# They Thought We Were Ridiculous:

The Unlikely Story of Behavioral Economics

# Episode 5: The Future

#### Synopsis

To look into the future of Behavioral Economics, we talked to three young researchers who are pushing the field further. A new generation of researchers is striving to understand decisionmaking in the developing world, how brains process economic decisions, and how bigger, more transparent scientific methods can shed light on basic principles of choice.

- Behavioral economics provided solutions to help farmers save more in developing countries.
- Understanding the brain unlocks new insights about human decision-making.
- Slower, more transparent science is imperative for the future of the field.

### Introduction

**ANDY**: Throughout this series, we've followed the arc of behavioral economics, from Richard Thaler's curious cashews to Kahneman and Tversky's long talks about decisionmaking shortcuts to the ways federal governments are helping people make wiser financial choices. Behavioral economics won. So now what? We wanted to know where things are headed. What does behavioral economics of the future look like? We asked Danny Kahneman, one of the founders of behavioral economics who we've heard from throughout this series.

**DANIEL KAHNEMAN:** I have absolutely no idea. I don't think that the forecasting the developments is a useful enterprise. The only people who know something about it, are the young people starting their career, because they're going to make the next 10 or 15 years. So, the thing they're interested in, that's the future that can be seen.

TIM: And who are we to question a Nobel laureate?

**KURT**: We talked to three young scientists, each of whom is pushing behavioral economics in a new, exciting direction. From looking at brains, running enormous field experiments, and understanding poverty in developing countries, what are these young whippersnappers up to? And how do *they* think this field can make a difference?

ANDY: From Opinion Science, I'm Andy Luttrell.

**TIM:** And from Behavioral Grooves, I'm Tim Houlihan.

KURT: And I'm Kurt Nelson.

**ANDY:** You're listening to "They Thought We Were Ridiculous: The Unlikely Story of Behavioral Economics."

TIM: Episode 5.

KURT: The future!

## **Poverty: Supreet Kaur**

**ANDY**: Throughout this series, we've mostly seen how behavioral economics has helped us understand people's decisions within economic powerhouses like the United States and Britain. But like so many social sciences, it's not always clear how well the same concepts apply around the world. Which is a shame because people all over the place face unique economic hardships.

**SUPREET KAUR**: When I was starting grad school, I knew that I wanted to work on poverty, like that was what prompted me to want to do an economics PhD and to, you know, want to be an economist, because I wanted to study poverty.

**ANDY:** That's Supreet Kaur. She's an assistant professor of economics at UC Berkeley. And studying poverty in the developing world isn't just an intellectual exercise. It's personal.

**SUPREET KAUR:** I was born in India. I moved to the US when I was six. And so I definitely, you know, from going back and visiting had this sense that there is this like, deep inequity, and this is something I'd like to work on. But then even in the US, you know, I grew up in, in a very low-income neighborhood, you know, only 10% of kids from my high school went to college, so it was kind of a very low-income setting. And I saw a lot of poverty just when I was growing up, even in the US and, and I saw a lot of similarities in terms of the kinds of struggles that people who are poor in the US face and people who seem to be poor, you know, in India days. And I think that's where the idea of applying psychology to the study of poverty felt very relevant because even though the settings are so drastically different, and a poor person in the US is surely much better off than a poor person in India, still you can see a lot of commonalities in the struggles they face the things that are hard, savings is hard, you know, managing your money is hard.

**ANDY:** But nevertheless, the circumstances of sorting out your finances are just fundamentally different when we're talking about a reasonably well-off person in the United States and when we're talking about a laborer in a developing country. You're dealing with a different infrastructure. So, the behavioral side of economics becomes central.

**SUPREET KAUR**: Now you have people who are navigating environments that are just harder to navigate. And so then all of the citations we have is thinking human beings where, you know, it's harder to kind of think cognitively through something. Well, now you don't have like this easy guidepost where every month I get salary deposited into my account, that goes and pays my rent. Instead, in a developing country, people every day their income changes, because then there may not get a job at the labor stand that day. So you have like really volatile income, you have really uncertain income, you have all of the shots that are being thrown at you, your kid gets malaria, well, you don't have health insurance. So you have to figure out how to come up with that money. So from a sort of ideas from cognitive psychology, I think are super relevant because people are navigating a much more difficult decision-making environment.

