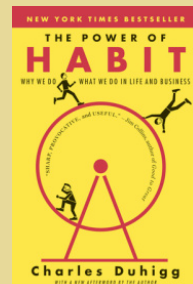




# THE MAIN IDEA

current education book summaries



## The Power of Habit: Why We Do What We Do in Life and Business By Charles Duhigg (Random House, 2012)

### S.O.S. (A Summary of the Summary)

*The main ideas of the book are:*

- ~ Much of what we do each day is *not* the result of decision-making, but rather of *habits*
- ~ Furthermore, organizations (like schools), also rely on habits (in the form of *routines*)
- ~ However, habits *can* be changed if we understand how they work

*Why I chose this book:*

A lot of science in the past two decades has shed light on exactly what habits *are* and more importantly, how they can be changed. In addition to being a very gripping read, this book has many significant implications for schools. As a school leader, you can read this book to improve your own habits (how to get into classrooms more, kick the email addiction, etc.) or you can get ideas for how to transform your school's habits (routines) into more productive ones.

### The Scoop (In this summary you will learn...)

- ✓ *How habits work – the cue, the routine, and the reward*
- ✓ *How to create new, more productive habits*
- ✓ *How to change old habits*
- ✓ *The importance of “keystone habits” to improve organizations*
- ✓ *How to make a keystone habit – like willpower – automatic*
- ✓ *What happens when organizations don't implement productive routines*
- ✓ *Professional development suggestions from The Main Idea to apply the book's concepts to schools*

## Introduction

Think about the thousands of choices you make every day: what to eat, what to say to your children at night, whether to exercise, how to organize your work time, etc. Most of the answers to these questions are *not* the result of carefully thought-out decisions, but rather, the *habits* we are used to. In fact, research has shown that more than 40 percent of what we do each day is based on habit, not conscious decisions. At first we *did* decide what we wanted to eat or how we wanted to spend our work time, but then when that behavior became automatic, we *stopped making that choice* and it became a habit. The three sections of this book describe three types of habits: (I) The Habits of *Individuals*, (II) The Habits of Successful *Companies*, and (III) The Habits of *Societies*.

## Part I – The Habits of Individuals

### Chapter 1 -- The Habit Loop: How Habits Work

In the 1990s, a tall, elderly man named Eugene Pauly was rushed to the hospital with a fever of 105 degrees, and never returned to his normal life. He was diagnosed with viral encephalitis – a devastating disease that destroyed part of his brain (the medial temporal lobe) and left him with no short-term memory. You could introduce yourself to Eugene, but if you left the room and returned five minutes later, he would greet you as if you were a total stranger. However, while he couldn't remember where in his house the kitchen was or how the buildings on his block were laid out, Eugene was still able to perform certain tasks. When he was hungry, he could walk straight to the kitchen. When he wanted to take a walk, he could circle his neighborhood and safely return home. In other words, he could carry out certain *habits* – like walking to the kitchen and opening a jar of nuts when he was hungry – even if he couldn't remember where the kitchen or the jar of nuts were. This was part of the research that scientists did in the 1990s that revealed that habits are actually neurological processes. They discovered that the basal ganglia – a golf ball-sized mass in the center of our skulls – is responsible for habit formation. Eugene's basal ganglia had not been destroyed, so he was still capable of forming and storing habits even when his memory was decimated.

#### *The Habit Loop and the Neurology of Habit Formation*

In one study, the brain waves of mice were working at peak levels as they were figuring out how to get the chocolate at the end of the maze. But as they repeated the same path over and over, scientists noticed a decrease in brain activity in subsequent tries. What they found was that the brain tries to conserve energy whenever possible so it converts the series of actions needed to complete the maze into an automatic routine, sometimes known as “chunking.” If you think about it, the first time you backed out of a driveway, your brain had to use a great deal of energy and concentration to adjust the seat, put the key in the ignition, put the car in reverse, avoid the tree next to the driveway, put the right amount of pressure on the gas, etc. But if you do this every day, it has become a *routine* that the brain can execute without much effort.

Scientists found there is a *neurological basis* for our routines. First there is a spike in brain activity at the beginning of any routine – telling your brain to set the routine in motion – and at the end, there is a type of reward that reminds your brain that this routine is worth remembering. For example, with the mice – when they heard the click that opened the maze door, their brain activity increased preparing them to execute the routine of the maze. Then they went into an automatic mode until they found their chocolate – their “reward” – when a second spike in brain activity occurred. This loop – the *cue, routine, reward* – is known as the “**habit loop**.” A “cue” can be anything from watching a candy bar commercial to seeing a certain person. A “routine” can be simple like brushing your teeth or incredibly complex. “Rewards” can be anything from food or drugs to feelings of pride and self worth. Once the habit loop is established, the brain stops engaging in decision making to save energy; it becomes encoded in the basal ganglia. We don't realize how much habits shape our lives and how much we cling to them at any expense.

However, as the upcoming chapters will show, habits are *not* destiny. While they never fully go away – the habits remain encoded in our brains – we can create new neurological routines to override old habits. On the one hand, habits are good because we wouldn't want to have to work so hard to remember to put the toothpaste on our toothbrushes before putting those toothbrushes in our mouth every time. On the other hand, it does take some work to undo all of those bad habits like reaching for donuts in the morning or plopping in front of the TV instead of exercising. The first step in changing any habit is *awareness*. Becoming aware of the cues, routines, and rewards in our lives is the key to changing habits.

### Chapter 2 -- The Craving Brain: How to Create New Habits

Over a century ago, Claude Hopkins was miraculously able to create a new habit among millions of Americans. In the early 1900s, only 7 percent of Americans had toothpaste in their medicine cabinets because toothbrushing had not yet become a daily habit. However, as an advertising executive, he was charged with the task of selling Pepsodent to the American public. Well ahead of his time, Hopkins understood that the key to creating a new habit was to identify a *cue* and *reward*, as described in the previous chapter.

