funeral, I wanted to give him everything I could, to take away his hurt. I kind of gave myself to the team."



"Some men like hugging each other," another player told me. "I don't. I haven't hugged my sons in a decade. But after Coach came back, I walked over and I hugged him as long as I could, because I wanted him to know that I was there for him."

After the death of Dungy's son, the team started playing differently. A conviction emerged among players about the strength of Dungy's strategy. In practices and scrimmages leading up to the start of the 2006 season, the Colts played tight, precise football.

"Most football teams aren't really teams. They're just guys who work together," a third player from that period told me. "But we became a *team*. It felt amazing. Coach was the spark, but it was about more than him. After he came back, it felt like we really believed in each other, like we knew how to play together in a way we didn't before."

For the Colts, a belief in their team—in Dungy's tactics and their ability to win—began to emerge out of tragedy. But just as often, a similar belief can emerge without any kind of adversity.

In a 1994 Harvard study that examined people who had radically changed their lives, for instance, researchers found that some people had remade their habits after a personal tragedy, such as a divorce or a life-threatening illness. Others changed after they saw a friend go through something awful, the same way that Dungy's players watched him struggle.

Just as frequently, however, there was no tragedy that preceded people's transformations. Rather, they changed because they were embedded in social groups that made change easier. One woman said her entire life shifted when she signed up for a psychology class and met a wonderful group. "It opened a Pandora's box," the woman told researchers. "I could not tolerate the status quo any longer. I had changed in my core." Another man said that he found new friends among whom he could practice being gregarious. "When I do make the effort to overcome my shyness, I feel that it is not really me acting, that it's someone else," he said. But by practicing with

his new group, it stopped feeling like acting. He started to believe he wasn't shy, and then, eventually, he wasn't anymore. When people join groups where change seems possible, the potential for that change to occur becomes more real. For most people who overhaul their lives, there are no seminal moments or life-altering disasters. There are simply communities—sometimes of just one other person—who make change believable. One woman told researchers her life transformed after a day spent cleaning toilets—and after weeks of discussing with the rest of the cleaning crew whether she should leave her husband.

"Change occurs among other people," one of the psychologists involved in the study, Todd Heatherton, told me. "It seems real when we can see it in other people's eyes."

The precise mechanisms of belief are still little understood. No one is certain why a group encountered in a psychology class can convince a woman that everything is different, or why Dungy's team came together after their coach's son passed away. Plenty of people talk to friends about unhappy marriages and never leave their spouses; lots of teams watch their coaches experience adversity and never gel.

But we do know that for habits to permanently change, people must believe that change is feasible. The same process that makes AA so effective—the power of a group to teach individuals how to believe—happens whenever people come together to help one another change. Belief is easier when it occurs within a community.



Ten months after Jamie's death, the 2006 football season began. The Colts played peerless football, winning their first nine games, and finishing the year 12–4. They won their first play-off game, and then beat the Baltimore Ravens for the divisional title. At that point, they were one step away from the Super Bowl, playing for the con-



ference championship—the game that Dungy had lost eight times before.

The matchup occurred on January 21, 2007, against the New England Patriots, the same team that had snuffed out the Colts' Super Bowl aspirations twice.

The Colts started the game strong, but before the first half ended, they began falling apart. Players were afraid of making mistakes or so eager to get past the final Super Bowl hurdle that they lost track of where they were supposed to be focusing. They stopped relying on their habits and started thinking too much. Sloppy tackling led to turnovers. One of Peyton Manning's passes was intercepted and returned for a touchdown. Their opponents, the Patriots, pulled ahead 21 to 3. No team in the history of the NFL had ever overcome so big a deficit in a conference championship. Dungy's team, once again, was going to lose.

At halftime, the team filed into the locker room, and Dungy asked everyone to gather around. The noise from the stadium filtered through the closed doors, but inside everyone was quiet. Dungy looked at his players.

They had to believe, he said.

"We faced this same situation—against this same team—in 2003," Dungy told them. In that game, they had come within one yard of winning. One yard. "Get your sword ready because this time we're going to win. This is *our* game. It's *our* time."

The Colts came out in the second half and started playing as they had in every preceding game. They stayed focused on their cues and habits. They carefully executed the plays they had spent the past five years practicing until they had become automatic. Their offense, on the opening drive, ground out seventy-six yards over fourteen plays and scored a touchdown. Then, three minutes after taking the next possession, they scored again.

As the fourth quarter wound down, the teams traded points. Dungy's Colts tied the game, but never managed to pull ahead. With

3:49 left in the game, the Patriots scored, putting Dungy's players at a three-point disadvantage, 34 to 31. The Colts got the ball and began driving down the field. They moved seventy yards in nineteen seconds, and crossed into the end zone. For the first time, the Colts had the lead, 38 to 34. There were now sixty seconds left on the clock. If Dungy's team could stop the Patriots from scoring a touchdown, the Colts would win.

Sixty seconds is an eternity in football.

The Patriots' quarterback, Tom Brady, had scored touchdowns in far less time. Sure enough, within seconds of the start of play, Brady moved his team halfway down the field. With seventeen seconds remaining, the Patriots were within striking distance, poised for a final big play that would hand Dungy another defeat and crush, yet again, his team's Super Bowl dreams.

As the Patriots approached the line of scrimmage, the Colts' defense went into their stances. Marlin Jackson, a Colts cornerback, stood ten yards back from the line. He looked at his cues: the width of the gaps between the Patriot linemen and the depth of the running back's stance. Both told him this was going to be a passing play. Tom Brady, the Patriots' quarterback, took the snap and dropped back to pass. Jackson was already moving. Brady cocked his arm and heaved the ball. His intended target was a Patriot receiver twenty-two yards away, wide open, near the middle of the field. If the receiver caught the ball, it was likely he could make it close to the end zone or score a touchdown. The football flew through the air. Jackson, the Colts cornerback, was already running at an angle, following his habits. He rushed past the receiver's right shoulder, cutting in front of him just as the ball arrived. Jackson plucked the ball out of the air for an interception, ran a few more steps and then slid to the ground, hugging the ball to his chest. The whole play had taken less than five seconds. The game was over. Dungy and the Colts had won.

Two weeks later, they won the Super Bowl. There are dozens of reasons that might explain why the Colts finally became champions

that year. Maybe they got lucky. Maybe it was just their time. But Dungy's players say it's because they *believed*, and because that belief made everything they had learned—all the routines they had practiced until they became automatic—stick, even at the most stressful moments.

"We're proud to have won this championship for our leader, Coach Dungy," Peyton Manning told the crowd afterward, cradling the Lombardi Trophy.

Dungy turned to his wife. "We did it," he said.



### How do habits change?

There is, unfortunately, no specific set of steps guaranteed to work for every person. We know that a habit cannot be eradicated—it must, instead, be replaced. And we know that habits are most malleable when the Golden Rule of habit change is applied: If we keep the same cue and the same reward, a new routine can be inserted.

But that's not enough. For a habit to stay changed, people must believe change is possible. And most often, that belief only emerges with the help of a group.

If you want to quit smoking, figure out a different routine that will satisfy the cravings filled by cigarettes. Then, find a support group, a collection of other former smokers, or a community that will help you believe you can stay away from nicotine, and use that group when you feel you might stumble.

If you want to lose weight, study your habits to determine why you *really* leave your desk for a snack each day, and then find someone else to take a walk with you, to gossip with at their desk rather than in the cafeteria, a group that tracks weight-loss goals together, or someone who also wants to keep a stock of apples, rather than chips, nearby.

The evidence is clear: If you want to change a habit, you must

find an alternative routine, and your odds of success go up dramatically when you commit to changing as part of a group. Belief is essential, and it grows out of a communal experience, even if that community is only as large as two people.

We know that change *can* happen. Alcoholics can stop drinking. Smokers can quit puffing. Perennial losers can become champions. You can stop biting your nails or snacking at work, yelling at your kids, staying up all night, or worrying over small concerns. And as scientists have discovered, it's not just individual lives that can shift when habits are tended to. It's also companies, organizations, and communities, as the next chapters explain.

executive, "the first day I pulled into the parking lot I saw all these parking spaces near the front doors with people's titles on them. The head guy for this or that. People who were important got the best parking spots. The first thing I did was tell a maintenance manager to paint over all the titles. I wanted whoever got to work earliest to get the best spot. Everyone understood the message: Every person matters. It was an extension of what Paul was doing around worker safety. It electrified the plant. Pretty soon, everyone was getting to work earlier each day."