**ANDY:** Okay, but if the whole idea is that economies work differently in different places, how can you really understand how people make decisions in these environments? Well, you've got to set up shop yourself.

**SUPREET KAUR**: One of the things I've done is actually set up almost like mini factory workshops in developing countries. So like, for example, in India, where we hire workers for like full-time jobs in some sense. And so, you know, because in the setting it's super common for workers to have like short-term contract jobs, which might even be day long or weeklong, or a month-long or so on, you know. I have several papers where we just hired workers who actually are working in data entry or working in low skilled manufacturing tasks where it's like real work that they're doing. And even the output is being sold in the local wholesale market. So, from their perspective, they're just getting a great job. But then now that they're working for us, we can start changing things about the environment to understand the underlying sort of psychology of what drives productivity.

**ANDY [tape]:** So, on the side, you're sort of low-level running a business that you never thought you would be.

**SUPREET KAUR:** [laughs] That's right. That's right. That's right. Like who knew being a researcher would require this skill set? And it makes it much easier that we don't actually ever have to turn a profit. I don't think I could ever run a business that would actually have to be profitable. But if you're willing to lose a *ton* of money, I mean, then it's not so bad.

ANDY [tape]: You can technically run a business.

SUPREET KAUR: Exactly, exactly, exactly.

**ANDY**: Okay, so but like what sorts of things can you learn from setting up your data entry firm in India? Well, in one of Supreet's studies, she was interested in people's capacity for self-control.<sup>1</sup> Productivity is a self-control game. The more you can focus on the task before you and not get distracted, the more you get done, the more money you make. Employers obviously want their workers to be more productive, and one way to help them keep their eye on the prize is to offer incentives like bonus pay for meeting some output goal. But that's expensive. Supreet and her team wondered, could you nudge people to be more productive without necessarily paying them more? They offered workers a curious option. Instead of being paid a set rate for each data entry field they completed, they could choose to set some threshold, say completing 1000 entries. If they hit their goal, they got paid according to the standard rate. But if they *fail* to hit that threshold, their standard pay rate gets cut in half. So, either status quo or take on a major risk with no special benefit for hitting the mark.

**SUPREET KAUR:** Now, no sane, rational, you know, Econ 101 agent, that person should do that, because this contract could not gonna make you better off, but it can make you much worse off, because you lose half your earnings for the day. But we find actually that like

<sup>&</sup>lt;sup>1</sup> <u>https://doi.org/10.1086/683822</u>

30% of workers sign up for these things, and they love them, and they sign up for them repeatedly, day after day.

**ANDY:** It's like people know their limitations. A whole bunch of people will commit themselves to a contract that could make them way less money because they know they're human. And it actually pays off. When they lock into this risky self-control device, they actually tend to be *more* productive, entering even more data and taking home even more money. The kinds of contexts Supreet studies also opened the door to understanding another quirk of psychology called the *planning fallacy.*<sup>2</sup>

**TIM:** Isn't that what happened to us? We thought that producing this series would take 6 months and it took almost 3 years.

**ANDY:** Yes, I get it, Tim. I had a child. And the time my daughter to learn how to speak English was faster than it took us to make this. But you're right: that's the planning fallacy – when people estimate how long it will take, they routinely think it won't take as long as it ends up taking. And it's because they overlook the million little setbacks we're bound to face along the way. The other jobs we have to finish, the unexpected sick days, new demands on our time. And so like, do I wish we finished this podcast series two years ago? Sure. But it's fine. Sometimes, though, the planning fallacy can get people into real trouble.

**SUPREET KAUR**: In Sub-Saharan Africa, one of the things that happens is you people harvest once a year that you harvest your beans once a year. And you have a ton of beans you need to eat them over the course of the coming 12 months. And then people invariably run out of food before the next year. And then this three month period is called like the hungry season before the next harvest where like, you can see like child BMI, like their weight is like plummeting. And like people are skipping meals, and people don't have the money to invest in their farms, which means their yields are going to be lower than next time. So it's like this really, really tough time for people.