#### *How to Build New Habits*

After thoroughly reading dental textbooks, he discovered that everyone naturally develops “mucin plaques” on their teeth. This is a regular occurrence no matter what you eat or how often you brush. But he took advantage of this fact and started printing ads that

encouraged Americans to run their tongues over their teeth to feel this film. He claimed that this film is what discolored teeth and led to decay and that Pepsodent would remove this film. Hopkins had created the perfect trigger – or *cue* -- for a new habit because everyone had this film. Furthermore, there was a clear *reward* – Pepsodent promised a more beautiful smile along with better dental health. Just ten years after his campaign went national, the number of Americans who regularly brushed their teeth increased to 65 percent! Hopkins got Americans to buy into this new routine by making them aware of this cue and reward. These same ideas have helped countless people successfully develop other habits as well. If you want to start running regularly, choose a cue (such as running as soon as you return from work) and give yourself a reward (a beer, an evening of television, etc.)

What Hopkins didn't consciously realize – and what was later proven as a key ingredient in the habit loop -- was that he had also created a *craving*. When people didn't brush, they craved that tingly, minty sensation that occurs when you use Pepsodent. Once they associated that cool tingling feeling with having clean teeth, then brushing became a habit.

### *Cravings Spur the Habit Loop*

Many decades later, in the 1990s, a professor of neuroscience, Wolfram Schultz, showed there was a *neurochemical* basis for cravings and rewards. He conducted experiments with a monkey named Julio, in which the monkey learned that if he saw colored shapes on a computer screen and then touched a lever, a drop of blackberry juice (which he loved!) would run down a tube into his mouth. He soon learned that he needed to touch the lever to get his reward (the blackberry juice). Schultz monitored Julio's brain activity and could see that it spiked (suggesting happiness) whenever the monkey got the reward. But in studying the monkey's brain activity more closely, Schultz saw that once Julio got the hang of the routine, his brain activity actually spiked *before* receiving the blackberry juice because now he *anticipated* it! By anticipating the reward, his brain had created a neurological craving for the reward, and if he didn't receive it, he became quite frustrated. A box of donuts in and of itself does not create a craving, but once we experience the sugar high, a craving emerges in our brain. This is what leads to the development of a new habit: we have a cue, a routine, and a reward, and we develop a craving that initiates the loop. When a smoker sees a pack of cigarettes or a runner sees her sneakers when she returns from work, a neurological craving in the brain initiates the habit loop. Many people start a new habit by happenstance, but what makes them *continue* it is when their brain regularly craves the rewards – the endorphins from a run or the high from drugs. The neurochemicals inside your brain actually *change* as cravings become ingrained, for better or for worse.

## **Chapter 3 -- The Golden Rule of Habit Change: Why Transformation Occurs**

You can never truly eradicate bad habits. You can only replace old behaviors with new ones. In fact, the secret to conquering a bad habit is to keep the same cue and the same reward, but just change the *routine*. This is the Golden Rule of habit change: almost any habit can be transformed if you keep the cue and the reward the same but replace the routine.

### *How to Change Old Habits*

To understand what the Golden Rule looks like in practice, it is useful to look at how one thirty-nine-year-old alcoholic found a way to successfully change the habits of 10 million Americans. In 1934 Bill Wilson, a drunk, had hit rock bottom. Because of his alcoholism, he had lost his job and his marriage was failing. But after checking into a hospital for drug and alcohol addictions, he created Alcoholics Anonymous (AA), or as Duhigg describes it, “the largest, most well-known and successful habit-changing organization in the world.” (p.68) Although alcoholism is more than a habit – it has psychological and genetic components – Bill Wilson decided to attack the *habits* connected with alcohol use. By now, most people have heard of its famous twelve steps, but what they don't realize is that these steps offer a lesson in how almost any habit can be changed. These steps help people follow the Golden Rule of habit change – they preserve the same cues and rewards that alcoholics are used to, but they change the *routine* (the drinking). AA has alcoholics identify all of the triggers that lead them to drink – everything from seeing a bar on the street to feeling lonely. Then AA asks alcoholics to name the rewards that lead them to drink. Believe it or not, intoxication is often not on that list. Instead, alcoholics drink because they crave escape, relaxation, companionship, and a chance to forget their worries. Then, AA provides the structure for them to get these rewards, but with a different routine. AA's regular group meetings and opportunities for alcoholics to talk to their “sponsors” essentially provide the companionship, distraction, and escape needed to replace the desire for a drink.

Having alcoholics pay attention to the triggers and rewards inherent in their binge drinking is a key first step in any habit change. One woman, Mandy, entered the counseling center at Mississippi State University for help with her lifelong habit of gnawing on her nails until they bled. She had a chronic nail biting problem. The counselors used a similar approach to AA called “habit reversal training.” First they helped Mandy become aware of what set off the habit. She explained how she felt a tension in her fingers that leads her to bring her hands to her mouth. Most people aren't even aware of what triggers their habits because these habits have been ingrained for so long. When they asked why she bit her nails, she realized she did it when she was bored and because it provided a sense of completion when she was done. This was the physical stimulation that had become her reward. To help her change the habit, first they gave her an index card to write down a check mark every time she felt that sensation that led her to bring her fingers to her mouth. The following week there were 28 check marks. Next they had her sit on her hands whenever this feeling arose and find some way to give herself some physical stimulation such as by rubbing her arms. As one of the developers of habit reversal training said, “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.” Mandy did successfully change her habits. However, even though it is simple to describe the process of changing a habit, it is not always so simple to create the change.

### *The Influence of Groups and Habit Change*

In addition to identifying the cues and rewards connected to your habits, there is one more important ingredient: belief. Some people who successfully transform a bad habit – whether it’s quitting smoking or stopping snacking – will find that they backslide during more stressful periods. Researchers found that this process of habit replacement is fairly successful, until you find out your marriage is falling apart. Then those people who were able to stick to their new habits were the ones who had something else, a deep belief. In the case of some alcoholics, this was a belief in God, but it could be any kind of belief that gets you through the stress and helps you know that change is possible. And what helps people develop these deep feelings of belief? Seeing that it works for others. In talking about AA, one scientist summed it up like this, “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*. 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.” (p.85) People often find it easier to change habits when they are part of a supportive group. Change becomes a real possibility when you know actual people who have made that change, like when you go to an AA meeting and people share that they haven’t had a drink in years. The group is a powerful mechanism to help people believe that change is possible. Want to stop smoking? In addition to identifying the cue and the reward and changing the routine, find a community of ex-smokers for support.

