Calling DIBS

Episode 108: "Boosts, Nudges, and Nuance"

with Takuro Ishikawa, Senior Behavioural Scientist
with the BC Behavioural Insights Group (BC BIG).

Tak Ishikawa returns to the podcast to help us understand the recent "debate" about boosts and nudges. To help ground the conversation, we disentangle terms like heuristics, biases, nudges, and boosts. In the end, Tak and I firmly agree that there is no debate -- both boosts and nudges are extremely valuable. Instead, it's about nuance and choosing the right intervention (or combination of interventions) for the situation.

Transcript:

KIRSTIN APPELT, HOST: Welcome this edition of Calling DIBS. I'm your host, Kirstin Appelt, research director with UBC Decision Insights for Business and Society, or DIBS for short.

Today we're Calling DIBS on Tak Ishikawa. Tak is a senior behavioral scientist with the BC Behavioral Insights Group, BC Big, and we talked to Tak back in episode 36, which is a while ago now. We're happy to be welcoming him back. And today we're going to talk about a topic ripped from the headlines. So with that teaser hanging there, welcome back to the pod Tak.

TAKURO ISHIKAWA, GUEST: Thank you very much. Thank you for having me.

APPELT: So you've been on the podcast before and you told us about your journey to BI. I thought maybe we would just do a bit of an update. Can you tell us a little bit about where your BI journey has taken you since winter 2022?

ISHIKAWA: So since then, we had, or I had the opportunity to do quite a lot of interesting work. It was in those days a little bit of the post pandemic or vaccine work that we did. We did a lot of collaboration with the BC CDC, the Center for Disease Control here in the British Columbia province in Canada, supporting basically the vaccine distribution program. We also had some projects related to organ donation that was interesting. Because it was an interesting challenge in the sense that it was more at the office level.

So we had to figure out a type of trial that wasn't a necessity and still get us some elements of causality with some levels of control. And indeed we were able to get some good effect sizes on, I think one of the posters that we use produced like a five-fold increase in organ donation, mind you. That was post pandemic. The organ donation rates at that point were very low. So it's kind of easier to get them to a big level, but still as a big effect.

We have also a couple of projects that I would say that I'm most proud of because those kind of resulted in high level policy. One was supporting the Ministry of Labor on implementing the mandatory paid sick leave, so

permanently. The ministry at that time during the pandemic made it as part of the emergency. They wanted to make it permanent and they needed to conduct a little bit of research on how people are using it and a lot of myth busting as well. The idea that people have that if you offer five days, people are going to take all five, why don't you offer 10? Who are going to take them, essentially the people are going to abuse the system. So we did a little bit of myth busting or behavioral myth busting, let's put it that way, to do that. And that turned out into a legislation that today benefits roughly 2 million British Columbian families. So that's pretty big.

The other one that is interesting is something that actually happened recently is that in this one, we were talking about reducing carbon footprint in the government, specifically related to supplies. And we started talking about paper and trying to encourage the government to use more green options to purchase. In the analysis that we did, we actually did more like a system level analysis.

We found that part of the reason it wasn't happening was because there was no policy very clearly telling people you need to choose this and people in the BC public service have always preferred to go for the cheapest option because we're using taxpayer money, right? So having a clear policy was more like the result. It wasn't really a matter of behavior, like an intervention on behavior. And recently we heard that they actually wrote a policy. So that was another one.

Yeah, very exciting, very exciting work. And then on my own learning and journey besides these experiences, I also had the opportunity to go to Germany in 2023 to go to the Summer Institute on Adaptive Rationality. And the theme of that year was the science of boosts for boosting. So that was by the Max Planck Institute in Berlin. And that was really good too. I learned a lot.

APPELT: Yeah, what a busy few years. I mean, having projects where you get to have that amount of impact is just amazing. And then getting to do learning at the same time, both in the projects and outside of the projects. What a great few years.

I think that's probably a good segue. This this talk about attending a summer camp on boosts. So boosts, they're not new. Know, this was a few years ago, you went and it's not like they were even new at that point. But they've really gotten a burst of attention. Their own boost in the press, if you will. This spring and summer. And so I thought that would be a really interesting topic to talk about today. And I was wondering if we want to start with just saying what is meant by boost in the context of behavioral science?

ISHIKAWA: There might be a more higher-level definition, but let's start with kind of like a lay language definition of what a boost is. You can think boosts as basically training people to use heuristics in a smart way, right? And it comes back to the idea that heuristics are these shortcuts that we use to simplify sometimes complex decisions or complex problems, but also to make these decisions or solve these problems in a more efficient way.

Those heuristics, generally speaking, are useful. They solve the problem sometimes. And also oftentimes they may lead to biases, which is kind of like, know most of us who work in the behavioral science. So the boosting basically consists on focusing on the hardware heuristics are actually useful and work very well and training people to know when to use those heuristics, right? And in that sense, you're enhancing decision-making competence. We need to make some distinctions too between boosts and something that is more like a information provision because sometimes boosts can be confused with just giving people information.

And in fact, there was a paper a few years ago that George Lowenstein and some co-authors published when they were describing boosts. Boosts is just information provision. I mean, it could be seen on the surface as information provision. The best way to describe it is to focus on the heuristic position. So for example, if I am trying to communicate the risk of vaccines and I basically write a bunch of information about vaccines and how they're safe and maybe I get a doctor expert who talked about why vaccines are safe. And explain a little bit of how they work. That would be more like information, right?