## 5

## STARBUCKS AND THE HABIT OF SUCCESS

When Willpower Becomes Automatic

1.

The first time Travis Leach saw his father overdose, he was nine years old. His family had just moved into a small apartment at the end of an alleyway, the latest in a seemingly endless series of relocations that had most recently caused them to abandon their previous home in the middle of the night, throwing everything they owned into black garbage bags after receiving an eviction notice. Too many people coming and going too late at night, the landlord said. Too much noise.

Sometimes, at his old house, Travis would come home from school and find the rooms neatly cleaned, leftovers meticulously wrapped in the fridge and packets of hot sauce and ketchup in Tupperware containers. He knew this meant his parents had temporarily abandoned heroin for crank and spent the day in a cleaning frenzy. Those usually ended badly. Travis felt safer when the house was messy and his parents were on the couch, their eyes half-lidded, watching cartoons. There is no chaos at the end of a heroin fog.

Travis's father was a gentle man who loved to cook and, except for a stint in the navy, spent his entire life within a few miles of his parents in Lodi, California. Travis's mother, by the time everyone moved into the alleyway apartment, was in prison for heroin possession and prostitution. His parents were, essentially, functional addicts and the family maintained a veneer of normalcy. They went camping every summer and on most Friday nights attended his sister and brother's softball games. When Travis was four years old, he went to Disneyland with his dad and was photographed for the first time in his life, by a Disney employee. The family camera had been sold to a pawn shop years before.

On the morning of the overdose, Travis and his brother were playing in the living room on top of blankets they laid out on the floor each night for sleeping. Travis's father was getting ready to make pancakes when he stepped into the bathroom. He was carrying the tube sock that contained his needle, spoon, lighter, and cotton swabs. A few moments later, he came out, opened the refrigerator to get the eggs, and crashed to the floor. When the kids ran around the corner, their father was convulsing, his face turning blue.

Travis's siblings had seen an overdose before and knew the drill. His brother rolled him onto his side. His sister opened his mouth to make sure he wouldn't choke on his tongue, and told Travis to run next door, ask to use the neighbor's phone, and dial 911.

"My name is Travis, my dad is passed out, and we don't know what happened. He's not breathing," Travis lied to the police operator. Even at nine years old, he knew why his father was unconscious. He didn't want to say it in front of the neighbor. Three years earlier, one of his dad's friends had died in their basement after shooting up. When the paramedics had taken the body away, neighbors gawked at Travis and his sister while they held the door open for the gurney. One of the neighbors had a cousin whose son was in his class, and soon everyone in school had known.

After hanging up the phone, Travis walked to the end of the alleyway and waited for the ambulance. His father was treated at the hospital that morning, charged at the police station in the afternoon, and home again by dinner time. He made spaghetti. Travis turned ten a few weeks later.

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When Travis was sixteen, he dropped out of high school. "I was tired of being called a faggot," he said, "tired of people following me home and throwing things at me. Everything seemed really overwhelming. It was easier to quit and go somewhere else." He moved two hours south, to Fresno, and got a job at a car wash. He was fired for insubordination. He got jobs at McDonald's and Hollywood Video, but when customers were rude—"I wanted *ranch dressing*, you moron!"—he would lose control.

"Get out of my drive-through!" he shouted at one woman, throwing the chicken nuggets at her car before his manager pulled him inside.

Sometimes he'd get so upset that he would start crying in the middle of a shift. He was often late, or he'd take a day off for no reason. In the morning, he would yell at his reflection in the mirror, order himself to be better, to suck it up. But he couldn't get along with people, and he wasn't strong enough to weather the steady drip of criticisms and indignities. When the line at his register would get too long and the manager would shout at him, Travis's hands would start shaking and he'd feel like he couldn't catch his breath. He wondered if this is what his parents felt like, so defenseless against life, when they started using drugs.

One day, a regular customer at Hollywood Video who'd gotten to know Travis a little bit suggested he think about working at Starbucks. "We're opening a new store on Fort Washington, and I'm

going to be an assistant manager," the man said. "You should apply." A month later, Travis was a barista on the morning shift.

That was six years ago. Today, at twenty-five, Travis is the manager of two Starbucks where he oversees forty employees and is responsible for revenues exceeding \$2 million per year. His salary is \$44,000 and he has a 401(k) and no debt. He's never late to work. He does not get upset on the job. When one of his employees started crying after a customer screamed at her, Travis took her aside.

"Your apron is a shield," he told her. "Nothing anyone says will ever hurt you. You will always be as strong as you want to be."

He picked up that lecture in one of his Starbucks training courses, an education program that began on his first day and continues throughout an employee's career. The program is sufficiently structured that he can earn college credits by completing the modules. The training has, Travis says, changed his life. Starbucks has taught him how to live, how to focus, how to get to work on time, and how to master his emotions. Most crucially, it has taught him willpower.

"Starbucks is the most important thing that has ever happened to me," he told me. "I owe everything to this company."



For Travis and thousands of others, Starbucks—like a handful of other companies—has succeeded in teaching the kind of life skills that schools, families, and communities have failed to provide. With more than 137,000 current employees and more than one million alumni, Starbucks is now, in a sense, one of the nation's largest educators. All of those employees, in their first year alone, spent at least fifty hours in Starbucks classrooms, and dozens more at home with Starbucks' workbooks and talking to the Starbucks mentors assigned to them.

At the core of that education is an intense focus on an all-important habit: willpower. Dozens of studies show that willpower is the single most important keystone habit for individual success. In a 2005 study, for instance, researchers from the University of Pennsylvania analyzed 164 eighth-grade students, measuring their IQs and other factors, including how much willpower the students demonstrated, as measured by tests of their self-discipline.

Students who exerted high levels of willpower were more likely to earn higher grades in their classes and gain admission into more selective schools. They had fewer absences and spent less time watching television and more hours on homework. "Highly self-disciplined adolescents outperformed their more impulsive peers on every academic-performance variable," the researchers wrote. "Self-discipline predicted academic performance more robustly than did IQ. Self-discipline also predicted which students would improve their grades over the course of the school year, whereas IQ did not. . . . Self-discipline has a bigger effect on academic performance than does intellectual talent."

And the best way to strengthen willpower and give students a leg up, studies indicate, is to make it into a habit. "Sometimes it looks like people with great self-control aren't working hard—but that's because they've made it automatic," Angela Duckworth, one of the University of Pennsylvania researchers told me. "Their willpower occurs without them having to think about it."

For Starbucks, willpower is more than an academic curiosity. When the company began plotting its massive growth strategy in the late 1990s, executives recognized that success required cultivating an environment that justified paying four dollars for a fancy cup of coffee. The company needed to train its employees to deliver a bit of joy alongside lattes and scones. So early on, Starbucks started researching how they could teach employees to regulate their emotions and marshal their self-discipline to deliver a burst of pep with

every serving. Unless baristas are trained to put aside their personal problems, the emotions of some employees will inevitably spill into how they treat customers. However, if a worker knows how to remain focused and disciplined, even at the end of an eight-hour shift, they'll deliver the higher class of fast food service that Starbucks customers expect.

The company spent millions of dollars developing curriculums to train employees on self-discipline. Executives wrote workbooks that, in effect, serve as guides to how to make willpower a habit in workers' lives. Those curriculums are, in part, why Starbucks has grown from a sleepy Seattle company into a behemoth with more than seventeen thousand stores and revenues of more than \$10 billion a year.

So how does Starbucks do it? How do they take people like Travis—the son of drug addicts and a high school dropout who couldn't muster enough self-control to hold down a job at McDonald's—and teach him to oversee dozens of employees and tens of thousands of dollars in revenue each month? What, precisely, did Travis learn?

