## How to Change: A Conversation with Katy Milkman

In conversation with Dilip Soman

Transcript of an event on May 12, 2021







Research Report Series
Behaviourally Informed Organizations Partnership;
Behavioural Economics in Action at Rotman

Rotman School of Management University of Toronto



## Correspondence

For questions and enquiries, please contact:

Dilip Soman or Bing Feng Rotman School of Management University of Toronto 105 St. George Street Toronto, ON M5S 3E6

Email: dilip.soman@rotman.utoronto.ca or bing.feng@rotman.utoronto.ca

Phone Number: (416) 978-6980

Twitter: @UofT\_BEAR @dilipsoman



## How to Change: The Science of Getting from Where You Are to Where You Want to Be

## Katy Milkman in conversation with Dilip Soman

**Dilip Soman:** I could introduce Katy Milkman a number of different ways. I could talk about the fact that she's the James G. Dinan Professor at the Wharton School, I could talk about the fact that she's the co-founder of the Behavior Change for Good Initiative, I could talk about all of her research papers, I could talk about the fact that she is a superstar researcher and an outstanding teacher, or I could do the following. I could read for you a little paragraph from the foreword of *How to Change*<sup>1</sup>.

This is a paragraph written by Angela Duckworth. Angela writes, "Before I met Katy in person, here's what I'd heard from colleagues about Katy. She's the smartest person you'll ever meet. She's crazy productive. She'll make you feel like a slacker. She's a machine. Things that I do in a week, Katy does in a day." Angela asks, "What sort of superhuman is Katy Milkman?"

Then she goes on to say, "Because I now count myself amongst her **close** colleagues, I can tell you that Katy is the smartest person that I've ever met, but", she goes on to say, "Katy is in fact super human. She is not superhuman. Instead, she is what you and I aspire to be, what the book shows us that we can be, a super human." Not a superhuman, but a super human.

By that, she says that Katy Milkman is a master of human nature. Clearly, we have much to talk about, because like Katy, I consider myself to be human.

**Katy Milkman:** Thank you for having me. I'm embarrassed by that very kind introduction.

**Dilip Soman:** I'd love for the audience to learn a little bit more about Katy the human. In saying that, I have I guess a couple of questions. One is, tell us a little bit about what drives you. What motivates you to do what you do? Then, what is it about being human that you think is central to your work and the way you've gone about thinking about your research?

<sup>&</sup>lt;sup>1</sup> Milkman, K. (2021). *How to change: The science of getting from where you are to where you want to be.* New York: Portfolio/Penguin.



**Katy Milkman:** That's a great opening question. My career in this field, Dilip, started in a very roundabout way, and I came to behaviour change through a funny path. I started as an engineer, and I actually ended up in a doctoral program that was a joint program between computer science and business, and I had no interest in decision-making, I had no inkling that this was even a field, and I certainly didn't expect to be writing a book someday called *How to Change*. I thought I was going to analyze big data sets and figure out how the internet was changing the world, or something to that effect.

I stumbled on the field of behavioural economics during a required graduate class in microeconomic theory. Of course, as you know, as a member of the field, it's this fascinating, growing discipline that was just, around the time as a graduate student, starting to catch on. The big ideas that caught my attention were that people were not perfectly rational, that we were impulsive. We made decisions that over weighted the present and underweighted the future, that we were loss averse, that losses loom larger than gains. Then there were all these systematic ways we've made mistakes.

I saw myself in this field, and I was immediately fascinated because I had always been intrigued by the quirky things that I did and my friends did that were obviously not optimal, but I didn't realize that there was a science to it, that you could study it, that you could get better. I honestly really began doing work in behavioural science as "mesearch". I was curious about weird things I did and I thought, "Wow, wait, I can study this? That's amazing." It wasn't until later that I became, I will say really, really passionate about the study of change specifically.

I started exploring all sorts of quirks of human nature, but I got really interested in the study of change, which led me to write this book and do the work that some of the work we're doing together involving the center that Angela and I co-direct. When I saw a graph, I know that's a weird thing to say, the graph. A graph was really important to my life, but we're nerds here and we acknowledge that - I'm wearing it on my sleeve.

I was in a seminar that I don't really remember actually much about it, other than seeing this graph. It was a pie chart showing the percentage of premature deaths in the US that are due to different causes. The largest wedge, 40% of that pie chart was premature deaths caused by decisions that people could change. About the food we eat, whether or not we're physically active, whether or not we drink, smoke, whether or not we're safe when we get into vehicles. They accumulated in a way that just boggled my mind.

I had been interested in behaviour change for, as I said, self-focused reasons, like, "Oh, I have problems. How can I fix them?" When I realized, this can have a huge impact. Of course, it's not just on health that it can have an impact, but it's clear once you recognize the way it accumulates in that domain.



I've never seen a similar graph. It has to have a cumulative effect that's enormous. When we think about financial decisions, something you and I both study, when we think about decisions about education, it's so clear what a big deal this could be. That really supercharged my interest in how to change. I realized, let me focus all my energy in this area because there's an opportunity to really have a positive impact.

**Dilip Soman:** Katy, you're an academic. You could have had a comfortable life publishing papers, getting tenure, going to the faculty club, having leisurely lunches, and being good at teaching. Why write a book? What made you do that?