**ANDY**: And it's not just that they need to save the crop to feed themselves, it's also their primary income, which helps them pay for their basic needs. They store their harvest in a granary, which needs to last them until the next harvest. It's like money in your bank account. And to get a sense of just how people find themselves in this situation, Supreet and her team interviewed a bunch of maize farmers in rural eastern Zambia, asking them to carefully predict just how much of their maize stock they'll still have in their savings three months later.<sup>3</sup> Their answers were wildly optimistic. When they check their predictions against the actual amount of savings they have 3 months later, people's predictions typically overestimated their savings by 81%. And even when the researchers asked farmers to predict the *worst-case scenario*, 60% of farmers still end up with less savings than their worst-case prediction. They find that one major factor here is that farmers end up spending twice as much as they expect on a variety of non-food expenses. Classic planning fallacy. But here's the hopeful part, because if what's happening seems

<sup>&</sup>lt;sup>2</sup> https://doi.org/10.1016/S0065-2601(10)43001-4

<sup>&</sup>lt;sup>3</sup> https://drive.google.com/file/d/1mM182FV9F8ni7O5BvQhQMOba9G1nPO0R/view?usp=share\_link;

<sup>&</sup>quot;Retrieval Failures and Consumption Smoothing: A Field Experiment on Seasonal Poverty" (Kaur, Augenblick, Jack, Masiye, and Swanson).

like the planning fallacy, and behavioral economists have been studying the planning fallacy for years, maybe they've discovered something that could help these farmers.

**SUPREET KAUR**: Okay, well, let's take this seriously. And let's like understand what the planning fallacy literature has done and the approaches they've made and the insights that that literature is generated to debias people and like, kind of make you make their beliefs more realistic.

**ANDY:** So, one of the things that behavioral economists had already figured out is that if the planning fallacy happens because people don't account for a bunch of future obstacles, they can make more accurate predictions if they just pay closer attention to those potential obstacles.<sup>4</sup> For example, if I ask you how long it'll take you to cook dinner for your family, if you're anything like me, you'll be super optimistic. "Couldn't be longer than 20 minutes, right? Dinner on the table at 7!" But if I break it down into its component parts and walk you through everything that needs to happen – how long to assemble the ingredients, how long it'll take, or at least you get closer. So Supreet thought, well if there's research showing that this strategy helps reduce the planning fallacy in more mundane situations, could it also help these farmers? Help them break down their future savings and...

**SUPREET KAUR:** ...they might remember, oh, I have to pay school fees for my kids, but they don't remember the cost of the uniforms. Or a few might remember for my vehicle, I have like the payment for the vehicle with maybe I don't remember the maintenance costs or the gas, you know, costs or so on. So, by sort of unpacking things, we kind of do this budgeting exercise with them. And you just see that they're there, they immediately after we do this with them post-harvest, they come immediately, much more pessimistic about how long it's gonna last.

**ANDY:** And they make it as easy as possible. They made these "expense boards" that visually broke down their spending month-by-month into categories like food, school fees, household supplies, emergencies. And farmers would think critically about where their resources will go throughout the year.

**SUPREET KAUR**: They realize, "Oh, wow, I actually have less disposable income than I really thought because there's all of this stuff."

**ANDY:** And because their expectations about their savings are more realistic, they become more careful with their spending. When Supreet and her team would go back to count up how many bags of maize were still left in people's granaries, they found that the farmers who went through the careful budget breakdown exercise actually had more in their savings months later than farmers who only gave a rough guess about their savings.

**SUPREET KAUR**: And as a result, they enter the hungry season with a month more worth of food. And because they have more savings at the time, when they need to make all

<sup>&</sup>lt;sup>4</sup> <u>https://link.springer.com/article/10.3758/MC.36.4.791</u>

these farm investments, they're able to invest more in their farms. So, their yields go up by 9% at the end of the year, so they enter the next year with more food than otherwise.

**ANDY**: Wrestling with a critical economic issue by digging into the psychology behind this kind of thinking, it's the heart of the behavioral economics revolution spanning out in new directions. And hopefully it's only the beginning.