## II.

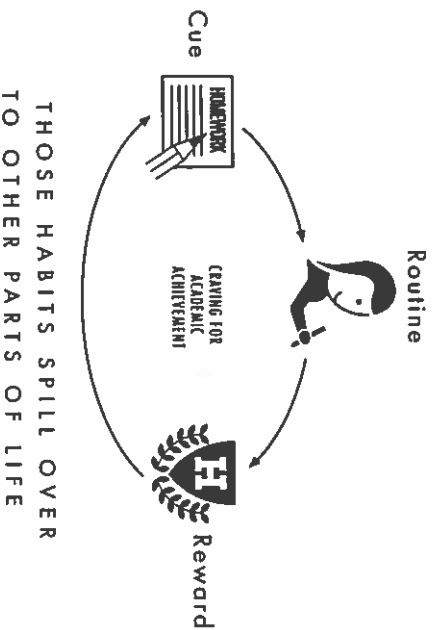
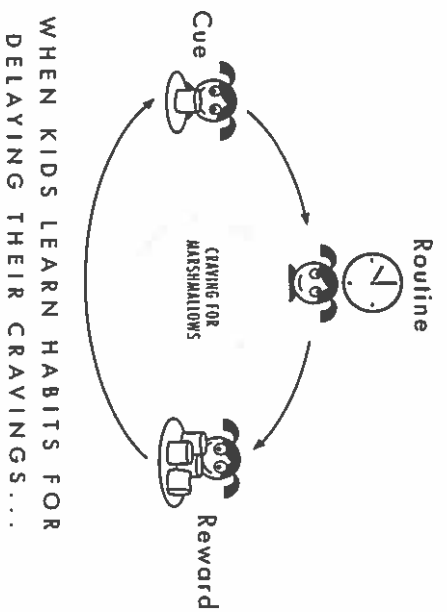
Everyone who walked into the room where the experiment was being conducted at Case Western Reserve University agreed on one thing: The cookies smelled delicious. They had just come out of the oven and were piled in a bowl, oozing with chocolate chips. On the table next to the cookies was a bowl of radishes. All day long, hungry students walked in, sat in front of the two foods, and submitted, unknowingly, to a test of their willpower that would upend our understanding of how self-discipline works.

At the time, there was relatively little academic scrutiny into willpower. Psychologists considered such subjects to be aspects of

something they called "self-regulation," but it wasn't a field that inspired great curiosity. There was one famous experiment, conducted in the 1960s, in which scientists at Stanford had tested the willpower of a group of four-year-olds. The kids were brought into a room and presented with a selection of treats, including marshmallows. They were offered a deal: They could eat one marshmallow right away, or, if they waited a few minutes, they could have two marshmallows. Then the researcher left the room. Some kids gave in to temptation and ate the marshmallow as soon as the adult left. About 30 percent managed to ignore their urges, and doubled their treats when the researcher came back fifteen minutes later. Scientists, who were watching everything from behind a two-way mirror, kept careful track of which kids had enough self-control to earn the second marshmallow.

Years later, they tracked down many of the study's participants. By now, they were in high school. The researchers asked about their grades and SAT scores, ability to maintain friendships, and their capacity to "cope with important problems." They discovered that the four-year-olds who could delay gratification the longest ended up with the best grades and with SAT scores 210 points higher, on average, than everyone else. They were more popular and did fewer drugs. If you knew how to avoid the temptation of a marshmallow as a preschooler, it seemed, you also knew how to get yourself to class on time and finish your homework once you got older, as well as how to make friends and resist peer pressure. It was as if the marshmallow-ignoring kids had self-regulatory skills that gave them an advantage throughout their lives.

Scientists began conducting related experiments, trying to figure out how to help kids increase their self-regulatory skills. They learned that teaching them simple tricks—such as distracting themselves by drawing a picture, or imagining a frame around the marshmallow, so it seemed more like a photo and less like a real



temptation—helped them learn self-control. By the 1980s, a theory emerged that became generally accepted: Willpower is a learnable skill, something that can be taught the same way kids learn to do math and say “thank you.” But funding for these inquiries was scarce. The topic of willpower wasn’t in vogue. Many of the Stanford scientists moved on to other areas of research.

However, when a group of psychology PhD candidates at Case Western—including one named Mark Muraven—discovered those studies in the mid-nineties, they started asking questions the previ-

ous research didn’t seem to answer. To Muraven, this model of willpower-as-skill wasn’t a satisfying explanation. A skill, after all, is something that remains constant from day to day. If you have the skill to make an omelet on Wednesday, you’ll still know how to make it on Friday.

In Muraven’s experience, though, it felt like he forgot how to exert willpower all the time. Some evenings he would come home from work and have no problem going for a jog. Other days, he couldn’t do anything besides lie on the couch and watch television. It was as if his brain—or, at least, that part of his brain responsible for making him exercise—had forgotten how to summon the willpower to push him out the door. Some days, he ate healthily. Other days, when he was tired, he raided the vending machines and stuffed himself with candy and chips.

If willpower is a skill, Muraven wondered, then why doesn’t it remain constant from day to day? He suspected there was more to willpower than the earlier experiments had revealed. But how do you test that in a laboratory?



Muraven’s solution was the lab containing one bowl of freshly baked cookies and one bowl of radishes. The room was essentially a closet with a two-way mirror, outfitted with a table, a wooden chair, a hand bell, and a toaster oven. Sixty-seven undergraduates were recruited and told to skip a meal. One by one, the undergrads sat in front of the two bowls.

“The point of this experiment is to test taste perceptions,” a researcher told each student, which was untrue. The point was to force students—but only *some* students—to exert their willpower. To that end, half the undergraduates were instructed to eat the cookies and ignore the radishes; the other half were told to eat the radishes and ignore the cookies. Muraven’s theory was that ignoring cookies



is hard—it takes willpower. Ignoring radishes, on the other hand, hardly requires any effort at all.

“Remember,” the researcher said, “eat only the food that has been assigned to you.” Then she left the room.

Once the students were alone, they started munching. The cookie eaters were in heaven. The radish eaters were in agony. They were miserable forcing themselves to ignore the warm cookies. Through the two-way mirror, the researchers watched one of the radish eaters pick up a cookie, smell it longingly, and then put it back in the bowl. Another grabbed a few cookies, put them down, and then licked melted chocolate off his fingers.

After five minutes, the researcher reentered the room. By Muraven’s estimation, the radish eaters’ willpower had been thoroughly taxed by eating the bitter vegetable and ignoring the treats; the cookie eaters had hardly used any of their self-discipline.

“We need to wait about fifteen minutes for the sensory memory of the food you ate to fade,” the researcher told each participant. To pass the time, she asked them to complete a puzzle. It looked fairly simple: trace a geometric pattern without lifting your pencil from the page or going over the same line twice. If you want to quit, the researcher said, ring the bell. She implied the puzzle wouldn’t take long.

In truth, the puzzle was impossible to solve.

This puzzle wasn’t a way to pass time; it was the most important part of the experiment. It took enormous willpower to keep working on the puzzle, particularly when each attempt failed. The scientists wondered, would the students who had already expended their willpower by ignoring the cookies give up on the puzzle faster? In other words, was willpower a finite resource?

From behind their two-way mirror, the researchers watched. The cookie eaters, with their unused reservoirs of self-discipline, started working on the puzzle. In general, they looked relaxed. One of them tried a straightforward approach, hit a roadblock, and then started again. And again. And again. Some worked for over half an hour

before the researcher told them to stop. On average, the cookie eaters spent almost nineteen minutes apiece trying to solve the puzzle before they rang the bell.

The radish eaters, with their depleted willpower, acted completely different. They muttered as they worked. They got frustrated. One complained that the whole experiment was a waste of time. Some of them put their heads on the table and closed their eyes. One snapped at the researcher when she came back in. On average, the radish eaters worked for only about eight minutes, 60 percent less time than the cookie eaters, before quitting. When the researcher asked afterward how they felt, one of the radish eaters said he was “sick of this dumb experiment.”

“By making people use a little bit of their willpower to ignore cookies, we had put them into a state where they were willing to quit much faster,” Muraven told me. “There’s been more than two hundred studies on this idea since then, and they’ve all found the same thing. Willpower isn’t just a skill. It’s a muscle, like the muscles in your arms or legs, and it gets tired as it works harder, so there’s less power left over for other things.”

Researchers have built on this finding to explain all sorts of phenomena. Some have suggested it helps clarify why otherwise successful people succumb to extramarital affairs (which are most likely to start late at night after a long day of using willpower at work) or why good physicians make dumb mistakes (which most often occur after a doctor has finished a long, complicated task that requires intense focus). “If you want to do something that requires willpower—like going for a run after work—you have to conserve your willpower muscle during the day,” Muraven told me. “If you use it up too early on tedious tasks like writing emails or filling out complicated and boring expense forms, all the strength will be gone by the time you get home.”



But how far does this analogy extend? Will exercising willpower muscles make them stronger the same way using dumbbells strengthen biceps?