**Katy Milkman:** That's a good question. In the last week, I've lost my voice rushing between events. I've been asking myself, "Why did I write a book instead of having leisurely lunches?" Honestly, it's the same answer that I just gave to why I ended up focusing narrowly in the last decade really on the challenge of behaviour change. Once that focus became clear, once I realized how much we actually were learning and how big the potential was to have impact, I wanted to make sure that I communicated it to a wider audience than just our academic peers.

You and I both work with large organizations, and that's one way we can have an impact, is by getting involved and running experiments and studies out in the field, but a way to reach a much larger audience seemed to be through a book. The real emphasis of this book is on how the individual can improve both themselves and also others around them, but that seemed best done in this format.

**Dilip Soman:** One of the things that I've always been pushed to do is to give like a two-sentence summary or a two-minute summary of my books, and I struggled with that, is there one for *How to Change*? What's the message like? What's the elevator pitch story, read my book because...?

**Katy Milkman:** I'm trying to hone [the elevator pitch] still. I don't know, maybe we can make it better. I think the central message of the book is that we can reach change more readily, both through science, but also through a recognition that there's no one size fits all solution, and that it's critical to understand what is the obstacle standing in the way of change, and then to tailor your solution to that obstacle.

If you're struggling with change, because whatever it is, that you aim to do more of feels like a chore, you really don't enjoy it, there's a completely different solution that's likely to yield benefits than if you just keep forgetting, you can't keep it top of mind. And a different solution still if you just don't believe you really can. You lack the confidence that you have the ability and you haven't convinced yourself that this is possible. All of those different challenges require different solutions. Science has a lot to say. The central point of my book is really tailoring and figuring out what's the obstacle before you prescribe a solution.



**Dilip Soman:** You do subscribe to the notion that people can change, correct? Because I've got to struggle a little bit with this, does knowledge itself help me become a better person? I've known about overconfidence for years. I still think I'm overconfident. I've known about the base rate fallacy; I still ignore the base rate. Where is the line? What are the kinds of things where you think we can change? What are the some of these hardwired, call them biases, call them phenomena that make it really hard for people to change?

**Katy Milkman:** I actually, I don't think we can turn off the obstacles if you will, because the book is about internal obstacles. I don't think we can cure ourselves of being impulsive or cure ourselves of being forgetful or cure ourselves of taking the easiest path to a solution. I don't actually think that kind of change is practical. What I do think is that there are ways that we can outsmart those challenges that we can restructure situations restructure our lives, so that we'll be set up for success when we face those obstacles.

I guess a lesson in the book is that it's less about-- This is really what Angela, I think, wrote when she wrote such a kind and over the top introduction. I don't think there is such a thing as changing to become a superhuman, but you can become a better human and more effective human when you structure your choices with the sophistication of someone who understands all the science and what can help you get where you want to be.

**Dilip Soman:** Your book begins with this really interesting story about something that happened at Google. I remember a passage about the fact that you visited and they had a problem. Yes, even Google has problems. Tell us a little bit about that story and why that's so central to some of the work that you did over the next few years.

**Katy Milkman:** Yes, I love that story. It really was one of those lightbulb moments, you have the moments as an academic. A lot of the time, we're just plodding away having conversations. Every once in a while, something big happens. This was an exciting one.

I went out to Google, I gave a presentation about some of the work I had done on nudges we could use to encourage people to get vaccinated more readily and to--Which is a topic we may come to later. Also to encourage people to exercise more regularly. I was presenting some of my research results. I was presenting it to their HR group, they call them people analysts. I got this great question from the people analytics lead.

The question was, "Okay, convinced that we should be using these tools of choice architecture and nudging our employees towards strategies that will make them more productive, healthier, have more savings, but is there some ideal time when we should be offering up these opportunities? I guess are there some better moments in their lives



or in their cycles here of their career when we should be offering up tools for change?" I vividly remember feeling the lightbulb go off, wow, that's such a good question.

I really don't think there's much that we know about it, but I have some strong intuitions and strong hunches. That's when research gets exciting because it was an opportunity to go dive and try to answer the question. I came back to my office in Philadelphia, started talking to my then-doctoral student Hengchen Dai, who's now a professor at UCLA Anderson school, also Jason Riis who is a senior fellow at Wharton, about the question and about my first intuition which was New Year's.

We all know about New Year's resolutions and that seems like obviously a time when people are more open to change, they're more motivated to pursue their goals. There's the social norm, but it seems like there's something else going on too. You have this sense when you close one year and open another of a new beginning, a transition, a clean slate, a dissociation from all the things that you messed up in the past. That was the old me, and this is the new me. You're also more likely to step back and think big picture at those moments.

My hunch was, there are a broader set of dates that may have that same feature, that it may be that there are other moments in our lives that feel like new beginnings and give us a similar motivation. We started analyzing data and reading up on the literature on autobiographical memory, and how people think about time and the passage of time, and temporal landmarks, which are the moments that we use to mark time in our lives.