**SUPREET KAUR**: We're working on scaling this up to other settings. Can we do this with food stamp recipients in the US? Can we do this with cash transfer recipients in developing countries? And so on. You could imagine lots of other studies that can use this as a template, taking an idea that's not one that's currently in economics, and applying it.

### Neuroeconomics: Rahul Bui

**TIM**: Another one of the new directions that behavioral economics has taken is to look inside the brains of people making economic decisions. We talked to a young neuroeconomist to get the scoop. Neuroeconomists study how the brain processes information related to economic decision-making. It's like economics plus psychology plus neuroscience all rolled together.

**RAHUL BHUI:** My name is Rahul Bhui. And I'm an Assistant Professor of Marketing at MIT in the Sloan School of Management. My goal is to understand how we can be so smart and so stupid at the same time.

**TIM**: We started out talking about what behavioral economics is and what it meant to him when he was getting started.

**RAHUL BHUI**: The movers and the shakers have a very particular perspective on what behavioral economics is because they created that field, right? They saw it from the very start. For me, when I was growing up in academia, as an undergrad, behavioral economics existed, right? It was established. Kahneman, years ago, had already won a Nobel Prize, right? So behavioral economics was a thing and people studied it. And it seemed to be very important. And while I was in undergrad, the middle of undergrad was when the financial crisis happened. And so, as you can imagine, it became even more popular. As they say, the financial crisis was one of the worst things to happen to the economy, but perhaps one of the best things to happen to economics. I thought, well, this is really interesting field that combines math, with things in the real world. I was drawn to it very naturally. But at the same time, I think in the air was this idea that while there are a lot of a lot of things, missing a lot of gaps.

**TIM**: And one way to address those gaps was by bridging disciplines. And if you thought behavioral economics was bold to bridge economics and psychology, this stew is about to get a lot more ingredients. Rahul went off to grad school at Caltech to work with Colin Camerer, who we met earlier in this series as a founder of this movement.

**RAHUL BHUI**: I started going to grad school there, in this interdisciplinary program, where you take sort of core economics core neuroscience, core computer science aspects, and you use put them together. And it was really a stark contrast sometimes to go from here's the introductory neuroscience class, where you have in a one gigantic textbook on

neuroscience. And I recall, at one point, you know, somebody asked the professor, "Well, what do we think about this, this new, this new idea?" He says, "Well, we really don't know how that works. But here's a speculative idea." And he goes on to lay out this chain of logic and evidence, which actually is extremely thorough and comprehensive. And to me sounded like, wow, you really actually know a lot about what's going on. And then, from there, we'd walk over to decision theory class. And decision theory class ends up having all of these nice thought experiments and axioms where you have somebody choosing between steak tar-tar and frog legs and these sort of menus of choices and well, what would potentially happen in this case, and how can we kind of philosophically almost model this in some way? And it was just such a stark contrast to go between those different environments. And then somehow, I got a job in a marketing department, where they happen to be very interested in questions of, well, how do you integrate psychology and economics? Right? How do you do that, particularly in a way that respects both of those angles at the same time?

**TIM**: A lot of what makes Rahul's work so innovative is that he doesn't just care about the decisions we make and whether they're rational or not. He really wants to look straight into our brains as we're making these choices to see what's going on in there and why we decide in these ways.

**RAHUL BHUI**: Everything that you do, everything that you decide, everything that you're making a judgement about is a result of your brain. I think a question that many economists tend to have is, well, to what extent is it really practical to actually know what's going on in the brain? And it's a fair point in the sense that, you know, there's so much physics that you can do without having a microscope, for example, and in fact, trying to think of things at such a fine-grained level, but it could actually get in your way, understanding things that these more abstract higher levels. At the same time, you can't really do physics without having a microscope somewhere in the picture. You have to have some sense, I think, of what the brain is doing in order to really fully deeply understand how decisions are made.