In 2006, two Australian researchers—Megan Oaten and Ken Cheng—tried to answer that question by creating a willpower workout. They enrolled two dozen people between the ages of eighteen and fifty in a physical exercise program and, over two months, put them through an increasing number of weight lifting, resistance training, and aerobic routines. Week after week, people forced themselves to exercise more frequently, using more and more willpower each time they hit the gym.

After two months, the researchers scrutinized the rest of the participants' lives to see if increased willpower at the gym resulted in greater willpower at home. Before the experiment began, most of the subjects were self-professed couch potatoes. Now, of course, they were in better physical shape. But they were also healthier in other parts of their lives, as well. The more time they spent at the gym, the fewer cigarettes they smoked and the less alcohol, caffeine, and junk food they consumed. They were spending more hours on homework and fewer watching TV. They were less depressed.

Maybe, Oaten and Cheng wondered, those results had nothing to do with willpower. What if exercise just makes people happier and less hungry for fast food?

So they designed another experiment. This time, they signed up twenty-nine people for a four-month money management program. They set savings goals and asked participants to deny themselves luxuries, such as meals at restaurants or movies. Participants were asked to keep detailed logs of everything they bought, which was annoying at first, but eventually people worked up the self-discipline to jot down every purchase.

People's finances improved as they progressed through the program. More surprising, they also smoked fewer cigarettes and drank less alcohol and caffeine—on average, two fewer cups of coffee, two

fewer beers, and, among smokers, fifteen fewer cigarettes each day. They ate less junk food and were more productive at work and school. It was like the exercise study: As people strengthened their willpower muscles in one part of their lives—in the gym, or a money management program—that strength spilled over into what they ate or how hard they worked. Once willpower became stronger, it touched everything.

Oaten and Cheng did one more experiment. They enrolled forty-five students in an academic improvement program that focused on creating study habits. Predictably, participants' learning skills improved. And the students also smoked less, drank less, watched less television, exercised more, and ate healthier, even though all those things were never mentioned in the academic program. Again, as their willpower muscles strengthened, good habits seemed to spill over into other parts of their lives.

"When you learn to force yourself to go to the gym or start your homework or eat a salad instead of a hamburger, part of what's happening is that you're changing how you think," said Todd Heatherton, a researcher at Dartmouth who has worked on willpower studies. "People get better at regulating their impulses. They learn how to distract themselves from temptations. And once you've gotten into that willpower groove, your brain is practiced at helping you focus on a goal."

There are now hundreds of researchers, at nearly every major university, studying willpower. Public and charter schools in Philadelphia, Seattle, New York, and elsewhere have started incorporating willpower-strengthening lessons into curriculums. At KIPP, or the "Knowledge Is Power Program"—a collection of charter schools serving low-income students across the nation—teaching self-control is part of the schools' philosophy. (A KIPP school in Philadelphia gave students shirts proclaiming "Don't Eat the Marshmallow.") Many of these schools have dramatically raised students' test scores.

"That's why signing kids up for piano lessons or sports is so im-

portant. It has nothing to do with creating a good musician or a five-year-old soccer star," said Heatherton. "When you learn to force yourself to practice for an hour or run fifteen laps, you start building self-regulatory strength. A five-year-old who can follow the ball for ten minutes becomes a sixth grader who can start his homework on time."

As research on willpower has become a hot topic in scientific journals and newspaper articles, it has started to trickle into corporate America. Firms such as Starbucks—and the Gap, Walmart, restaurants, or any other business that relies on entry-level workers—all face a common problem: No matter how much their employees want to do a great job, many will fail because they lack self-discipline. They show up late. They snap at rude customers. They get distracted or drawn into workplace dramas. They quit for no reason.

"For a lot of employees, Starbucks is their first professional experience," said Christine Deputy, who helped oversee the company's training programs for more than a decade. "If your parents or teachers have been telling you what to do your entire life, and suddenly customers are yelling and your boss is too busy to give you guidance, it can be really overwhelming. A lot of people can't make the transition. So we try to figure out how to give our employees the self-discipline they didn't learn in high school."

But when companies like Starbucks tried to apply the willpower lessons from the radish-and-cookie studies to the workplace, they encountered difficulties. They sponsored weight-loss classes and offered employees free gym memberships, hoping the benefits would spill over to how they served coffee. Attendance was spotty. It was hard to sit through a class or hit the gym after a full day at work, employees complained. "If someone has trouble with self-discipline at work, they're probably also going to have trouble attending a program designed to strengthen their self-discipline *after* work," Muraven said.

But Starbucks was determined to solve this problem. By 2007, dur-

ing the height of its expansion, the company was opening seven new stores every day and hiring as many as fifteen hundred employees each week. Training them to excel at customer service—to show up on time and not get angry at patrons and serve everyone with a smile while remembering customers' orders and, if possible, their names—was essential. People expect an expensive latte delivered with a bit of sparkle. "We're not in the coffee business serving people," Howard Behar, the former president of Starbucks, told me. "We're in the people business serving coffee. Our entire business model is based on fantastic customer service. Without that, we're toast."

The solution, Starbucks discovered, was turning self-discipline into an organizational habit.

|||.

In 1992, a British psychologist walked into two of Scotland's busiest orthopedic hospitals and recruited five-dozen patients for an experiment she hoped would explain how to boost the willpower of people exceptionally resistant to change.

The patients, on average, were sixty-eight years old. Most of them earned less than \$10,000 a year and didn't have more than a high school degree. All of them had recently undergone hip or knee replacement surgeries, but because they were relatively poor and uneducated, many had waited years for their operations. They were retirees, elderly mechanics, and store clerks. They were in life's final chapters, and most had no desire to pick up a new book.

Recovering from a hip or knee surgery is incredibly arduous. The operation involves severing joint muscles and sawing through bones. While recovering, the smallest movements—shifting in bed or flexing a joint—can be excruciating. However, it is essential that patients begin exercising almost as soon as they wake from surgery. They must begin moving their legs and hips before the muscles and skin have healed, or scar tissue will clog the joint, destroying its flex-

ibility. In addition, if patients don't start exercising, they risk developing blood clots. But the agony is so extreme that it's not unusual for people to skip out on rehab sessions. Patients, particularly elderly ones, often refuse to comply with doctors' orders.

The Scottish study's participants were the types of people most likely to fail at rehabilitation. The scientist conducting the experiment wanted to see if it was possible to help them harness their willpower. She gave each patient a booklet after their surgeries that detailed their rehab schedule, and in the back were thirteen additional pages—one for each week—with blank spaces and instructions: "My goals for this week are \_\_\_\_\_. ? Write down exactly what you are going to do. For example, if you are going to go for a walk this week, write down where and when you are going to walk." She asked patients to fill in each of those pages with specific plans. Then she compared the recoveries of those who wrote out goals with those of patients who had received the same booklets, but didn't write anything.

It seems absurd to think that giving people a few pieces of blank paper might make a difference in how quickly they recover from surgery. But when the researcher visited the patients three months later, she found a striking difference between the two groups. The patients who had written plans in their booklets had started walking almost twice as fast as the ones who had not. They had started getting in and out of their chairs, unassisted, almost three times as fast. They were putting on their shoes, doing the laundry, and making themselves meals quicker than the patients who hadn't scribbled out goals ahead of time.

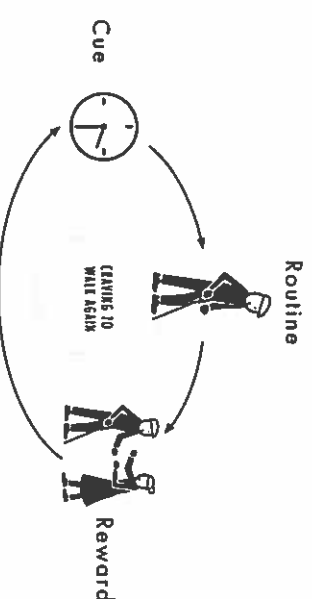
The psychologist wanted to understand why. She examined the booklets, and discovered that most of the blank pages had been filled in with specific, detailed plans about the most mundane aspects of recovery. One patient, for example, had written, "I will walk to the bus stop tomorrow to meet my wife from work," and then noted what time he would leave, the route he would walk, what he would

wear, which coat he would bring if it was raining, and what pills he would take if the pain became too much. Another patient, in a similar study, wrote a series of very specific schedules regarding the exercises he would do each time he went to the bathroom. A third wrote a minute-by-minute itinerary for walking around the block.