## **Part II – The Habits of Successful Organizations**

### **Chapter 4 -- Keystone Habits: The Habits That Matter Most**

Paul O’Neill, a former government bureaucrat, had a remarkable impact on a company by changing one *keystone habit* of its employees. He came in as the unlikely new CEO of the Aluminum Company of America (Alcoa). When most new CEOs are introduced to a company’s investors, they begin with a rousing talk and an inspiring plan to raise profits. O’Neill’s unorthodox approach, in contrast, had people at Alcoa worried. The first line of his introductory speech was, “I want to talk to you about worker safety.” After the meeting, one of the investors called his top clients and told them to sell all of their stocks because Alcoa was now run by a crazy hippie. That was the worst piece of advice he ever gave. A year after this talk, Alcoa’s profits hit a record high.

In his talk, O’Neill didn’t even introduce the topic of profits. Instead, he said his goal was to attain zero worker injuries. Before O’Neill got there, almost every Alcoa plant had about one accident a week. Alcoa employees faced big risks as they worked with machines that could rip their arms off. After O’Neill’s plans were enacted, plants would go for *years* without having an accident that resulted in workers missing work causing his company to become one of the safest in the world. This was *in addition* to the incredible profits Alcoa began to earn.

### *The Power of Keystone Habits*

When O’Neill first started he didn’t list “quality” or “efficiency” as a top goal because he knew you couldn’t mandate something like “quality” from the top. Instead, he had to find an issue that everyone was invested in and could agree on. Then, once he had this agreement and buy-in, it was easier to change how people *worked* and how they *communicated*. As you will see below, in order for worker safety to improve, people had to address both quality and efficiency.

Paul O’Neill essentially modeled his changes on the habit loop – the cue, the routine, and the reward. First he identified a cue – a worker got injured. Then he developed a routine to address it – the unit president was to be informed so he could report the incident to O’Neill within twenty-four hours along with a plan to insure that that type of injury would never be repeated. The reward was that all the workers who followed this routine were the ones who were promoted. In order to fully implement this new routine, the company’s hierarchy, the former ways of communicating, and ideas about quality control all had to be re-examined and improved. As a result of this new routine, other changes began to take place. Not only was the rigid hierarchy overturned, but policies that managers had resisted -- like giving workers authority to shut down production when the pace was too fast – began to shift. The new focus on worker safety had a ripple effect on all of these *other aspects* of the company. Another example is its impact on *communication* behaviors. In order to quickly communicate about worker safety in plants throughout the world, the organization developed an electronic network. While this may seem commonplace today, back in the 1980s Alcoa had developed one of the first functioning worldwide corporate email systems! What started as a focus on worker safety ended up improving communication in the organization.

What research shows, is that sometimes there is what is called a *keystone habit* – one habit – that has the power to influence a range of other habits, including how people work, eat, play, live, spend, and communicate. That is to say, sometimes there is one habit that simply matters more than other habits. What this means is that an organization, rather than focusing on improving every little thing, should instead focus on a few *key priorities* – or keystone habits – that will serve as catalysts to change the rest of the organization.

In the same way that individuals develop habits, organizations develop *routines*. O’Neill argues that the best organizations understand and are aware of their habits, and the worst organizations simply don’t think about them. NASA serves as one good example of a way an organization intentionally creates beneficial habits. Some of NASA’s departments found that their engineers just weren’t taking risks. So department heads started spearheading a new habit – applauding when an unmanned rocket took off but blew up. This sent the message that the *attempt*, not necessarily the *success*, is what is important. Eventually everyone started applauding and the department heads had successfully engineered a new routine that got employees to take more risks.



It is important to note that O’Neill turned worker safety into a successful routine by celebrating *small wins* and reminding people of the *purpose* of their new actions. He publically celebrated early successes and he made sure to emphasize the importance of what these successes meant. In a memo to the entire company, he wrote, “I want to congratulate everyone for bringing down the number of accidents, even just for two weeks. We shouldn’t celebrate because we’ve followed the rules, or brought down a number. We should celebrate because we are saving lives.” (p.117) This memo was so meaningful that some employees posted it in their lockers and someone painted a mural of O’Neil with a quote from the memo on one of the walls of a plant.

Keystone habits work with individuals as well as with organizations. For example, research has shown that starting a habit of regular exercise impacts other routines. Studies have demonstrated that when people start exercising regularly, they unwittingly start to eat better, become more productive at work, smoke less, exhibit more patience with others, and even use their credit cards less frequently! It is unclear exactly why, but research shows that exercise is a type of keystone habit that ends up having ripple effects in other arenas of one’s life. Studies have identified other keystone habits as well. For example, families that regularly eat dinner together also raise children who do homework habitually, get higher grades, and have more emotional control and confidence. A large body of research shows that success with certain small habits translates into much larger changes and achievements.

### *Root Causes*

This does not mean that it is easy to identify these keystone habits and implement them regularly. In fact, organizations often try different routines over and over until they find something that works for them. Part of what helps an organization identify the keystone habit it should enact, is through digging down into *root causes*. When a younger Paul O’Neill had a different job working for the U.S. government, he was charged with finding out why the U.S. had such a high infant mortality rate (higher than most of Europe and parts of South America). He tasked federal agencies to research possible causes and when they came back to him, he gave them even *more* questions to research. Eventually he found that malnourishment during pregnancy was the primary reason for the high infant mortality rates. So that seems straightforward to address – improve diets. But women had to be better nourished *before* they became pregnant. Again, simple, educate women about good nutrition before they got pregnant. So the government should create a nutrition curriculum for high schools. However, when he dug further, O’Neill found that many high school teachers didn’t have a sufficient background in biology to teach this curriculum. So now this meant that future teachers needed a better biology education in *college* before they became teachers. That took a lot of exploration, but what O’Neill was doing was to identify the *root cause* of the problem. Today, the U.S. infant mortality rate is 68 percent lower than when O’Neill started the job.