**TIM**: So far, this has all been pretty abstract. But concretely, what can we learn about economic decision-making when we take a neuroscience perspective? Rahul pointed us to something from Prospect Theory. That was one of the big ideas that Kahneman and Tversky brought to the world. One of the basic tenets of Prospect Theory is that people experience "loss aversion."<sup>5</sup>They're skittish about losing what they already have, so they don't take as many risks when they're framed as potential losses...even though they're relatively happy to take risks when they're framed as potential gains.

**RAHUL BHUI**: Prospect Theory itself is sort of a very simplified and sort of funny theory when you really think about it, right? It's like, well, you take this line and then you kind of bend it in this way and you like work it around and you're like doing a real number on it. Like it's expected utility that you know, was putting the wrestling rig and you sort of bent it. So, in some sense for why exactly does that happen? I think one interesting perspective that people have found are interesting sets of data are that actually these kinds of curves, these psychometric or psycho economic curves are much more malleable. Like, they're

<sup>&</sup>lt;sup>5</sup> https://www.behavioraleconomics.com/resources/mini-encyclopedia-of-be/loss-aversion/

more flexible than even Prospect Theory, would predict. And so they change shape in different kinds of ways, right. So maybe the extent to which you are sensitive to a certain difference in value or certain difference in risk changes depending on the context as well.

**TIM**: It hits on another key idea from ProspectTheory: "reference dependence."<sup>6</sup> People pick some reference point, and they think about whether an event will be a loss relative to that reference point or whether it will be a relative gain. So, whether we prefer one option to another hinges on where we set the baseline or reference point. If our baseline makes one option feel like a win, we like it. But if our baseline makes the same option feel like a loss, we walk away. This all makes sense when we understand how brains work.

**RAHUL BHUI**: So let's, let's think about this from an analogous angle, which is to say, your vision. So, what happens when you walk into a dark room? I mean, first you stumble, and then you trip on the table, because you can't see anything. But then something miraculous happens, which is that your eyes will adapt to that ambient level of light or darkness. Now that that is a kind of reference dependence, right? Your perception of brightness is changing, depending on the local context. And you can see in that setting how it's profoundly adaptive, right? It's a result of the fact that, well, our eyes are pretty good, but they actually cannot, they're not capable of sensing all gradients of light at the same point in time. But what they can do is adapt to the local conditions. And as a result, they're able to achieve overall a much, much wider range of sensitivities. And so in the same way, just as our eyes adapt to what is light and what is dark, our brains can better discern value by redefining what is good and what is bad. Right? That means in some cases, you have to make decisions between Well, what am I going to eat for lunch today? That's pretty small stakes. Other days, you have to decide, well, what apartment am I going to rent? Or what house do I want to buy? And these are huge decisions, right? These are totally orders of magnitude, different decisions. So because you have to make judgments on these different scales, then you just have to adapt your sense of value to actually be able to make decisions in that local context. That broadly tells us reference dependence rather than being some sort of weird, quirky thing about human nature, actually, it's something that's really fundamental. And in fact, we could not have survived without reference dependence is something that's got to be there, right? It's something that's got to be there, across multiple species in all kinds of domains.<sup>7</sup>

**TIM**: That's a very big, and very important, leap to make: reference dependence has actually helped us survive as a species. And they're getting these insights – in part – through understanding how our brains work. In addition to looking at brains and how they do this kind of thinking, Rahul and other scientists are also borrowing from *computer science* to build complex mathematical formulas based on how neurons share information.

**RAHUL BHUI**: It's transformative to me in the sense that we start off thinking here's some weird quirk of the way that people are behaving. And when you follow this chain of logic, and you combine it with neural evidence, and with computational analysis, you end up actually seeing, well, this isn't some quirk, it's almost impossible that things could have

<sup>&</sup>lt;sup>6</sup> <u>https://www.behavioraleconomics.com/resources/mini-encyclopedia-of-be/reference-dependence/</u>

<sup>&</sup>lt;sup>7</sup> <u>https://doi.org/10.1016/j.cobeha.2021.02.015</u>

been any other way. It should be completely expected. This to me, I think that that is the kind of really fascinating change in perspective that I guess I'd implicitly hoped for when I was enthralled by neuroscience, computational neuroscience to begin with.