As the psychologist scrutinized the booklets, she saw that many of the plans had something in common: They focused on how patients would handle a specific moment of anticipated pain. The man who exercised on the way to the bathroom, for instance, knew that each time he stood up from the couch, the ache was excruciating. So he wrote out a plan for dealing with it: Automatically take the first step, right away, so he wouldn't be tempted to sit down again. The patient who met his wife at the bus stop dreaded the afternoons, because that stroll was the longest and most painful each day. So he detailed every obstacle he might confront, and came up with a solution ahead of time.

Put another way, the patients' plans were built around inflection points when they knew their pain—and thus the temptation to quit—would be strongest. The patients were telling themselves how they were going to make it over the hump.

Each of them, intuitively, employed the same rules that Claude Hopkins had used to sell Pepsodent. They identified simple cues



PATIENTS DESIGNED WILLPOWER  
HABITS TO HELP THEM OVERCOME  
PAINFUL INFLECTION POINTS

and obvious rewards. The man who met his wife at the bus stop, for instance, identified an easy cue—*It's 3:30, she's on her way home!*—and he clearly defined his reward—*Honey, I'm here!* When the temptation to give up halfway through the walk appeared, the patient could ignore it because he had crafted self-discipline into a habit.

There's no reason why the other patients—the ones who didn't write out recovery plans—couldn't have behaved the same way. All the patients had been exposed to the same admonitions and warnings at the hospital. They all knew exercise was essential for their recovery. They all spent weeks in rehab.

But the patients who didn't write out any plans were at a significant disadvantage, because they never thought ahead about how to deal with painful inflection points. They never deliberately designed willpower habits. Even if they intended to walk around the block, their resolve abandoned them when they confronted the agony of the first few steps.



When Starbucks's attempts at boosting workers' willpower through gym memberships and diet workshops faltered, executives decided they needed to take a new approach. They started by looking more closely at what was actually happening inside their stores. They saw that, like the Scottish patients, their workers were failing when they ran up against inflection points. What they needed were institutional habits that made it easier to muster their self-discipline.

Executives determined that, in some ways, they had been thinking about willpower all wrong. Employees with willpower lapses, it turned out, had no difficulty doing their jobs most of the time. On the average day, a willpower-challenged worker was no different from anyone else. But sometimes, particularly when faced with unexpected stresses or uncertainties, those employees would snap and their self-control would evaporate. A customer might begin yelling,

for instance, and a normally calm employee would lose her composure. An impatient crowd might overwhelm a barista, and suddenly he was on the edge of tears.

What employees really needed were clear instructions about how to deal with inflection points—something similar to the Scottish patients' booklets: a routine for employees to follow when their willpower muscles went limp. So the company developed new training materials that spelled out routines for employees to use when they hit rough patches. The manuals taught workers how to respond to specific cues, such as a screaming customer or a long line at a cash register. Managers drilled employees, role-playing with them until the responses became automatic. The company identified specific rewards—a grateful customer, praise from a manager—that employees could look to as evidence of a job well done.

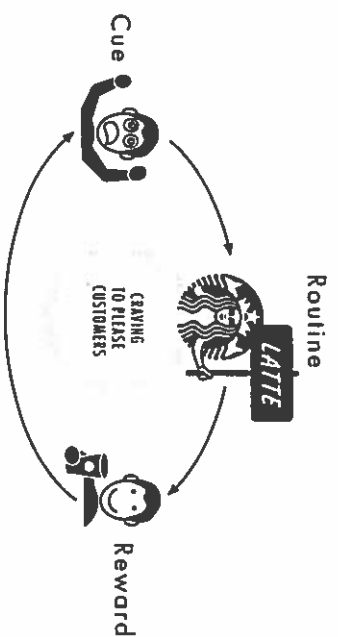
Starbucks taught their employees how to handle moments of adversity by giving them willpower habit loops.

When Travis started at Starbucks, for instance, his manager introduced him to the habits right away. "One of the hardest things about this job is dealing with an angry customer," Travis's manager told him. "When someone comes up and starts yelling at you because they got the wrong drink, what's your first reaction?"

"I don't know," Travis said. "I guess I feel kind of scared. Or angry."

"That's natural," his manager said. "But our job is to provide the best customer service, even when the pressure's on." The manager flipped open the Starbucks manual, and showed Travis a page that was largely blank. At the top, it read, "When a customer is unhappy, my plan is to . . ."

"This workbook is for you to imagine unpleasant situations, and write out a plan for responding," the manager said. "One of the systems we use is called the *LATTE* method. We *Listen* to the customer, *Acknowledge* their complaint, *Take action* by solving the problem, *Thank* them, and then *Explain* why the problem occurred.



THE LATTE HABIT LOOP

"Why don't you take a few minutes, and write out a plan for dealing with an angry customer. Use the LATTE method. Then we can role-play a little bit."

Starbucks has dozens of routines that employees are taught to use during stressful inflection points. There's the *What What Why* system of giving criticism and the *Connect, Discover, and Respond* system for taking orders when things become hectic. There are learned habits to help baristas tell the difference between patrons who just want their coffee ("A hurried customer speaks with a sense of urgency and may seem impatient or look at their watch") and those who need a bit more coddling ("A regular customer knows other baristas by name and normally orders the same beverage each day"). Throughout the training manuals are dozens of blank pages where employees can write out plans that anticipate how they will surmount inflection points. Then they practice those plans, again and again, until they become automatic.

This is how willpower becomes a habit: by choosing a certain behavior ahead of time, and then following that routine when an inflection point arrives. When the Scottish patients filled out their booklets, or Travis studied the LATTE method, they decided ahead of time how to react to a cue—a painful muscle or an angry customer. When the cue arrived, the routine occurred.

Starbucks isn't the only company to use such training methods.

For instance, at Deloitte Consulting, the largest tax and financial services company in the world, employees are trained in a curriculum named "Moments That Matter," which focuses on dealing with inflection points such as when a client complains about fees, when a colleague is fired, or when a Deloitte consultant has made a mistake. For each of those moments, there are preprogrammed routines—*Get Curious, Say What No One Else Will, Apply the 5/5/5 Rule*—that guide employees in how they should respond. At the Container Store, employees receive more than 185 hours of training in their first year alone. They are taught to recognize inflection points such as an angry coworker or an overwhelmed customer, and habits, such as routines for calming shoppers or defusing a confrontation. When a customer comes in who seems overwhelmed, for example, an employee immediately asks them to visualize the space in their home they are hoping to organize, and describe how they'll feel when everything is in its place. "We've had customers come up to us and say, 'This is better than a visit to my shrink,'" the company's CEO told a reporter.

IV.

Howard Schultz, the man who built Starbucks into a colossus, isn't so different from Travis in some ways. He grew up in a public housing project in Brooklyn, sharing a two-bedroom apartment with his parents and two siblings. When he was seven years old, Schultz's father broke his ankle and lost his job driving a diaper truck. That was all it took to throw the family into crisis. His father, after his ankle healed, began cycling through a series of lower-paying jobs. "My dad never found his way," Schultz told me. "I saw his self-esteem get battered. I felt like there was so much more he could have accomplished."

Schultz's school was a wild, overcrowded place with asphalt playgrounds and kids playing football, basketball, softball, punch ball,

slap ball, and any other game they could devise. If your team lost, it could take an hour to get another turn. So Schultz made sure his team always won, no matter the cost. He would come home with bloody scrapes on his elbows and knees, which his mother would gently rinse with a wet cloth. "You don't quit," she told him.

His competitiveness earned him a college football scholarship (he broke his jaw and never played a game), a communications degree, and eventually a job as a Xerox salesman in New York City. He'd wake up every morning, go to a new midtown office building, take the elevator to the top floor, and go door-to-door, politely inquiring if anyone was interested in toner or copy machines. Then he'd ride the elevator down one floor and start all over again.

By the early 1980s, Schultz was working for a plastics manufacturer when he noticed that a little-known retailer in Seattle was ordering an inordinate number of coffee drip cones. Schultz flew out and fell in love with the company. Two years later, when he heard that Starbucks, then just six stores, was for sale, he asked everyone he knew for money and bought it.

That was 1987. Within three years, there were eighty-four stores; within six years, more than a thousand. Today, there are seventeen thousand stores in more than fifty countries.

Why did Schultz turn out so different from all the other kids on that playground? Some of his old classmates are today cops and firemen in Brooklyn. Others are in prison. Schultz is worth more than \$1 billion. He's been heralded as one of the greatest CEOs of the twentieth century. Where did he find the determination—the willpower—to climb from a housing project to a private jet?