## **Chapter 5 – Starbucks and the Habit of Success: When Willpower Becomes Automatic**

Travis Leach had a chaotic childhood. He first saw his father overdose on drugs at the age of nine and continued to experience everything from his mother being imprisoned for heroin possession and prostitution to his own dropping out of high school at sixteen. It wasn’t a surprise when he couldn’t keep a job after that. He tried to work at McDonald’s but he often arrived late or would explode when a customer was rude. One day someone suggested he try working at Starbucks. Six years later he became a manager in charge of two stores and forty employees, he had a 401(k), and he never arrived late or got upset at work. What happened to cause such a turnaround? Starbucks provided him with training that taught him *willpower*. This changed his life. Why the focus on willpower? Willpower is one of those keystone habits that research shows impacts numerous areas of one’s life. Those with willpower are more likely to have higher grades, fewer absences, spend less time watching TV, and more time on homework. As one researcher wrote, “Self-discipline predicted academic performance more robustly than did IQ.” (p. 131) The best way to help students strengthen their willpower is to make it a *habit*. “Sometimes it looks like people with great self-control aren’t working hard – but that’s because they’ve made it automatic,” (p.131) explained another researcher.

By now many people have heard of the famous marshmallow experiment from the 1960s. Four-year-olds were offered a choice – they could have one marshmallow now *or* if they waited a few minutes they could have *two* marshmallows. Years later, follow-up research showed that the children who were able to delay their gratification and held out for two marshmallows scored an average of 210 points higher on their SATs than those who grabbed the one marshmallow. When scientists began to study this phenomenon, they found that self-discipline was not an innate trait, but rather people employed *skills* in order to regulate themselves. Some of the four-year-olds distracted themselves by drawing a picture or using visualization to imagine the marshmallow was more like a photo and less like an actual treat. By the 1980s, researchers could say definitively that self-regulation was a learnable skill.

Enter Starbucks. When Starbucks started to expand, they realized they needed to create an environment in every store that justified charging four dollars for a cup of coffee. They needed to deliver stellar service by employees who had self-discipline and could manage their emotions. So, Starbucks, as well as other companies, figured out how to teach the kind of life skills that they felt schools, families, and communities failed to provide. In their first year, Starbucks employees spend over 50 hours in this training plus more at home doing Starbucks’ workbooks and learning from Starbucks’ mentors. They spent millions of dollars creating this curriculum and training program so employees could develop the habit of willpower.

Furthermore, researchers found willpower was like a keystone habit. When you strengthen willpower in *one* aspect of people’s lives, their willpower in other areas becomes stronger as well. When people were taught to self regulate their spending, researchers found they ended up smoking less, eating less junk food, and being more productive at work. When students were self-regulating through study habits, they also ended up smoking less, exercising more, and eating more healthily. Some schools even started developing

lessons to strengthen willpower (one school created “Don’t Eat the Marshmallow” t-shirts). This helps explain the importance of having your child do sports or music lessons. It’s less about creating a musician or an athlete, and more about developing the self-regulatory habits to practice daily on the piano or run for fifteen laps. This willpower spills over so that these students now know how to go home and get started on homework right away.

### *Setting Goals*

Another way researchers discovered to develop willpower was through the creation of *goals*. In a 1990s experiment, researchers looked at patients who had undergone hip surgery. For recovery it is essential to start exercising almost immediately, but it is also excruciating to do this exercise. Some patients recorded *goals* for their plans to exercise and others didn’t. The researchers found that those who wrote out goals returned to walking twice as fast as those who didn’t! Looking at the goals, they often included very specific details. For example, one patient wrote, “I will walk to the bus stop tomorrow to meet my wife from work” but he didn’t stop there. He included the time he would leave, the route he would take, what he would wear, including what to wear if it was raining, and what pills he would take if he experienced too much pain. He, like other patients who were successful with their willpower, had *anticipated* obstacles (like rain and pain) and came up with a solution to overcome these challenges. Furthermore, like with habits, these patients had outlined a cue (time to leave to meet my wife), a routine (the path to take), and a reward (I get to see my wife!)

This is exactly what Starbucks’ executives needed – a way for employees to handle challenges *and* a routine they could turn to regularly. Employees needed clear instructions for what to do when customers were rude or snapped. So executives developed the *LATTE* plan (We *Listen* to the customer, *Acknowledge* their issue, *Take action* to address the problem, *Thank* them and *Explain* why the problem occurred). Employees were asked to write out their *own* plan – using *LATTE* – when confronted with an angry customer (“When a customer is unhappy, my plan is to...”) Then employees role-played their plan until their response became automatic. In fact, Starbucks has numerous *routines* to help employees deal with common stressful inflection points such as one routine for giving criticism and another routine for taking orders when things get chaotic. This is how employees develop the routine of self-regulation – they identify a behavior they wish to exhibit ahead of time, they practice it, and then they follow this routine automatically when the stressful or challenging point arrives.

### *Choice and Kindness*

One more element affects how successful people are in developing willpower habits – *how* people are asked to establish these habits. One researcher gave the following directions to half of the participants in his survey, “We ask that you please don’t eat the cookies. Is that okay?” and then explained the goal of the experiment and added, “If you have any suggestions or thoughts about how we can improve this experiment, please let me know.” (pp.149-50) The other group was told, “You *must not* eat the cookies” and was not given any other information. As the experiment progressed, who had more willpower? The group that had been treated kindly and had been given some say in the experiment had much stronger willpower. Simply giving employees a sense of agency will improve their willpower. At Starbucks, employees created their *own* plans for responding to difficult customers and were given authority in other ways as well – input into store layout, how customers should be greeted, and more.