## Slowing Science Down: Linnea Gandhi

**KURT:** Here's another way of looking at behavioral economics: No matter how far it's come, no matter what we're calling it, it is still building momentum. We talked to Linnea Gandhi about this. She's a PhD student at the University of Pennsylvania. But that doesn't come close to describing her relationship to the field. She was Richard Thaler's teaching assistant at the University of Chicago. Then she worked with Danny Kahneman, Cass Sunstein, and Olivia Sibony on their book called "Noise."<sup>8</sup> And while she's been getting her PhD, she's been working on a massive map of nudges. And just like the perspective we saw emerging in the last episode, Linnea sees behavioral economics as just "economics."

**LINNEA GANDHI:** So behavioral economics is to me a temporary discipline that emerged to address something that was a blind spot in our understanding of human behavior. And once we can acknowledge that blind spot and fill it, it no longer needs to exist in the nomenclature, like it doesn't need a label.

KURT: But despite these ideals, the field is in the middle of an identity crisis.

**LINNEA GANDHI**: We're in our adolescence, we're kind of fragmented. We're trying on all of these labels. Am I a cognitive psychologist? Am I a social psychologist, am I behavioral economist? Am I a behavioral finance person? There's a lot of labels that we're throwing around to try to define the space as it fragments and breaks. But we haven't really solidified who and what we are yet. My hope is that we become more solution-oriented in what we call ourselves in what we do. I'm not a behavioral economist, I am someone who works on helping people save more for retirement. I'm you know, and I just happened to use the tools from behavioral science along with user design and experimentation, which is not proprietary to behavioral economics.

**KURT:** One of the projects Linnea worked on recently is a great example of how she pushes behavioral economics forward by focusing on solving real problems. The problem in this case was how to motivate people in Philadelphia to get the COVID-19 vaccine. Andy's going to help walk us through it.

**ANDY:** So, if we put on our economics hats and ask what gets people to do things, the answer is "incentives." People don't just build houses, deliver food, and sort the mail for the intrinsic pleasure of it. They do it because they get paid. Would the same logic apply to public health measures? Linnea was a member of a large team that worked with the city of Philadelphia to run a lottery.<sup>9</sup>

**KURT:** The price of a ticket? Getting your COVID shot. They put \$400,000 into the prize pot. Every couple weeks during the summer of 2021, they would draw names at random. You

<sup>&</sup>lt;sup>8</sup> <u>https://a.co/d/8SopmM0</u>

<sup>&</sup>lt;sup>9</sup> https://doi.org/10.1038/s41562-022-01437-0

could win \$1,000, \$5,000, and even \$50,000 just by getting your vaccine and being lucky enough to have your number come up.

**ANDY**: What made this an experiment, though, is that they also targeted three random zip codes and increased the odds of lottery winners from those areas. And it was no secret. Media coverage made it clear that those zip codes had an edge. People living there were 50- 100 times more likely to win a prize. The idea was that the higher chances of winning in these random pockets of Philadelphia would increase the incentive for getting a COVID vaccine in those neighborhoods. Therefore, we should see is that people in those zip codes become more likely to get a COVID vaccine.

#### KURT: And it worked like a charm, right?

**ANDY:** Well... So, after they announced the first zip code with an extra incentive, they did see a significant uptick in vaccinations there. About an 11% increase. But as you can imagine, this was the incentive boost that got a lot of media attention. It was news! But the boost petered out. After a while, people in that zip code weren't much more likely to be getting their vaccine than any other neighborhood in Philly, even though their incentive was still higher. And neither of the other incentive-mega-charged sections of the city saw clear increases in vaccination rates after they announced their higher odds of a payout.

**KURT:** So, hang on. You're saying people still didn't get a COVID shot even when it could double their chances of winning \$50,000? I thought behavioral economics was magic!

**ANDY:** Well, I mean, that's kind of the point. Science is about learning what works *and* what doesn't work. Like a lot of social sciences, behavioral economics is taking stock of its key findings, holding them to the fire to make extra sure that they hold up. And sometimes, programs like a vaccine lottery, which feel like they should definitely work...they have their limits.