"I don't really know," he told me. "My mom always said, 'You're going to be the first person to go to college, you're going to be a professional, you're going to make us all proud.' She would ask these little questions, 'How are you going to study tonight? What are you going to do tomorrow? How do you know you're ready for your test?' It trained me to set goals."

"I've been really lucky," he said. "And I really, genuinely believe that if you tell people that they have what it takes to succeed, they'll prove you right."

Schultz's focus on employee training and customer service made Starbucks into one of the most successful companies in the world. For years, he was personally involved in almost every aspect of how the company was run. In 2000, exhausted, he handed over day-to-day operations to other executives, at which point, Starbucks began to stumble. Within a few years, customers were complaining about the quality of the drinks and customer service. Executives, focused on a frantic expansion, often ignored the complaints. Employees grew unhappy. Surveys indicated people were starting to equate Starbucks with tepid coffee and empty smiles.

So Schultz stepped back into the chief executive position in 2008. Among his priorities was restructuring the company's training program to renew its focus on a variety of issues, including bolstering employees—or "partners," in Starbucks' lingo—willpower and self-confidence. "We had to start earning customer and partner trust again," Schultz told me.

At about the same time, a new wave of studies was appearing that looked at the science of willpower in a slightly different way. Researchers had noticed that some people, like Travis, were able to create willpower habits relatively easily. Others, however, struggled, no matter how much training and support they received. What was causing the difference?

Mark Muraven, who was by then a professor at the University of Albany, set up a new experiment. He put undergraduates in a room that contained a plate of warm, fresh cookies and asked them to ignore the treats. Half the participants were treated kindly. "We ask that you please don't eat the cookies. Is that okay?" a researcher said. She then discussed the purpose of the experiment, explaining that it was to measure their ability to resist temptations. She thanked them for contributing their time. "If you have any suggestions or



thoughts about how we can improve this experiment, please let me know. We want you to help us make this experience as good as possible."

The other half of the participants weren't coddled the same way. They were simply given orders.

"You must not eat the cookies," the researcher told them. She didn't explain the experiment's goals, compliment them, or show any interest in their feedback. She told them to follow the instructions. "We'll start now," she said.

The students from both groups had to ignore the warm cookies for five minutes after the researcher left the room. None gave in to temptation.

Then the researcher returned. She asked each student to look at a computer monitor. It was programmed to flash numbers on the screen, one at a time, for five hundred milliseconds apiece. The participants were asked to hit the space bar every time they saw a "6" followed by a "4." This has become a standard way to measure willpower—paying attention to a boring sequence of flashing numbers requires a focus akin to working on an impossible puzzle.

Students who had been treated kindly did well on the computer test. Whenever a "6" flashed and a "4" followed, they pounced on the space bar. They were able to maintain their focus for the entire twelve minutes. Despite ignoring the cookies, they had willpower to spare.

Students who had been treated rudely, on the other hand, did terribly. They kept forgetting to hit the space bar. They said they were tired and couldn't focus. Their willpower muscle, researchers determined, had been fatigued by the brusque instructions.

When Muraven started exploring why students who had been treated kindly had more willpower he found that the key difference was the sense of control they had over their experience. "We've found this again and again," Muraven told me. "When people are

asked to do something that takes self-control, if they think they are doing it for personal reasons—if they feel like it's a choice or something they enjoy because it helps someone else—it's much less taxing. If they feel like they have no autonomy, if they're just following orders, their willpower muscles get tired much faster. In both cases, people ignored the cookies. But when the students were treated like cogs, rather than people, it took a lot more willpower."

For companies and organizations, this insight has enormous implications. Simply giving employees a sense of agency—a feeling that they are in control, that they have genuine decision-making authority—can radically increase how much energy and focus they bring to their jobs. One 2010 study at a manufacturing plant in Ohio, for instance, scrutinized assembly-line workers who were empowered to make small decisions about their schedules and work environment. They designed their own uniforms and had authority over shifts. Nothing else changed. All the manufacturing processes and pay scales stayed the same. Within two months, productivity at the plant increased by 20 percent. Workers were taking shorter breaks. They were making fewer mistakes. Giving employees a sense of control improved how much self-discipline they brought to their jobs.

The same lessons hold true at Starbucks. Today, the company is focused on giving employees a greater sense of authority. They have asked workers to redesign how espresso machines and cash registers are laid out, to decide for themselves how customers should be greeted and where merchandise should be displayed. It's not unusual for a store manager to spend hours discussing with his employees where a blender should be located.

"We've started asking partners to use their intellect and creativity, rather than telling them 'take the coffee out of the box, put the cup here, follow this rule,'" said Kris Engskov, a vice president at Starbucks. "People want to be in control of their lives."

Turnover has gone down. Customer satisfaction is up. Since Schultz's return, Starbucks has boosted revenues by more than \$1.2 billion per year.

## V.

When Travis was sixteen, before he dropped out of school and started working for Starbucks, his mother told him a story. They were driving together, and Travis asked why he didn't have more siblings. His mother had always tried to be completely honest with her children, and so she told him that she had become pregnant two years before Travis was born but had gotten an abortion. They already had two children at that point, she explained, and were addicted to drugs. They didn't think they could support another baby. Then, a year later, she became pregnant with Travis. She thought about having another abortion, but it was too much to bear. It was easier to let nature take its course. Travis was born.

"She told me that she had made a lot of mistakes, but that having me was one of the best things that ever happened to her," Travis said. "When your parents are addicts, you grow up knowing you can't always trust them for everything you need. But I've been really lucky to find bosses who gave me what was missing. If my mom had been as lucky as me, I think things would have turned out different for her."

A few years after that conversation, Travis's father called to say that an infection had entered his mother's bloodstream through one of the places on her arm she used to shoot up. Travis immediately drove to the hospital in Lodi, but she was unconscious by the time he arrived. She died a half hour later, when they removed her life support.

A week later, Travis's father was in the hospital with pneumonia. His lung had collapsed. Travis drove to Lodi again, but it was 8:02 P.M.

when he got to the emergency room. A nurse brusquely told him he'd have to come back tomorrow; visiting hours were over.

Travis has thought a lot about that moment since then. He hadn't started working at Starbucks yet. He hadn't learned how to control his emotions. He didn't have the habits that, since then, he's spent years practicing. When he thinks about his life now, how far he is from a world where overdoses occur and stolen cars show up in driveways and a nurse seems like an insurmountable obstacle, he wonders how it's possible to travel such a long distance in such a short time.

"If he had died a year later, everything would have been different," Travis told me. By then, he would have known how to calmly plead with the nurse. He would have known to acknowledge her authority, and then ask politely for one small exception. He could have gotten inside the hospital. Instead, he gave up and walked away. "I said, 'All I want to do is talk to him once,' and she was like, 'He's not even awake, it's after visiting hours, come back tomorrow.' I didn't know what to say. I felt so small."

Travis's father died that night.

On the anniversary of his death, every year, Travis wakes up early, takes an extra-long shower, plans out his day in careful detail, and then drives to work. He always arrives on time.



The water is habits, the unthinking choices and invisible decisions that surround us every day—and which, just by looking at them, become visible again.

Throughout his life, William James wrote about habits and their central role in creating happiness and success. He eventually devoted an entire chapter in his masterpiece *The Principles of Psychology* to the topic. Water, he said, is the most apt analogy for how a habit works. Water “hollows out for itself a channel, which grows broader and deeper; and, after having ceased to flow, it resumes, when it flows again, the path traced by itself before.”

You now know how to redirect that path. You now have the power to swim.

## APPENDIX

### A Reader's Guide to Using These Ideas

The difficult thing about studying the science of habits is that most people, when they hear about this field of research, want to know the secret formula for quickly changing any habit. If scientists have discovered how these patterns work, then it stands to reason that they must have also found a recipe for rapid change, right?

If only it were that easy.

It's not that formulas don't exist. The problem is that there isn't one formula for changing habits. There are thousands.

Individuals and habits are all different, and so the specifics of diagnosing and changing the patterns in our lives differ from person to person and behavior to behavior. Giving up cigarettes is different from curbing overeating, which is different from changing how you communicate with your spouse, which is different from how you prioritize tasks at work. What's more, each person's habits are driven by different cravings.

As a result, this book doesn't contain one prescription. Rather, I

hoped to deliver something else: a framework for understanding how habits work and a guide to experimenting with how they might change. Some habits yield easily to analysis and influence. Others are more complex and obstinate, and require prolonged study. And for others, change is a process that never fully concludes.