## **Chapter 6 – The Power of a Crisis: How Leaders Create Habit Through Accident and Design**

If organizations don’t create effective habits and routines, then detrimental ones will arise in their stead. Although Rhode Island Hospital was one of the top medical institutions, tensions between the physicians and nurses ran deep. In fact, in 2000 the nurses’ union decided to strike. One nurse told a reporter, “This place can be awful. The doctors can make you feel like you’re worthless, like you’re disposable. Like you should be thankful to pick up after them.” (p. 155) Although the strike was settled, several years later, tensions remained thick between nurses and doctors. When one nurse tried to call a “time out” – a typical procedure hospitals employ to make sure mistakes are avoided -- the surgeon stormed out and said, “If I want your damn opinion, I’ll ask for it. Don’t ever question my authority again. If you can’t do your job, get the hell out of my OR.” (p. 156)

### *The Consequences of Failing to Implement Formal Routines*

To deal with these tensions, the nurses developed an *informal* system to help them manage these conflicts. For example, nurses knew which physicians were more prone to error and double-checked their orders to look for mistakes. Another system helped them to alert each other when more difficult doctors were working. They would use different colors to write the name of the doctor on duty on a white board – blue meant ‘nice,’ red meant ‘jerk,’ and black meant ‘don’t contradict this one.’ These habits just emerged on the fly to help nurses deal with the corrosive culture. In contrast to the Alcoa example in Chapter 4, in which a purposeful keystone habit had ripple effects throughout the organization, Rhode Island Hospital did *not* have carefully thought-out routines. Often when ad hoc, band-aid routines are put into place, disasters result. This is exactly what happened at Rhode Island Hospital.

When an eighty-six-year-old man developed a subdural hematoma during a routine surgery at Rhode Island Hospital, he was rushed to the ER. However, a nurse stated that the accompanying paperwork failed to note which side of the man’s head the hematoma was on. When she mentioned this to the surgeon he snapped that he had no time for this and prepared to operate on the man’s right side. The unwritten rules implied that the surgeon was always right. However, after cutting in, they found no hematoma. They were operating on the wrong side of this man’s head! The team quickly tried to repair the damage, but two weeks later the patient died. The family ended up suing the hospital and the surgeon was barred from ever working there again. This was not an isolated incident. Four months later, another surgeon operated on the wrong side of a patient’s head and this resulted in a fine of \$50,000 from the state’s health

department. A year and a half later a surgeon operated on the wrong part of a child's mouth during a cleft palate surgery. Ten months later a drill bit was left inside of another patient during surgery resulting in a fine of \$450,000 for the hospital. The dysfunctional habits of the hospital had led to dire consequences. Any type of organization in which the leaders don't thoughtfully put effective routines into place can have these types of destructive consequences. The fact is that all organizations have routines and habits. It's just that some are put in place with forethought and purpose and others develop in the absence of careful guidance. Many organizations are run more on ad hoc habits – the “unwritten rules” of an organization -- that result from employees' individual decisions rather than deliberate and rational decision making.

#### *The Power of a Crisis to Fuel Organizational Change*

By the time Rhode Island Hospital was penalized with the \$450,000 fine, it was clear that a crisis had emerged. However, sometimes crises can be *valuable* to an organization. Yes, valuable. In fact, some leaders even emphasize a sense of impending catastrophe to begin to pave the way toward organizational change. It is during this turmoil that habits become pliable and an organization becomes more open to change. At Rhode Island Hospital it was the chief quality officer who spoke up. She said, “Sometimes people need a jolt, and all the bad publicity was a *serious* jolt. It gave us a chance to reexamine everything.” (p. 177) In fact, Rhode Island Hospital decided to shut down all elective surgery units for an entire day (an enormous expense) and brought the staff together for training and teamwork exercises that emphasized the importance of nurses and medical staff. In addition, they installed video cameras to ensure time-outs and checklists were used properly, and they set up a computer system so employees could report problems anonymously. Successful leaders know how to capitalize on crises to remake institutional habits. This is exactly what happened at NASA. For years administrators tried to improve safety, but it was in 1986 when the *Challenger* exploded that the organization was finally able to overhaul systems and enforce safety standards. A wise leader will either make use of a crisis or create *the perception* of crisis -- the idea that something must change – to be able to rework unhealthy or unproductive work habits.

### **Chapter 7 –How Companies Predict (and Manipulate) Habits**

Businesses – as recently as twenty years ago – used to hire *psychologists* to help them better understand consumers. And some of these approaches to selling still exist today. For example, psychologists suggested that if a supermarket places produce near the front of the store, then customers will be more likely to buy junk food in later aisles because they will feel virtuous from having already added healthy food to their carts.

#### *Mining Data to Understand the Habits of Individuals*

Now large companies hire data experts to more thoroughly and accurately mine information about *individual* customers. Because not all customers are alike, companies like Target collect a great deal of information about the habits of individual customers (through credit cards, surveys, email addresses, etc.) so they can tailor the ways they try to get each individual consumer to buy more. For example, you might have two customers who regularly buy orange juice. But because Target knows that one is a thirty-four-year old mom, they send her coupons for Thomas the Tank Engine DVDs and the other one is a twenty-eight-year old bachelor who drinks the juice after his runs, they send him coupons for athletic apparel. It is amazing to see how sophisticated the use of data can be in understanding and then shaping customers' habits. For example, shoppers who buy bikinis in April are then sent coupons for sunscreen in July and more coupons for weight-loss books in December.

#### *Encouraging New Habits by Connecting them to Familiar Habits*

How do companies and organizations persuade people to adopt new habits? In 2003, music executives knew they had a hit song on their hands with the new song “Hey Ya” by the hip-hop group OutKast. However, when the song hit the airways, it was a flop. Listeners repeatedly changed the station when the song came on. However, music executives knew people would like the song if they just gave it a chance because the song had been analyzed by a program that predicts the popularity of songs based on the tempo, melody, and chord progressions. So how could radio stations get listeners to give this new song, “Hey Ya” a chance?