**KURT:** Linnea told us that this is key to the future of behavioral economics. The next generation needs to be problem solvers who aren't only going for flashy results, but they're interested in what doesn't work, as well. In short, they need to slow down.

**LINNEA GANDHI**: We've sped up the process of science that is always actually meant to be slow. And it's tough because we're living in a world where the incentives to speed up are there. Having a brand as an academic or a practitioner even means creating content fast. It means speeding up the process of creation, but to actually create knowledge, that's really, really slow. That's the point of science is to be slow. And so, I think, you know, especially with the renaissance in psychology or other dubbed the replication crisis going on, my suspicion, and I'm part of it, we're all part of it is that we've been speeding up.

**KURT**: And it's not just slowing down the process. It's making it more transparent. That big vaccine lottery study? The research team was careful to fully document their plans for the experiment and the analysis ahead of time. Those plans were time-stamped and posted on a public database. Then, they also shared the data and the computer code for their statistical analyses. Because the new wave of research has made this kind of transparency common practice.

**ANDY:** It's a reaction to some criticisms of past behavioral science research. When scholars want to find new, exciting things that challenge old ideas, they might accidentally or intentionally massage the data, get creative with their analyses, or even make things up entirely.<sup>10</sup>

**KURT:** You might remember a guy named Dan Ariely who we mentioned in the last episode. He wrote the book "Predictably Irrational," which helped put behavioral economics on the map.<sup>11</sup> In 2021, attempts to re-analyze the data from one of his studies revealed that the data could not have been genuine.<sup>12</sup> It seemed fabricated and tailored to supporting the team's hypotheses. The team even issued a statement confirming that the data were not reliable. Now, despite plenty of allegations, we still don't know for sure *who* created those data.<sup>13</sup> But it's not great that a famous study turned out to be nothing.

**ANDY:** Recently, analysts have also found evidence that suggests other data by one of Ariely's colleagues were also tampered with to produce evidence for their hypotheses.<sup>14</sup> And it's not a new issue. Back in 2010, the social psychologist Diederik Stapel was found to be fabricating data.<sup>15</sup> He admitted that that's exactly what he'd done.<sup>16</sup> And it raised alarm at just how easily we'd been fooled into thinking his findings were reliable. This all came to light in my first year of grad school. It was quite a time to kick off a career in behavioral science.

**KURT:** So, the new generation of behavioral economists needs to take up slow, transparent science so they can be sure they're documenting reality and not just a clever story.

**LINNEA GANDHI**: I think the field of behavioral economics, behavioral science, we need to start tapping the brakes a bit. We need to slow down to get all these results out which we really do want to get out to help people and really validate that we've been going through the right process to get there. And I do hope going forward, we're going to have less of this emphasis on these beautiful, fun, amazing, exciting explanations and biases, and much more on how do I build a hypothesis? How do I look to reduce my uncertainty about the world? How do I make predictions and make statements with appropriate causal claims, again, ranges of my uncertainty? And stuff isn't fun. But that's the stuff that's actually going to contribute to learning and impact over time.

<sup>&</sup>lt;sup>10</sup> <u>https://doi.org/10.1177/1745691617751884</u>

<sup>&</sup>lt;sup>11</sup> <u>https://predictablyirrational.com/</u>

<sup>&</sup>lt;sup>12</sup> <u>https://datacolada.org/98</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.chronicle.com/article/did-a-star-researcher-fabricate-data-in-a-study-about-dishonesty</u>

<sup>&</sup>lt;sup>14</sup> <u>https://www.newyorker.com/magazine/2023/10/09/they-studied-dishonesty-was-their-work-a-lie</u>

<sup>&</sup>lt;sup>15</sup> <u>https://www.nytimes.com/2013/04/28/magazine/diederik-stapels-audacious-academic-fraud.html</u>

<sup>&</sup>lt;sup>16</sup> <u>https://web.archive.org/web/20120529001933/http://bd.nl/nieuws/tilburg-stad/stapel-betuigt-openlijk-diepe-spijt-1.121338</u>

## Conclusion

TIM: Seems like "the kids are alright," as they say.

**KURT**: I agree. I'm excited about what all three of these researchers are doing to take behavioral economics to new heights.