But that doesn't mean it can't occur. Each chapter in this book explains a different aspect of why habits exist and how they function. The framework described in this appendix is an attempt to distill, in a very basic way, the tactics that researchers have found for diagnosing and shaping habits within our own lives. This isn't meant to be comprehensive. This is merely a practical guide, a place to start. And paired with deeper lessons from this book's chapters, it's a manual for where to go next.

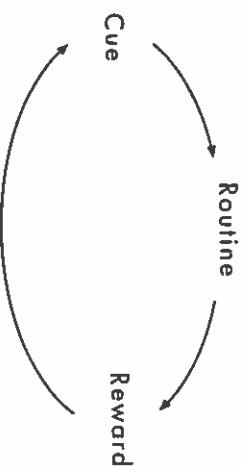
Change might not be fast and it isn't always easy. But with time and effort, almost any habit can be reshaped.

#### THE FRAMEWORK:

- Identify the routine
- Experiment with rewards
- Isolate the cue
- Have a plan

#### STEP ONE: IDENTIFY THE ROUTINE

The MIT researchers in chapter 1 discovered a simple neurological loop at the core of every habit, a loop that consists of three parts: a cue, a routine, and a reward.



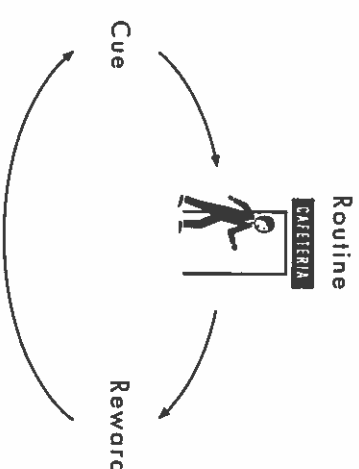
To understand your own habits, you need to identify the components of your loops. Once you have diagnosed the habit loop of a particular behavior, you can look for ways to supplant old vices with new routines.

As an example, let's say you have a bad habit, like I did when I started researching this book, of going to the cafeteria and buying a chocolate chip cookie every afternoon. Let's say this habit has caused you to gain a few pounds. In fact, let's say this habit has caused you to gain exactly eight pounds, and that your wife has made a few pointed comments. You've tried to force yourself to stop—you even went so far as to put a Post-it on your computer that reads **NO MORE COOKIES**.

But every afternoon you manage to ignore that note, get up, wander toward the cafeteria, buy a cookie, and, while chatting with colleagues around the cash register, eat it. It feels good, and then it feels bad. Tomorrow, you promise yourself, you'll muster the willpower to resist. Tomorrow will be different.

But tomorrow the habit takes hold again.

How do you start diagnosing and then changing this behavior? By figuring out the habit loop. And the first step is to identify the routine. In this cookie scenario—as with most habits—the routine is the most obvious aspect: It's the behavior you want to change. Your routine is that you get up from your desk in the afternoon, walk to the cafeteria, buy a chocolate chip cookie, and eat it while chatting with friends. So that's what you put into the loop:



Next, some less obvious questions: What's the cue for this routine? Is it hunger? Boredom? Low blood sugar? That you need a break before plunging into another task?

And what's the reward? The cookie itself? The change of scenery? The temporary distraction? Socializing with colleagues? Or the burst of energy that comes from that blast of sugar?

To figure this out, you'll need to do a little experimentation.

## STEP TWO: EXPERIMENT WITH REWARDS

Rewards are powerful because they satisfy cravings. But we're often not conscious of the cravings that drive our behaviors. When the Febreze marketing team discovered that consumers desired a fresh scent at the end of a cleaning ritual, for example, they had found a craving that no one even knew existed. It was hiding in plain sight. Most cravings are like this: obvious in retrospect, but incredibly hard to see when we are under their sway.

To figure out which cravings are driving particular habits, it's useful to experiment with different rewards. This might take a few days, or a week, or longer. During that period, you shouldn't feel any pressure to make a real change—think of yourself as a scientist in the data collection stage.

On the first day of your experiment, when you feel the urge to go to the cafeteria and buy a cookie, adjust your routine so it delivers a different reward. For instance, instead of walking to the cafeteria, go outside, walk around the block, and then go back to your desk without eating anything. The next day, go to the cafeteria and buy a donut, or a candy bar, and eat it at your desk. The next day, go to the cafeteria, buy an apple, and eat it while chatting with your friends. Then, try a cup of coffee. Then, instead of going to the cafeteria, walk over to your friend's office and gossip for a few minutes and go back to your desk.

You get the idea. What you choose to do *instead* of buying a cookie

isn't important. The point is to test different hypotheses to determine which craving is driving your routine. Are you craving the cookie itself, or a break from work? If it's the cookie, is it because you're hungry? (In which case the apple should work just as well.) Or is it because you want the burst of energy the cookie provides? (And so the coffee should suffice.) Or are you wandering up to the cafeteria as an excuse to socialize, and the cookie is just a convenient excuse? (If so, walking to someone's desk and gossiping for a few minutes should satisfy the urge.)

As you test four or five different rewards, you can use an old trick to look for patterns: After each activity, jot down on a piece of paper the first three things that come to mind when you get back to your desk. They can be emotions, random thoughts, reflections on how you're feeling, or just the first three words that pop into your head.

RELAXED      SLOW      NOT  
FLOWERS      HUNGRY

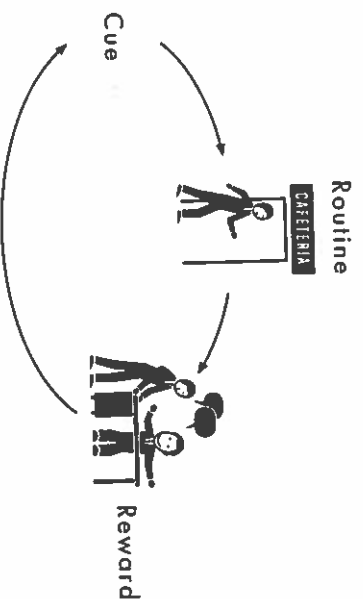
Then, set an alarm on your watch or computer for fifteen minutes. When it goes off, ask yourself: Do you still feel the urge for that cookie?

The reason why it's important to write down three things—even if they are meaningless words—is twofold. First, it forces a momentary awareness of what you are thinking or feeling. Just as Mandy, the nail biter in chapter 3, carried around a note card filled with hash marks to force her into awareness of her habitual urges, so writing three words forces a moment of attention. What's more, studies show that writing down a few words helps in later recalling what you were thinking at that moment. At the end of the experiment, when you review your notes, it will be much easier to remember what you were thinking and feeling at that precise instant, because your scribbled words will trigger a wave of recollection.

And why the fifteen-minute alarm? Because the point of these tests is to determine the reward you're craving. If, fifteen minutes after eating a donut, you *still* feel an urge to get up and go to the cafeteria, then your habit isn't motivated by a sugar craving. If, after gossiping at a colleague's desk, you still want a cookie, then the need for human contact isn't what's driving your behavior.

On the other hand, if fifteen minutes after chatting with a friend, you find it easy to get back to work, then you've identified the reward—temporary distraction and socialization—that your habit sought to satisfy.

By experimenting with different rewards, you can isolate what you are *actually* craving, which is essential in redesigning the habit.



Once you've figured out the routine and the reward, what remains is identifying the cue.

### STEP THREE: ISOLATE THE CUE

About a decade ago, a psychologist at the University of Western Ontario tried to answer a question that had bewildered social scientists for years: *Why do some eyewitnesses of crimes misremember what they see, while other recall events accurately?*

The recollections of eyewitnesses, of course, are incredibly important. And yet studies indicate that eyewitnesses often misre-

member what they observe. They insist that the thief was a man, for instance, when she was wearing a skirt; or that the crime occurred at dusk, even though police reports say it happened at 2:00 in the afternoon. Other eyewitnesses, on the other hand, can remember the crimes they've seen with near-perfect recall.

Dozens of studies have examined this phenomena, trying to determine why some people are better eyewitnesses than others. Researchers theorized that some people simply have better memories, or that a crime that occurs in a familiar place is easier to recall. But those theories didn't test out—people with strong and weak memories, or more and less familiarity with the scene of a crime, were equally liable to misremember what took place.