What we found is that there do seem to be a series of dates that feel like new beginnings of feeling fresh starts, days, like the beginning of a new week, or starting a new month, the celebration of a birthday or a holiday that feels like a fresh start too, think more Labour Day and Valentine's Day, or the first day of spring, then--

**Dilip Soman:** The first day of the semester when we talk about our academic lives!

**Katy Milkman:** The first day of a semester, absolutely. Yes, all these dates, we see people naturally actually are pursuing their goals at a higher velocity on this date. They go to the gym more frequently around those dates, they search for the term diet on Google more, they set goals more. We've also found that we can nudge them towards action when we invite change on those dates.

Now, we found that you can't like whip up a fresh start out of thin air. We have tried things like, "Hey, it's the 100<sup>th</sup> day of the year and so a fresh start! Make a new beginning," and people just ignore us. But there are dates that we can call to people's attention. The first day of spring is one we found to be very effective. Birthdays, highlighting them as an opportunity for a new beginning. We found people when given an opportunity to choose when they'll get reminders to start pursuing their goals, they're more likely to do that.



When we call out a fresh start date, the first day of spring, and label it as such, as opposed to just calling them the third Thursday in March, or when we invite them to start saving for retirement and put-- Start setting money aside in 401k. We invite them to do that starting on the first day of spring or starting after their next birthday, they're more likely to do it than at an equal time delay that just isn't labeled as such. I think that's really exciting. There's a lot of potential ways we can use these fresh starts to kickstart change in our lives.

**Dilip Soman:** This is exactly the proverbial striking when the iron is hot kind of an idea, right? What I'm hearing you say is that people's motivation waxes and wanes over time. Essentially, you could take a nudge in intervention, education, campaign anything, but if you deliver that when it is at its ebb, then you're essentially losing the ability to engineer change. It's really searching for the points where motivation crests automatically as a function of time. Is that a fair way of putting that?

**Katy Milkman:** Absolutely, I think, and this is really when we think about the obstacle framework, there's this obstacle of the ebb and flow of motivation, that you're not always ready to get started. To try to actually kickstart change, trying to use these moments when we have that crest is exactly the idea.

**Dilip Soman:** Obviously, the timing of when to get started is important, but I think there's also the question of them developing habits that follow from the fresh start, there's a couple of interesting questions that have come in. I'm just going to read them. They both get to the same point.

The first is, "Once someone determines the best way to tailor a strategy for behaviour change, how do you actually make that a habit? Are there any guidelines that you might have for that?" A related question is "Why do we as humans find it hard to break a bad habit?" The flip side, one is developing a habit and then breaking bad habits? Is there anything in the science that tells us how we can break bad habits and start good ones? I feel like you could do a career's worth of research on that.

**Katy Milkman:** Yes, I think we can I think both of us could, right? Wendy Wood, who I think is the world's expert on habit has done a lot of wonderful research, and I'll point to her to some degree here. In terms of habit, there's a simple model that has been popularized in best-selling books like *The Power of Habit* and *Atomic Habits*, that actually is roughly right. The simple model is to find a consistent cue that can trigger the habit. I'll try to do it right after I brush my teeth in the morning if I want to start working out, for instance. Then after that, execute the habit or execute the behaviour you hope will become a habit and find some way to reward yourself for it.

Do that on repeat as many times as you can and then depending on the behaviour and how frequently you do it, somewhere between weeks and months later, you should start



to find that it's actually on autopilot. You're not having to think about it anymore, it's happening naturally. Even if you stopped rewarding yourself, you would still probably keep at it because it's become second nature to you. That's the idea of how a habit is formed.

I have one study that I really love, that pokes a hole in one of my former beliefs about the best way to form those habits so that they last, that I'll mention and then I promise we can talk maybe a little bit of breaking bad habits after that. This study was actually a follow-up to my visit to Google. It was with Google, it was a project based on the relationships I formed during that fresh start light-bulb conversation.

We were relating to this question, "How do you create a habit? Can we engineer habits that are lasting?" It was work with John Beshears and a big team of collaborators. John and I originally conceived the idea that it might be really effective to form a habit if you got people to do the behaviour at a consistent time and place. We were training at Google to form exercise habits and we thought let's just reward them for working out at the same time every day, and see if we can build a really stable cue-based routine or really stable habit.

We compared that to a group of people who were rewarded for exercising as well but not for that consistency. In the end, what we ended up with was a month-long program where we convinced two groups to go to the gym at about equal frequency but one group, 85% of their visits were in the same narrow window of time, so very routine. The other group about half of their visits were at that narrow time because we reminded everyone to go on the best time for them every day, but the other half were all over the place.

We really thought that that very strict routine was going to carry over. The question was what happens when we let go, the program ends, we're no longer rewarding people, we just see what happens naturally, do they maintain the habits? We were startled to find that the group that had formed the most flexible habit where half the time they went out, had a consistent time and the other half was all over the place actually had a stickier habit.

When we dug into the data what we found was that the people who had formed that consistent routine, they didn't go a little bit more to the gym at that magic time, say it was 7 AM everyday whatever, let's pick 7 AM. They went a little bit more at 7 AM than the other group. They had formed a more stable routine about there's your first best time but if they didn't go at 7 AM they didn't go at all.

Dilip Soman: The what-the-hell effect?

**Katy Milkman:** The what-the-hell effect, exactly. The other groups they become rigid and instead of building a stable habit they built a rigid habit, and the other group had



built what I now call an elastic habit where they instead of an only-if habit they had a nomatter-what habit. If they missed 7 AM, they went at noon, if they missed noon they went at 5 and they had these backup plans and they were more effective for it.