What pollsters found, is that people often listen to songs that they say they *dislike*. A number of men stated that they hated Celine Dion, but when her songs come on the radio, they don't touch the dial. Why? Because the song is *familiar*. While you might *tell* someone that you hate Celine Dion, your subconscious brain says, ‘I know this song! I've heard it a million times! I can sing along!’ This behavior can be explained neurologically. Our brains crave familiarity in music because it prevents us from becoming overwhelmed and distracted by all the numerous tones, pitches, melodies, etc. Just as scientists found that part of why we develop habits in life is to minimize having to constantly make decisions (Do I put the car in reverse or look at my side view mirror first when I back up my car?) we also want to make our listening habits as simple as possible. If the song is familiar then we can attend to other sounds we need to listen to – our child's cry or the whistle of our coach. Listening to familiar music allows us to minimize the conscious listening decisions we have to make in a day. So how did the radio DJs end up getting people to listen to “Hey Ya”? They sandwiched the song between the current two top songs. By playing “Hey Ya” after another top hit, they camouflaged the new song next to a familiar one in order to help people develop the habit of listening to the new song. And it worked. If you can connect a new habit to an old familiar one, you can get the public to accept it. You need to figure out how to make something new and unknown somehow seem familiar.

## Part III – The Habits of Societies

### Chapter 8 – Saddleback Church and the Montgomery Bus Boycott: How Movements Happen

Why did Rosa Parks' refusal to give up her seat spark a year-long bus boycott in Montgomery, Alabama? Hadn't other blacks refused to give up their seats before she did? The answer lies in how the habits of societies function. By now it is a well-known part of history. On December 1, 1955, after a long day at work, Rosa Parks saw that the blacks-only section of the bus was full, so she sat in the middle section where either blacks or whites could sit. When a white passenger boarded the bus, the driver asked Parks to give up her seat. When she refused, and the driver threatened to call the police, Parks remained calmly seated. Two police officers arrived, put her under arrest, and brought her to the police station.

#### *How the Habits of Society Propel Change*

This small action became the epicenter of the civil rights movement. But the individual act alone wasn't what did it, rather it was the result of a complex set of social patterns. In fact, several other black people had refused to give up their seats years before Parks. So why was it Rosa Parks' small refusal that ended up having such dramatic consequences? Sociologists and historians have found that three elements must be present to spark, grow, and continue a social movement, and Rosa Parks' situation contained all three ingredients.

To *start* a movement, there must be the social habits found in friendships. Then for movements to *grow* they must have the habits of a community – those “weak ties” that hold neighborhoods and communities together. Finally, for movements to *endure*, the leaders must give people new habits that help them create a fresh sense of identity. While Rosa Parks might have served as the catalyst for the boycott, it was because her situation contained all three of the forementioned elements that *social habits* took over and propelled the movement forward.

To begin, Parks was deeply embedded in and respected by a variety of social circles in Montgomery. She was involved in so many networks – from the NAACP and both the Methodist and Lutheran churches near her home to the botanical club and the local hospital. When Parks was arrested, it struck a chord in the community. Because so many people knew her, they were more willing to get involved because it touched them personally. On the night of her arrest, the news spread like wildfire. An impromptu meeting was called, and a friend who was a schoolteacher suggested a one-day boycott. The first ingredient – the habits of friendship – helped make this first step possible because Parks was so widely connected to others.

But most people expected the boycott to last one day. What helped that boycott to grow was the *second* ingredient – the social habits of a community. These habits come from social peer pressure. The habits of peer pressure often hold a community together. If you ignore your social obligations, you are often shunned by your community. The “weak ties” that we have to acquaintances often compel us to maintain our obligations. Because so many organizations and social networks supported the bus boycott, the boycott grew. It became unacceptable for a black person to be seen riding a bus. It would just look bad. The weak ties of peer pressure gave the boycott the momentum it needed.

Then, what helped the boycott continue for an entire year? One night that year, the young Martin Luther King, Jr. was preaching when a bomb exploded in his home. If his wife and daughter had been in the front rooms destroyed by the bomb, they could have been killed. When a crowd of blacks along with the police arrived and things were getting tense, King began a message of nonviolence, “We must love our white brothers...” King provided a new lens and a new approach black people could take in contrast to the language of battles and struggles that had been used to fuel the civil rights movement. “We must meet hate with love,” King said. Although the boycott was starting to flag, after this inspirational speech, the next week the boycott moved forward. More people signed up to help with carpooling and when more bombs exploded no violence resulted. People involved with the boycott had learned a *new way* to think about the issue and a new way to act. A new set of social habits – sit-ins and peaceful demonstrations – had replaced the old ways. In the same way people in Alcoholics Anonymous learned new behaviors and were buoyed by seeing others successfully displaying these behaviors, people in Montgomery began to make changes and saw their community change as well. This is the third aspect of social habits – when leaders help followers by providing a vision, new habits, and ownership, then those followers will sustain a movement.

Saddleback Church is another example of these three elements of social habits in action. In 1979 the young seminary student Rick Warren had only \$2,000 but set out to start a new congregation in Saddleback Valley, California. Like with other social movements, he appealed to people's social habits and he built that church from a membership of zero to over twenty thousand parishioners. The success of his church is a testament to the power of social habits.

Warren realized, that like other things, religion had to be marketed. He had to rely on the social habits of groups to increase religious participation. He didn't have much space so he decided to ask a few church members to host classes in their homes. He didn't know if this would work, but it turned out to be the best decision he made. Congregants loved the opportunity to get to know their neighbors in their homes. He would still draw a larger crowd on the weekends, but he said that ninety-five percent of the church was what happened in those homes. He was able to expand the church by relying on both strong (friendship) and weak (acquaintances) ties in the community.



However, Warren couldn't possibly lead all of those small groups himself. And without leadership, although the small groups discussed the Bible for ten minutes, people spent most of the time chatting and discussing their kids. So he decided to create a series of curriculums and habits that groups could enact on their own. One of Warren's manuals reads, "All of us are simply a bundle of habits... Our goal is to help you replace some bad habits with some good habits that will help you grow in Christ's likeness." (p.238) These were the habits that provided the third ingredient and allowed his religious community to become self-perpetuating. Now people had a new identify and could guide themselves.