The psychologist at the University of Western Ontario took a different approach. She wondered if researchers were making a mistake by focusing on what questioners and witnesses had said, rather than *how* they were saying it. She suspected there were subtle cues that were influencing the questioning process. But when she watched videotape after videotape of witness interviews, looking for these cues, she couldn't see anything. There was so much activity in each interview—all the facial expressions, the different ways the questions were posed, the fluctuating emotions—that she couldn't detect any patterns.

So she came up with an idea: She made a list of a few elements she would focus on—the questioners' tone, the facial expressions of the witness, and how close the witness and the questioner were sitting to each other. Then she removed any information that would distract her from those elements. She turned down the volume on the television so instead of hearing words, all she could detect was the tone of the questioner's voice. She taped a sheet of paper over the questioner's face, so all she could see was the witnesses' expressions. She held a tape measure to the screen to measure their distance from each other.

And once she started studying these specific elements, patterns

leapt out. She saw that witnesses who misremembered facts usually were questioned by cops who used a gentle, friendly tone. When witnesses smiled more, or sat closer to the person asking the questions, they were more likely to misremember.

In other words, when environmental cues said “we are friends”—a gentle tone, a smiling face—the witnesses were more likely to misremember what had occurred. Perhaps it was because, subconsciously, those friendship cues triggered a habit to please the questioner.

But the importance of this experiment is that those same tapes had been watched by dozens of other researchers. Lots of smart people had seen the same patterns, but no one had recognized them before. Because there was *too much* information in each tape to see a subtle cue.

Once the psychologist decided to focus on only three categories of behavior, however, and eliminate the extraneous information, the patterns leapt out.

Our lives are the same way. The reason why it is so hard to identify the cues that trigger our habits is because there is too much information bombarding us as our behaviors unfold. Ask yourself, do you eat breakfast at a certain time each day because you are hungry? Or because the clock says 7:30? Or because your kids have started eating? Or because you’re dressed, and that’s when the breakfast habit kicks in?

When you automatically turn your car left while driving to work, what triggers that behavior? A street sign? A particular tree? The knowledge that this is, in fact, the correct route? All of them together? When you’re driving your kid to school and you find that you’ve absentmindedly started taking the route to work—rather than to the school—what caused the mistake? What was the cue that caused the “drive to work” habit to kick in, rather than the “drive to school” pattern?

To identify a cue amid the noise, we can use the same system as the psychologist: Identify categories of behaviors ahead of time to

scrutinize in order to see patterns. Luckily, science offers some help in this regard. Experiments have shown that almost all habitual cues fit into one of five categories:

- Location
- Time
- Emotional state
- Other people
- Immediately preceding action

So if you’re trying to figure out the cue for the “going to the cafeteria and buying a chocolate chip cookie” habit, you write down five things the moment the urge hits (these are my actual notes from when I was trying to diagnose my habit):

- Where are you? (sitting at my desk)
- What time is it? (3:36 P.M.)
- What’s your emotional state? (bored)
- Who else is around? (no one)
- What action preceded the urge? (answered an email)

The next day:

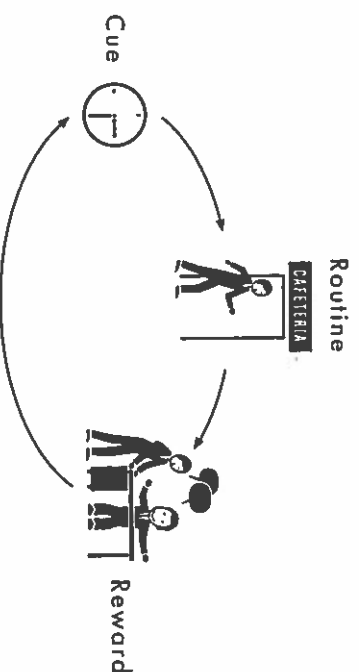
- Where are you? (walking back from the copier)
- What time is it? (3:18 P.M.)
- What’s your emotional state? (happy)
- Who else is around? (Jim from Sports)
- What action preceded the urge? (made a photocopy)

The third day:

- Where are you? (conference room)
- What time is it? (3:41 P.M.)

What's your emotional state? (tired, excited about the project I'm working on)  
 Who else is around? (editors who are coming to this meeting)  
 What action preceded the urge? (I sat down because the meeting is about to start)

Three days in, it was pretty clear which cue was triggering my cookie habit—I felt an urge to get a snack at a certain time of day. I had already figured out, in step two, that it wasn't hunger driving my behavior. The reward I was seeking was a temporary distraction—the kind that comes from gossiping with a friend. And the habit, I now knew, was triggered between 3:00 and 4:00.



#### STEP FOUR: HAVE A PLAN

Once you've figured out your habit loop—you've identified the reward driving your behavior, the cue triggering it, and the routine itself—you can begin to shift the behavior. You can change to a better routine by planning for the cue and choosing a behavior that delivers the reward you are craving. What you need is a plan.

In the prologue, we learned that a habit is a choice that we deliberately make at some point, and then stop thinking about, but continue doing, often every day.

Put another way, a habit is a formula our brain automatically follows: When I see CUE, I will do ROUTINE in order to get a REWARD. To re-engineer that formula, we need to begin making choices again. And the easiest way to do this, according to study after study, is to have a plan. Within psychology, these plans are known as "implementation intentions."

Take, for instance, my cookie-in-the-afternoon habit. By using this framework, I learned that my cue was roughly 3:30 in the afternoon. I knew that my routine was to go to the cafeteria, buy a cookie, and chat with friends. And, through experimentation, I had learned that it wasn't really the cookie I craved—rather, it was a moment of distraction and the opportunity to socialize.

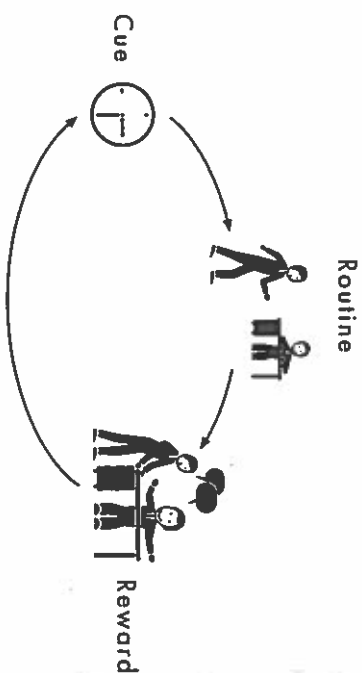
So I wrote a plan:

At 3:30, every day, I will walk to a friend's desk  
 and talk for 10 minutes.

To make sure I remembered to do this, I set the alarm on my watch for 3:30.

It didn't work immediately. There were some days I was too busy and ignored the alarm, and then fell off the wagon. Other times it seemed like too much work to find a friend willing to chat—it was easier to get a cookie, and so I gave in to the urge. But on those days that I abided by my plan—when my alarm went off, I forced myself to walk to a friend's desk and chat for ten minutes—I found that I ended the workday feeling better. I hadn't gone to the cafeteria, I hadn't eat a cookie, and I felt fine. Eventually, it got be automatic: when the alarm rang, I found a friend and ended the day feeling a small, but real, sense of accomplishment. After a few weeks, I hardly thought about the routine anymore. And when I couldn't find anyone to chat with, I went to the cafeteria and bought tea and drank it with friends.

That all happened about six months ago. I don't have my watch anymore—I lost it at some point. But at about 3:30 every day, I absently stand up, look around the newsroom for someone to talk to, spend ten minutes gossiping about the news, and then go back to my desk. It occurs almost without me thinking about it. It has become a habit.



Obviously, changing some habits can be more difficult. But this framework is a place to start. Sometimes change takes a long time. Sometimes it requires repeated experiments and failures. But once you understand how a habit operates—once you diagnose the cue, the routine and the reward—you gain power over it.

## ACKNOWLEDGMENTS

I have been undeservedly lucky throughout my life to work with people who are more talented than I am, and to get to steal their wisdom and gracefulness and pass it off as my own.

Which is why you are reading this book, and why I have so many people to thank.

Andy Ward acquired *The Power of Habit* before he even started as an editor at Random House. At the time, I did not know that he was a kind, generous, and amazingly—astoundingly—talented editor. I'd heard from some friends that he had elevated their prose and held their hands so gracefully they almost forgot the touch. But I figured they were exaggerating, since many of them were drinking at the time. Dear reader: it's all true. Andy's humility, patience and—most of all—the work he puts into being a good friend make everyone around him want to be a better person. This book is as much his as mine, and I am thankful that I had a chance to know, work with, and learn from him. Equally, I owe an enormous debt to