I thought that was a really interesting finding about habit, and I think it's really important to recognize that disruptions get in the way, and we basically need the best habits or the ones that are robust and that are practiced at being robust to whatever life throws at you, where you've formed a no-matter-what kind of rule or no-matter-what kind of habit.

**Dilip Soman:** That's your Rachel and Fernando story from the book. Isn't it? The elastic habit idea?

Katy Milkman: Yes, Rigid Rachel and Flexible Fernando.

**Dilip Soman:** Fantastic. I'm going to get back to the bad habit question a little bit later because I think it might flow better with something that's going to come later but there's a question that's just popped up-- Well, not just popped up, it popped up the moment you said fresh start and it's from somebody you know, Rory Sutherland all the way from the UK. Rory's question is, he wants you to look into the crystal ball and gaze a little bit, what's going to happen in terms of behaviour once the pandemic ends? Are we going to have a fresh start, or are we going to revert to what we were doing before?

**Katy Milkman:** It's such a great question. Okay, let me tell you about my favorite study for looking into that crystal ball. It's going to sound weird, but I really do think it's useful and that study is, a study was done going to your backyard in London, of a Tube strike that happened in 2014 where a bunch of the subways in London were closed. Some were still open and commuters had to find a way to get to work.

In this paper, the scholars who were doing the research analyzed data on what happened after the Tube closure, so after basically everybody was forced to try a new way of living with just basically what happened during the pandemic in much of the world. Australia seems to have dodged. Anyway, suddenly my life has been upended, I'd had to try Zoom teaching and do all sorts of things very differently that I would prefer to not have done.

What they found is that after the strike, 95% of the commuters went back to their routes but 5% actually found a better way of getting to work, when they had been forced to experiment. Interestingly, it didn't seem to be random, these were people who've lived on portions of the map, that are actually distorted to make it fit, or portions of the subway line that actually got a slower speed. If you were analyzing the map rationally, you would say that this is the best way to get to work but once you experiment and explore you actually discover, "Oops, well no it goes five miles an hour on this route and goes 25 the other, so it will be better off this other way."



What I love about that is it suggests that when we have these periods of disruption, we actually can learn new things from the forced experimentation that we go through, so I would expect that a lot of things are going to back to the way they were, but that actually some things will stay the same. Things like these where you discovered you can bring hundreds and hundreds of people together from around the world for a conversation online without anyone having to get on the plane, and maybe something like this is actually superior to ways that we did things before.

**Dilip Soman:** And, the carbon footprint is great.

**Katy Milkman:** The carbon footprint is great. We're discovering, so I think some things will stick. The other thing I'd say is I do think we're going to see a lot of people who've done, and I think it's already happened by the way, a lot of reflection about what do I want. Because of this big disruption we're stepping back and thinking big picture more reflection, how do I want to live my life.

There's a really interesting report published in *The Washington Post* just last week about how many people are choosing to switch careers because they realized this isn't what they wanted to be doing maybe more than ever before, and so I think that we are going to see the results of this collective fresh start in people I would bet, I would bet joining gyms or other exercise programs maybe Peloton, pick your way you do it, but getting more interested in fitness goals and wellness goals, I think we'll see a huge enthusiasm for theater and arts because people have missed that, and will be interested in bettering themselves. I would expect self-improvement to be booming in the year ahead and changes to be common. People moving to the suburbs, people on the suburbs moving to the city, lots of reflection and switching. That's my prediction.

**Dilip Soman:** In terms of just personal motivation, you do think it's going to be at an all-time high post-pandemic because it is a good fresh start. It is a chance to redo your lives almost.

**Katy Milkman:** That's my prediction. That's certainly my prediction but this is out of sample.

**Dilip Soman:** As you were speaking, it struck me that you probably also answered the bad habit question. If you think about meetings as bad habits, just getting rid of the option of having them and doing it over the long enough period of time. I wonder if there's other thoughts you have on getting rid of bad habits. Is there a negative version of the cue examples you gave before?

Katy Milkman: Yes.

Dilip Soman: Or maybe not, I'm just--



**Katy Milkman:** Well, I'm super interested in what your thoughts are on this actually, Dilip. I think bad habits are a very different piece than forming deliberately a good new habit, I do think changing the environment is a really important one that Wendy Wood has written about and that others have written about, where to the extent that habits are cued behaviours when you have a shift in an environment or a shift in your life.

Like, "I always went to Dunkin' Donuts for breakfast on the way to work but now I'm taking a different way to work or I have a new job. There is no Dunkin' Donuts." That can give you a great disruption. Sometimes you have to engineer it with like, "Okay, I'm not going to walk by the Dunkin' Donuts anymore, I am going to change the way-- I'm going to drive to work instead of walking." Although that's bad for carbon, "I'll bike instead of walking, so then it's harder to slow down." You can make changes so that you aren't facing those cues and that seems to be really powerful because that disrupts the cycle.

**Dilip Soman:** Yes, I guess that's also the substitution strategy. Every time you're compelled to do X, you substitute that actively with Y. I guess you get some perverse effects, people used to be addicted to smoking, now they're addicted to gum instead.

Katy Milkman: It's better.