#### **Chapter 9 and Appendix – Are We Responsible for Our Habits? The Author Gives Habit Change a Try**

Just how responsible are we for our habits? The point of the book is that we *can* change our habits. Our habits are not our destiny. But it is not easy to change habits. First you need to identify the cues, rewards, and the routines involved, and then you need to seek out and practice using alternatives. Our days are filled with habits – how we organize our mornings, greet our kids, whether we exercise or drink after work – but each of these habits can be modified. It is up to us to identify and decide to change any of our habits.

While everyone's habits and everyone's cravings are different, this book provides an overarching framework for understanding how habits work and therefore, how habits can be changed. The key lies in diagnosing the components of your habit and experimenting with different rewards. To give an example of how this can actually be done, the author describes how we went through *four basic steps* to address his bad habit of going to the cafeteria and buying a chocolate chip cookie every day (which resulted in his gaining a few pounds as his wife pointed out).

*Step One: Identify the Routine.* Duhigg's habit loop was fairly obvious. He would get up from his desk in the afternoon, go to the cafeteria to buy a chocolate chip cookie, and then eat the cookie while chatting with friends. The *routine* is the part that he wanted to change – the eating of the cookie. But what was his *cue* – was it boredom? Hunger? A need for a break? And what exactly was the *reward*? Was it the cookie itself? The distraction from work? The energy from the sugar? To figure out the less obvious aspects of his habit, he had to do some experimentation.

*Step Two: Experiment with Rewards.* This step might take days, weeks, or even longer. In order to experiment with a different reward, Duhigg would have to change his routine. For example, one day he bought a donut (to see if it was the sugar he wanted as a reward), another day he bought a cup of coffee (to see if it was the energy from the caffeine that would provide the right reward), another day he tried an apple (perhaps he was just hungry) and yet another day he skipped the snack and just chatted with colleagues (perhaps he just needed to socialize). After each activity he wrote some notes about how he felt. Then he set his alarm for fifteen minutes later to see if he still craved that cookie. If he didn't want the cookie, then perhaps it was the need for human contact or energy that was really triggering this bad habit.

*Step Three: Isolate the Cue.* The reason it is so difficult to identify the cue in a routine is that we are bombarded by so much information all the time. It is hard to isolate the sole reason. Do you eat breakfast at 7:30 because you're hungry? Because you're already dressed and that's when one eats breakfast? Or because your kids are eating then? It's hard to tell. So, to help you isolate the cue for your problem, scientists have found that almost all cues fall into the following five categories: 1) location, 2) time, 3) emotional state, 4) other people, and 5) immediately preceding action. So, to diagnose his cue, every day Duhigg jotted down notes about these five categories when he felt the urge to get the cookie. One day, his notes looked like this: 1) at my desk, 2) 3:36pm, 3) bored 4) no one, and 5) answered an email. After three days, from steps two and three, he figured out that hunger was *not* driving his habit, but rather the need to have the type of distraction from work that involved socializing, and that this habit occurred every day between 3:00 and 4:00pm.

*Step Four: Have a Plan.* Once you've figured out your own habit loop, you need to plan for a better routine. Since Duhigg knew his cue hit between 3 and 4:00pm, he set his alarm for 3:30pm. Then he decided to make this plan, "Every day, I will walk to a friend's desk and talk for 10 minutes." Did this work every day? Of course not. Sometimes he was busy or ignored the alarm, and other times he gave in and bought the cookie. But on the days he forced himself to stick to the plan, he felt better. After a few weeks, the plan worked, and it had become his new routine! Obviously, many other habits are much harder to change. But the basic four steps listed here provide a path for people to begin to change those habits.

## THE MAIN IDEA's PD suggestions for *The Power of Habit*

\*\*\*Below are three different PD ideas – one to use with teachers, one to use with a leadership team or group of principals, and one to use with families at your school.

### I. Habit change on the INDIVIDUAL level

This section can be used to help staff members change or develop a habit they want to change. It can be a professional habit (like giving out exit tickets daily) or it can be a personal habit (exercising regularly). If you can help staff develop improved personal habits this will spill over into their enjoyment of and productivity at school.

\*\*\*Distribute the *Handout for Teachers* from The Main Idea

#### A. What are habits?

Introduce *The Power of Habit*, how habits work, and how habits change. Either introduce the first 4 bullet points below (and on the *handout*) yourself or copy pages 1-2 of the summary and have staff read it on their own. Discuss the following as a larger group.

- Much of what we do each day is *not* the result of decision-making, but rather of *habits*
- The habit loop: cue → routine → reward
- Neurological basis: the mice and the chocolate – to conserve energy
- The Golden Rule of Habit Change: Habits *can* be transformed if you keep the cue and the reward and just replace the routine.

#### B. What personal or professional habit would teachers like to work on?

In small groups or pairs, have teachers brainstorm possible personal or professional habits they'd like to start or stop (anything from starting to run three times a week to committing to checking for understanding before proceeding with a lesson.) Or they can focus on a student habit (like getting students to do their homework nightly!)

#### C. According to research, what can help individuals improve their habits?

On their handouts, teachers have a list of 7 items that can help with individual habit change: 1) awareness of habit loop, 2) understanding of Golden Rule of Habit Change, 3) influence of groups, 4) seeking root causes, 5) small wins, 6) setting goals, and 7) anticipating obstacles. They also have the pages in the summary where each of these is described.

1. Introduce these yourself *or* have teachers do a jigsaw – 1/3 of the staff read about #1 & 2 in the summary, 1/3 read #3 & 4, and 1/3 read #5-7. Then in groups of 3 (1 person who read each part) share how this element can help with habit change.
2. Have teachers discuss which of these could help them with the habit they wish to change or develop.