**TIM**: Hard to think that it wasn't that long ago that this revolution in economics really caught steam. We started this series profiling a bunch of rebels who dared to question the neo-classical model of rational decision-making. How their research was initially shrugged off as merely highlighting some interesting anomalies. As Danny Kahneman said, 'they thought we were ridiculous.'

**KURT**: And yet they persevered. Eventually, this new appreciation for the complexities of human judgment and decision-making made its way into governments, large companies, and the mainstream press. Their work spawned countless peer-reviewed papers, millions of views on YouTube lectures and TED talks, and popular books that have been read around the world.

**TIM**: Amos Tversky died in 1996, but in 2002, Danny Kahneman was awarded the Nobel Prize in Economic Sciences for their work together.<sup>17</sup> Kahneman was the first ever Nobel winner to have a doctoral degree in psychology. Then in 2017, Richard Thaler was also awarded the Nobel Prize in Economics.<sup>18</sup>

**KURT:** The first generation of behavioral economists had their work cut out for them, but they put their heads down and let the data do the talking. Now, here we are.

**TIM**: It also sparked a general explosion in the role of applied behavioral *science*. Although we highlighted a bunch of ways in which governments and companies realized that they could improve *economic* outcomes by understanding human behavior, now there's an even wider appreciation for how *all sorts* of practices could be improved by understanding how people think and act.

**KURT:** That's right. On Behavioral Grooves, we've talked to almost 400 people who have been studying and applying behavioral science in general. The field has gotten massive.

**ANDY**: One of the things I find really exciting about the story, too, is how it's informed other social sciences. Take political science. There once was a time when political scientists talked about people's political views just like economists talked about their financial decisions. They assumed that people's political opinions and voting decisions were based on a full, careful assessment of the information available: the policies being proposed, candidates' positions on key issues...those sorts of things. But eventually, it was clear that that's *not* always how it works. People use thinking heuristics and reason in a biased way, coming to simple conclusions and motivated to stay attached to a political party.<sup>19</sup> I think

<sup>&</sup>lt;sup>17</sup> <u>https://www.nobelprize.org/prizes/economic-sciences/2002/kahneman/facts/</u>

<sup>&</sup>lt;sup>18</sup> <u>https://www.nobelprize.org/prizes/economic-sciences/2017/thaler/facts/</u>

<sup>&</sup>lt;sup>19</sup> <u>https://www.cambridge.org/core/books/taming-</u> intuition/8AB97A7DBDCC0AEE936E8E1BA8476EC5

this shift in how we understand politics owes a lot to the work that shook up economic assumptions.

**KURT:** But don't forget that just because we're irrational doesn't mean we're doomed. Being irrational is not being stupid, it's being human! We just need to accept it and plan accordingly. We saw how people can make better savings decisions by being nudged in the right way. People will pay their taxes on time when they get the right messages. Kids will do the work to apply for financial aid in college if we understand their all-too-human biases.

**TIM**: That means you too have the power to make better decisions. You just need to treat yourself as the human being you are and not the totally rational robot that neoclassical economists assumed you were.

**ANDY**: Because that assumption? That's what was ridiculous.

#### [Credits]

They thought we were ridiculous is written and reported by Andy Luttrell, Kurt Nelson, and Tim Houlihan. Editing and Sound Design by Andy Luttrell. Thanks to Ben Granlund, Alex Belanger, and Alexa Cover for design and marketing. And thanks to Mary Kaliff and Caroline Schaeffer for other assistance along the way. Music licensed by Blue Dot Sessions and Epidemic Sound. Transcripts with key source citations are available, check out the episode webpage. Thanks to the guests whose voices you heard, including Richard Thaler, Colin Camerer, Richard Nisbett, Liam Delaney, Linda Babcock, and George Loewenstein. This miniseries is a co-production of two podcasts: Opinion Science is hosted by Andy Luttrell and explores the science of people's opinions, where they come from and how they talk about them. Behavioral Grooves is hosted by Tim Houlihan and Kurt Nelson and explores our human condition through a behavioral science lens. You can find more information on both of those shows in the episode description. Thanks for listening. We'll see you next time.