**Dilip Soman:** I guess the general point is, as long as there's a strategy inbuilt above substituting that undesirable action, maybe that's the way out. I do want to talk about Mary Poppins a little bit because I love to quote Mary Poppins a lot in my work. She has some gems. I think the biggest gem was, "Well begun is half done." I think the idea that once you get started, things eventually happen. You've quoted Mary Poppins, what was that about?

Katy Milkman: I quoted "The spoonful of sugar that makes the medicine go down."

Dilip Soman: Yes, that's the one.

**Katy Milkman:** That's the one. This really builds on an insight from work by Ayelet Fishbach at the University of Chicago and Kaitlin Woolley from Cornell University. They did this, I think, really brilliant work showing that a lot of people seem to have the wrong intuition about the best way to kickstart a habit or change. If you ask someone, for instance, who's trying to start a workout routine or actually just we could choose healthy eating or studying habits, but let's stay in the gym.

If you ask somebody, what's the way you're going to pursue a new gym goal? They'd say, "I'm going to go find the most effective workout I can do, the thing that's going to burn the most calories per minute and that's how I'm going to get going." A very small fraction of people make a different choice and say, "What I'm going to do is, I'm going to try to find the most fun workout I could do, like, I'm going to go to Zumba class with my



friends." It turns out if you instruct people to look for the most fun way to pursue their goals rather than the most effective, which is their default. They actually persist longer, because they enjoy doing it.

One of the big barriers to pursuing our goals is that it's not instantly gratifying to pursue many of them, they feel like a chore. If we can find ways to do these things that are enjoyable, to find a healthy diet that I actually look forward to because it involves smoothies and nuts, or eggs and bacon if you're into Atkins, I will stick with it, I will persist and persistence is a major challenge for a lot of our goals. Students who were given the opportunity to work on math worksheets while listening to music and eating snacks, their teachers were sure they would do worse because this was a distraction, but they persisted longer because it was enjoyable.

I've done work that's very closely related, it actually preceded their work, but I didn't get the big picture in the way that they did at the time, where you could link something tempting. Like I only let myself listen to my favorite audio novels that are lowbrow, so things like Alex Paterson or *Hunger Games* while I'm exercising. That means I crave my workouts.

A lot of people do this with television, they only want themselves watch *Bridgerton* while they're at the gym and they find themselves looking forward to it, because they've bundled a temptation with this thing that used to be a chore and now it becomes a pleasure, the time flies while you're at the gym and you lose the wasted time you used to spend on TV or addictive vices.

**Dilip Soman:** A couple of questions that I think might be a good time to bring these up. One asks about, "You talked earlier about people changing and their ability to change, are there any pre-existing determinants that will tell us whether or not some people are more likely to change? Is it something about genetics or the kind of childhood you had, any research that tells us about who is more likely to change?"

**Katy Milkman:** That's such an interesting question. I don't know of any individual differences that are strong predictors of the ability to pivot and change and I'm curious if you do. I grew up in a tradition of studying people as people and ignoring whatever those individual differences were, but trying to figure out how could we deploy interventions that would help lift all boats. The rising tide lifts all ships.

I have been startled actually by how few individual differences I have found when I looked at different interventions deployed and stuff like, did this work better for person type, men or women, low-income students to high-income students, people who'd been going in the gym before versus- above average versus below average. It's been remarkable actually how stable the results of so many of my intervention studies have been across demographic groups, but I'm curious if you know of any.



**Dilip Soman:** I don't. I shared the same point of view, which is I suspect there are differences. My sense is that context matters a lot more, the environment matters a lot more than individual differences do, so perhaps there are more differences across contexts than there are across individuals, but no, I'm not aware of any study that's actually tried to put those two against each other. This question from my colleague Ajay Agarwal about Al and whether you're aware of any good applications of Al in behaviour change. For example, predicting what an individual's obstacle to behaviour change is and then predicting what nudge will work best.

I know I've done some stuff where we've tested a bunch of nudges and used AI to figure out what works well for whom. Curious about, is there anything that's gone, but one step before and say, based on what I can see about a person's behaviour, do I know what friction is going to trip them up?

**Katy Milkman:** Not that I know of, but it feels like that's one of the next-generation tools that behavioural scientists need to move to, is trying to figure out if we can do that kind of predictive modeling and then tailor deliver better interventions that are more well-suited to individuals.

**Dilip Soman:** One of the things, Katy, I love about the book is it's the only book that I've read that's got a chapter called laziness and it's something I subscribe to a lot. That chapter begins with the following, "What in the world happened? That was Steve Honeywell, who was an analyst at the University of Pennsylvania's health system and one day in the fall of 2014 he just couldn't make heads or tails out of a graph that he just created." There's a story there, about 15 million had suddenly disappeared overnight, or savings worth 15 million. You said this was not normal. What was that all about? What has that got to do with laziness, Katy?

Katy Milkman: I love that story. There's a great, by the way, *Freakonomics* episode also about that, it's a story of a software change that was made at the University of Pennsylvania's hospital system by someone who was just tinkering and that it had this huge positive effect. The software change was that a default in a system was changed. It used to be the case that when a doctor sent a prescription to a pharmacy, it just went to the pharmacy as is. Say, you're trying to give someone Lipitor which is a commonly prescribed statin. It's a popular drug, it would go straight to the pharmacy in that form, but this tweak was that now when the doctor prescribes a drug that has a brand name like Lipitor, they'll send the generic prescription and it's cheaper and it's chemically identical, but it costs less for the patient and their insurer. This is good, it's something that hospital systems want to do more and has good outcomes for the patient as well, because it's cheaper, so it's easier for them to stick to their meds because the costs are lower.