#### D. How can teachers create a plan for habit change or development?

Have teachers develop a plan to change or begin a new personal, professional, or student habit. The *Handout for Teachers* has space for teachers to map out an action plan. Note they should focus on *one* habit. They can work alone or in pairs.

The *Action Plan* on the *Handout for Teachers* includes the following:

1. What is the habit you wish to change or develop?
2. Identify the *cue*, *routine*, and *reward*.
3. If it is for a habit *change* – how can you replace the routine? To develop a *new* habit, what cues and rewards might you set up?
4. From the list of 7 elements that help with habits, which will you implement and how? E.g., If you want to run regularly, you might find an online running community, post your successes and read about others' successes (reward, small wins, and group).
5. Below or on your calendar, map out dates you will commit to implementing the new habit (and all of the component parts).

\*\*\*Tell teachers they can work directly with their students to use the ideas above to improve their own habits!

### II. Habit change at the SCHOOL or DISTRICT level

This section is for use with a leadership team or a group of principals to discuss ways to change institutional habits or routines.

#### A. How do habits work on an institutional level?

Introduce the concepts behind habits and organizational habits. Have your leadership team or your principals (if you are a district leader) read the introduction (pp. 1-2 in the summary), Chapter 4 -- Keystone Habits: Which Habits Matter Most (or pp. 3-4 in the summary) and Chapter 6 -- The Power of a Crisis: How Leaders Create Habits Through Accident and Design (or pp. 5-6 in the summary). Discuss the following concepts:

- The habit loop: cue → routine → reward
- The Golden Rule of Habit Change: Habits *can* be transformed if you keep the cue and the reward and just replace the routine.
- Keystone habits: some habits just matter more
- The consequences of failing to implement formal routines

### B. How can we use keystone habits to make a difference in our school/school district?

Discuss how Paul O'Neill's focus on safety really made a difference for Alcoa (summary pp.3-4). Then talk about possible keystone habits that could really make a difference in *your* school or school district. You may need to take some time to look into root causes of whatever current problem you have at your school – low literacy achievement, a toxic culture among staff, etc.

### C. According to research, what can help organizations improve their routines?

With your leaders, discuss the following 10 items that can help with habits and the implications for your own school.

To help with habit change in organizations:	Pages in the summary:
1. Influence of groups	pp. 2-3 (Alcoholics Anonymous)
2. Seeking out root causes	p. 4 (Paul O'Neill)
3. Small wins	p. 4 (Paul O'Neill's memo)
4. Setting goals	p. 5 (hip surgery and Starbucks' LATTE plan)
5. Anticipating obstacles	p. 5 (hip surgery and Starbucks' LATTE plan)
6. Crisis or the perception of crisis	pp. 5-6 (Rhode Island Hospital)
7. Connecting new habits to familiar habits	p. 6 (The hip-hop song "Hey Ya")
8. Choice and kindness	p. 5 (Don't eat the cookies!)
9. Data mining to better understand habits of individuals	p. 6 (Target)
10. Strong (friendship) and weak (acquaintances) ties	pp. 7-8 (Rosa Parks and Saddleback Church)

### D. How can we map out a plan to implement a new keystone habit or change an old routine?

Choose *one* keystone habit or routine you would like to implement throughout the school (or school district). Then consider the following ways to make this habit more successful:

- How can we mine data and seek out root causes of our current problems to ensure we implement the correct keystone habit?
- How could we have staff work in groups to make use of the power of groups to change habits?
- How can we celebrate small wins early in the process? How can we connect the changes we are making to a larger purpose like Paul O'Neill did with Alcoa?
- How can we use goal setting to move this new routine or habit forward?
- How can we have staff anticipate obstacles before they occur? Next, how can we help staff (or students) create a routine to deal with the obstacles? How can we practice this routine ahead of time?
- How can the leaders create the perception of crisis – the idea that things *must* change – to help with the new routine?
- How can we connect the new routine to routines that staff (or students) are already familiar with so it doesn't seem so jarring?
- How can we include choice in implementing the new routine?
- How can we make use of strong ties (friendship) and weak ties (acquaintances) to make the routine more attractive to staff (or families or students)?

## III. Habit change at HOME – Discuss Chapter 5 with Families

Organize a breakfast with parents to discuss the importance of willpower and other beneficial habits for their children.

**A. Copy Chapter 5** in the book (Starbucks and the Habit of Success: When Willpower Becomes Automatic) and distribute it to parents to read ahead of time.

**B. Set a date** for a morning to meet. On that morning, provide coffee and pastries and discuss the chapter. In particular, discuss how they, as parents, can help their children develop willpower and other useful habits.

**C. Have a discussion with parents.** Here are some possible discussion questions you can use:

#### Discussion Questions for Chapter 5 from *The Power of Habit*

1. Why was Starbucks' training so effective for Travis? What were some of the successful techniques Starbucks used?
2. Describe the marshmallow experiment and what you think it suggests about the power of willpower?
3. In a book about habits, why do you think an entire chapter is devoted to the concept of willpower?
4. A researcher said that one way to strengthen willpower is to make it a habit. What does this mean and how might this help our children?
5. Researchers Megan Oaten and Ken Cheng found out something interesting about willpower. What was the result when their subjects developed willpower in one aspect of their lives? Again, what can we take away from this in terms of working with our children?
6. What does the chapter say about the importance of signing your child up for sports or piano lessons?
7. Look at the 1992 experiment with hip surgery patients. Why were some people more effective in recovering from surgery? Why were goals and anticipating obstacles so important here? How can we use goal setting and anticipating obstacles, or inflection points, with our children?
8. How is the Starbucks' LATTE plan similar to hip patients writing about inflection points? Is there an equivalent "LATTE plan" you could have your child create and then rehearse to deal with anticipated obstacles?
9. At the end of the chapter, what did Mark Muraven discover about the power of choice and voice? How could you use these concepts to help your children develop willpower and positive habits?
10. What are the habits you would most like to see your children develop (doing homework nightly, arriving at school on time, reading daily, getting enough sleep, etc.)? What from this chapter do you think would most help you help your children instill this habit?