This was a really great outcome. The way it relates to laziness is that the doctors at this hospital system had been nagged and nagged to start prescribing more generics and they all agreed, this is better for our patients, it's what we should be doing, but they're a little bit lazy, they take the path of least resistance, they know the brand name, they didn't always take the time to convert from the brand name and say, "No, actually, I want to send a generic to the pharmacy, there is a generic for this one."

By making it so that the thing that happened naturally, without them having to lift a finger was the thing that was desirable all of a sudden, all these savings were created and presumably some lives saved because medication adherence goes up when you are prescribed generics. Lots of cost savings for the health insurers, rewards that were accrued to the medical system for beating the neighboring medical systems.

**Dilip Soman:** This is a fascinating story at many levels. I think one of the things I love to talk about when I teach classes like this is in business schools-- Indulge me for a minute and I'd love to get your comment on it, we often teach our students to think big and come up with the big ideas and the big programs. This story doesn't mean it's a little thing that matters at the end. You could come up with the fanciest program, but if it was a bit of a default, which was perhaps something that was not on anyone's radar screen.

Owain Service and Rory Gallagher have written a book called *Think Small*, which I love that title. I think they use the phrase "Think Small" to mean something else, but the point is, oftentimes, it's the little stuff that trips people up. Is that a fair conclusion? Should we stop teaching our students to think big and focus on the nuts and bolts? Obviously the answer is a little bit of both.

**Katy Milkman:** Both, this is the blockbuster finding in the field of behavioural science and choice architecture, that this particular type of tweak that understanding defaults can have such a huge effect. It does suggest that if we can teach our students to think wisely about defaults and other tools of choice architecture, little things that can matter a lot then actually they are going to be thinking big, bigger than they realize. I think this is a great insight, I am whatever the 200th person to write about it in a book, 2,000th.

It only gets a little bit of coverage, but I felt like I actually had a little bit of a fight with my editor about this one, because she was like, "Oh, defaults are old news." I was like, "Yes, but this is about everything we know about how to change and this is the biggest, baddest tool in our toolbox, it needs to be in there." I was glad to win that battle and be able to focus on some of the tools that can actually alleviate laziness and turn it into an advantage.

**Dilip Soman:** There is one passage, and I remember reading research by you, Katy, a while ago, maybe recently, on the fact that if you just give other people advice, it may not only help that other person, but it might help you. What's that all about?



**Katy Milkman:** I love this finding, it's the brilliant insight of Lauren Eskers Winkler, an incoming faculty member of the Kellogg School at Northwestern University. What she realized as she was actually, she was doing interviews with people who were struggling to achieve their goals, salespeople, students, people who are trying to get fit. She was finding, time and again, that these people actually had a lot of insights about things that might help them, they just weren't implementing them and they lacked the confidence.

They were constantly being told by other people, this is what you should do. It was actually really demotivating. She thought, what if we just flip the script? What if instead of giving people who are struggling to achieve their goals advice, we actually put them on a pedestal and said, "Hey, you've thought about this a lot, probably, or you may have a lot of insight into it if you give it some thought because you're in the position struggling. What do you think would work? Can you coach someone else who has a similar goal and try to help them achieve it and overcome the obstacles that you have seen in the way?"

She thought it would do a few things, she thought, one, it would increase their self-confidence, someone's putting me on the pedestal making me feel like, "Hey, I've got what it takes to give advice, I must not be such a doofus after all, maybe I've got what it takes to achieve." Two, it's going to cause introspection that might not have happened otherwise, because if I have to dredge up advice, I'm going to have to think about, "What have I found can work and what really doesn't motivate me?" Then finally, once you say something to someone, there's the saying-is-believing effect, you don't want to be the hypocrite who doesn't actually follow through on the advice you're giving someone else.

I thought it was just such a great insight. She's done multiple studies on this, I got to be along for the ride on one. There was a random assignment trial with about 2,000 high school students who were at the beginning of their second semester of the school year, they were prompted to give some study advice to younger students, how could they be more effective in their study habits? What are the best places to study? What's general advice for staying focused? Half of the people in the experiment were prompted to give that advice to their younger peers and the other half were in a control group and didn't.

What we found is that at the end of the third marking period, which was the period we had defined as the outcome of interest in the study, we looked at two outcomes that we said we'd look at in advance. One was students' grade in their class that they had defined is the one they most wanted to improve in and the second was math, which is a class that a lot of high school students struggle in. In both areas, we found that students' grades significantly improved when they gave advice to others.

I want to be clear that this is not a whopping effect, it's not the default effect we just talked about, it's a small effect. We're not turning C-students into valedictorians, it's one



point on a grade point average from 50 to 100, but it's, it's significant, it's potent, and it's a 10-minute exercise. You can imagine, maybe the effects would be a lot larger if you did a more active intervention, or put people in a position like Alcoholics Anonymous does, have a sponsor to someone where you're coaching consistently and having regular interactions with someone else you could be helping.

I just think the insight is really cool and I think there's a lot of ways we can use it in our own lives. I have formed an advice club with other colleagues who have similar professional goals where we ask people, ask one another when we run into it, we get stuck. It helps us because when you solicit advice, you don't mind hearing other people's advice to be valuable, but also when someone else solicits advice from me, I thought, "Oh, it builds my confidence, see, I can figure out a good solution. I have a strategy that I can use when I face a similar challenge myself."

**Dilip Soman:** Couple of questions that have come in about behaviour change in the context of organizations. Here's a question from one of our listeners – "Is change always a personal decision? What is the role of an organization in the change process?" A second one asks the following about behaviour change – "That the sustainability is often a huge challenge, any tips, especially in an organizational context?" Anything that you might have done in the organizational context would be helpful.

**Katy Milkman:** It's funny, because all of the research really in the book is in organizational contexts, and it's organizations that are nudging employees towards making decisions that will be better for them in the long run.

The advice-giving as a school is nudging students to offer advice to others, and therefore improving their performance. The work on fresh starts, where we encourage people to save more with their employer sending the mailings inviting them to save in a 401k and just changing the date or the invitation the way it was structured and framed to highlight an upcoming fresh start and invite people to save then. The work on elastic habits was in partnership with Google trying to nudge employees to exercise more regularly and form these exercise habits. The work that I just described on defaults is also an organization changing as defaults.

Actually, all of this work is organizations, nudging people towards change. What I think is so useful is that the insights can be used in both directions, so people can take these insights and use them to-- Richard Thaler coined the term and I can't believe I'm about to use it, but he said, "Your book is about self-nudging, it's snudging."

**Dilip Soman:** Somebody is going to have to write a book to explain that, what is nudging and what is not.

**Katy Milkman:** I told my editor and she was like, "I'm glad he didn't say that to you earlier, because you might have tried to call the book snudging and I would have had to



say no." The idea of the book is that we can flip a lot of these things that have been studied in organizations, and use them as snudges or self-nudges, but of course, they can be used by organizations to promote change.

Nudges like prompting people to make plans to write down the date and time when they will get a flu shot or when they will go vote. This is a technique that an organization can use to get people to write down the date and time, when they're going to be a mentor to someone, or when they're going to achieve some organizationally-important goal. Almost everything in the book can be deployed to nudge people towards change or for an individual to snudge.

**Dilip Soman:** There's an interesting question that actually relates to something that I've written a bit about with Kim Ly<sup>2</sup>, one of our former research associates, and it's also in *The Last Mile*,<sup>3</sup> this whole notion of the three segments of people, whenever you ask people to make a behaviour change, there's a bunch of people who will get it done, there's a bunch who are opposed to it, for whatever reason, they don't like change, perhaps and there's a big population in the middle who says I'll do it tomorrow.

Those are the dangerous ones, in my opinion. In the sense that to me, we spend a lot of time and energy trying to convince them to change, they don't need convincing, they just need the hands held and they need a pathway. Roger's question I guess is, how do you unstick people who resist change? That second segment, the ones that are resistant to change to begin with, as opposed to some of the--

Katy Milkman: The movable middle.

**Dilip Soman:** I think the book is about the ones in the middle, your book is a lot about that. I think the question is about the people who are opposed.

**Katy Milkman:** Way on the far, the people who are saying, I have no interest in changing.

Dilip Soman: Don't want to change.

**Katy Milkman:** I have a book for that. Hold on, it's not my book. This is the one, this is a fabulous book by Bob Cialdini, it's about influence, and that's really, it's the science of persuasion, *The Psychology of Persuasion* is the subtitle<sup>4</sup>. I think it's a great set of tools if you want to convince someone who doesn't agree to come along for the ride. The book I've written is really meant for someone who's raising their hand and says, "Ooh,

<sup>&</sup>lt;sup>2</sup> Soman, D. & Ly, Kim. (2018). The growing market for self-control. *Rotman Magazine*, Winter, 36-41.

<sup>&</sup>lt;sup>3</sup> Soman, D. (2015). *The last mile: Creating social and economic value from behavioral insights*. Toronto: University of Toronto Press.

<sup>&</sup>lt;sup>4</sup> Cialdini, R. B. (2006). Influence: The psychology of persuasion. New York: Harper Business.



I'd like to change", or for an organization that's trying to help people achieve their own goals, for the most part, goals that are going to be aligned with their interests and trying to topple those obstacles. Persuasion is a very different art.

There's a lot of same principles that can apply. For instance, I think social forces can play a really big role both in persuasion and in helping yourself change. Robert Cialdini has done some of the most important work on social norms. When you see everybody else is doing something, that can persuade you, "Oh well, everybody else is getting the vaccine, then I guess it's not so scary and I should do it too. If everybody else is reusing their hotel towels, I guess that's not so gross. Maybe I should reuse mine too. Maybe it's better to be green." He has a lot of those insights.

Some of them I think are related to individuals who want to change in ways that they can snudge. You can surround yourself with the kinds of people who show you what's possible. You can deliberately emulate the strategies they're deploying. If you're trying to encourage change, you can certainly also strategically introduce the right social structures. I think Bob Cialdini's book is a wonderful one for anyone who wants to learn about persuasion.

**Dilip Soman:** There's a question that's come in while you were talking about organizations, and this is something you spoke about when you were here for the BAD Conference. The question is about whether you've seen any neat effects using nudges for building inclusivity in organizations.

**Katy Milkman:** Yes. This is, as you know, for something that I work on when I'm not studying, how do we get people to save more and exercise more regularly and get their vaccines and so on. I am very, very interested in the question of inclusivity and how do we encourage it. I think it's even more important to focus on the structure and to change the structures in organizations.

I know you and many of your colleagues share that view. I've done some research looking at things like diversity training and showing that does not seem to have much benefit if any. Maybe it changes attitudes slightly. The kinds of behaviours that changes are women and minorities run around and seek out more mentors after they've gone through diversity training because it scares them as opposed to those with the power in organizations treating women and minorities better after diversity training, which is not the goal.

What does work? There's actually some wonderful work by your colleagues, Sonia Kang and one of her doctoral students showing things like defaults can be important. If you, instead of asking people to raise their hands, "I want a promotion", you actually default everyone in an organization into being up for promotion unless they opt-out.



That increases the likelihood women and minorities come up for promotions, and I think that's a really important structural type of solution that uses behavioural science.

I've done some work led by my amazing students, Erica Kyrgios and Edward Chang, also with Aneesh Rai, where we found that, getting people to hire new employees in sets rather than singletons, can be really important for increasing the diversity of who they choose.

The logic is very simple and related to other concepts in judgment and decision-making, that when you see a set of five people who you're about to press the button and say or go to your decision-making higher authority and say, "I want to hire these five people", it's very salient all five of them look the same, and you're going to go, "Oh my God, that is not aligned with my values, that's not the kind of organization I want. We need diversity here." If you hire people one at a time, you may accidentally, without ever noticing it or intending to, hire five people one at a time who look the same because there is no such thing as a diversity in a singleton. Hiring sets is another way of making decisions in sets.

I think there's a lot of strategies and tools along those lines, but it's a very different problem, I think. The obstacles are different to change in that context. At least some of the same principles apply, that we need to figure out what's getting in the way.

**Dilip Soman:** I think this is the challenge often to a lot of people who are looking at behavioural science solution, is, they often tend to do what I call off-the-shelf borrowing, but I think the principles are the same, but I think you need to spend a lot of time localizing and contextualizing whatever that intervention is because, you're right, the devil is in the details.

I do want to ask you one final question. There's a lot of other questions popping up and I'm afraid we're not going to have time to get to nearly as many of them as we would have liked. What's next for Katy Milkman? This is your first book, you've started this thing called BCFG. What's the next big chapter, Katy?

**Katy Milkman:** Next chapter. This is fresh start, new beginning. I actually think BCFG, the Behavior Change for Good Initiatives that Angela and I co-direct is really just starting and I'm super excited to spend a lot of time building that organization. It's an organization we've created, that you're a part of, that has-- We just did a count, 138 scholars around the world, all in different disciplines, interested in advancing the science of behaviour change. We've been pioneering a different way of doing science, which is really more akin to the way science has done in the hard sciences.

You've been involved in some of this. We just had a paper accepted in *Nature*, conditionally accepted, maybe I should knock on wood, about this method of doing research of mega steps, in where, instead of testing a single hypothesis about a single



idea that might promote change and be policy relevant, we test maybe dozens of hypotheses from different teams of researchers all at once on the same population, the same outcome variables for the same time period.

We have comparability and also scale and the ability to say, "Let's make apples-to-apples comparisons. What works best, what's most cost-effective, and leap frog theory forward, hopefully, when we make a number of discoveries simultaneously instead of decade after decade, slowly they trickle in. I'm really excited about the potential for this kind of work. We're trying to scale mega studies and do this work with many more partners so that we'll know a lot more about how to change even 10 years from now than we do now.

**Dilip Soman:** A book, BCFG, there's a podcast. Will there be a movie coming out soon? Shall we be seeing you on Netflix at some point in time, Katy?

Katy Milkman: If you make it.

**Dilip Soman:** That's a business idea. One last super quick question, Katy. One of our listeners asks – "I'm very intrigued by your productivity. Would you please share some useful tools for improving workplace productivity?"

**Katy Milkman:** This is one that you'll appreciate. I know you've studied along these lines too. I really think actually one of the most important things is breaking down the big objective. What is the bite size doable now? We just actually wrote a paper that I really love on asking people who had committed to doing a 200-hour a year volunteering job, just telling them, "That's four hours a week. Got it? Do four hours this week. Four hours this week", instead of every week reminding them, "You're doing 200 hours this year."

That specificity, that bite size, chunk, it's something I use all the time. I'm just going to work on this for an hour. I'm going to get this small sub-task done and put it on the calendar. That's a major productivity hack. There are many. I hope if you read the book you'll find lots of others because a lot of my work is me-search, but there's one that we haven't discussed that's quite useful.

**Dilip Soman:** Katy, thank you so very much. This was an enlightening talk. I have a lot more that I could discuss with you, but we could go on and on, but this was great. I wish you all the very best with the book, and again, congratulations and thank you for being here.

Katy Milkman: Thank you so much for hosting me. This was really fun.

Dilip Soman: Thank you.