What makes certain information a boost, it will be in this case of vaccines, if we present the risk of side effects, for example, in a format that we know people find it more useful or easier to understand. The research that some people who work on boost have done is that it's easier for people to think about probabilities when they are presented in terms of frequencies. And if you present them in graphical form with dots or with Venn diagrams, people are more likely to understand those probabilities.

That will be a boosting, presenting this information in a format that research on cognitive psychology or decision-making have demonstrated that is easier for people. So that's kind of the main distinction between just giving information and boosting. Boosting tends to target competencies. Your ability to make decisions doesn't really necessarily target behaviors. Maybe the end goal is to change behavior, but what it's targeting is competency, decision-making competencies.

Another element is that boosting tries to enhance autonomy, meaning that you're not deciding which direction people should be going is just like, I'm going to give you this ability to understand the problem and you make the decision based on whatever you consider to be valuable to you, right? And the only condition for certain boosts that require more training is that the person has to agree and wants to want to improve, right? Tt requires not only an intention, but there's some willing to spend time and effort to learn how to improve the decision.

APPELT: That is a very good intro to boost. I like how you did both the kind of short version and the more detailed version. And on the face of it, it wouldn't sound controversial at all, but it has in some ways been a bit of a drama over the last few months. And I think this is something we've seen before that when something is in the news to make it a headline, people talk about it in a quote unquote, or context as if it's a shiny new thing replacing an old thing. And this is something we saw back in the early 2010s when nudges were new on the scene.

Some people were talking about nudges were replacing old tools, which was this misunderstanding that behavioral science was a silver bullet that was going to replace everything from regulation to taxation. And of course, that's not what nudges were and no clear-eyed behavioral scientist or practitioner was leading with that idea. It was always the case that nudges and behavioral science were an additional approach to complement other ways to change behavior. So we saw this kind of or debate then. Then a few years back, there was this I frame or individual frame versus S frame or system frame.

And in reality, once again, it's not an or, it's an and. Both are important and we want to change both individuals and systems. And we actually covered that debate in episode 63 with Jay-Z, if anyone wants to revisit that one. So now we're a few years further along and we're seeing kind of a new or, which again, we'll

talk about, it an or or is it an and, but the headlines sometimes are suggesting in the last few months that nudges are out and boosts are in. And so I'd love to chat about this.

And to my mind, part of it comes down to a misuse of terminology like heuristics biases and even nudges. And so you even have already mentioned heuristics and biases. And I wondered if we want to just start by clarifying what we mean when we use these terms. So how would you define heuristics and biases?

ISHIKAWA: Oh, okay. Yeah. That's, I agree with you that part of it might be the use of terminology. In my case, heuristics, as I mentioned, are just rules of thumb or mental shortcuts that humans either individually or collectively have developed to solve problems and the idea is to solve problems with increased efficiency. That's the simplest way to put it is that heuristics also comes in a very wide range of sophistication, right?

You might think a heuristic as a child may touch a stove burner that is red hot and maybe from then on learns that red things are hot that probably should not be touched. And then this kid avoids red things from that moment on, right? Is it an accurate way of distinguishing what can burn the kid or not for that kid? Probably not, but it's sufficient to avoid being brought accident, right?

So we can come in a more sophisticated types of heuristics. And this is something that I learned recently as I was going through the process of purchasing a home and choosing a mortgage. And I was saying this mortgage broker who has a YouTube channel and I have to give credit because he's actually pretty smart heuristic that he was offering. Mathias is Nolan Mathias is the name. He basically said, how do you choose between a viable rate, right? Or in the United States they call it adjustable rate, I think. I had a fixed rate, interest rate because those are different, right? So fixed rate basically. Is a little more made of a safer choice in the sense that you choose and you pay basically the same interest for five years or three years, whatever you choose.

And the valuable rate is a little bit of a more a risky choice in the sense that it changes depending on whatever the central bank of the country you're in, in this case, Canada, changes every quarter or every few months, right? If you choose well, then you can save a lot of money. But the question is, how do you choose? So this guy said, well, the rule of thumb is that you just choose the mortgage that is the lowest interest rate at the time you're taking your mortgage. And he's basically providing a bunch of statistical analysis and curves and time series. This is what statistically speaking is going to give you the best value.

Is it perfect? No, it's not perfect, but this is the rule of thumb that you can use. So that's the level of sophistication for a heuristic that that involves a lot more science and a lot more math, but it's still both this hot stove red color and this mortgage heuristic can be considered heuristics, right? And that's basically the way individuals and collectively all on their own have learned to use to deal with the uncertainties and the complexities of the

APPELT: Yeah, I think that's a great definition and some good examples. And then I think part of where the confusion comes from is people often say heuristics and biases as if they're the same thing, when in fact heuristics are the shortcuts and biases are the systematic errors that can come from overuse of heuristics. Biases are errors, they tend to be bad, but the heuristics aren't necessarily bad. Heuristics are shortcuts which can be used well to make things better and they can be used poorly to make things worse. So another example, that I learned when moving to Vancouver is that here, because there's not a lot of left turn lights or left turn lanes, you usually, when the light is turning yellow, you know that two cars are gonna try to go

through the intersection on the yellow, which, you know, usually works, but sometimes leads to a car accident.

So if you're using, if everyone's following the heuristic together and coordinating, it works really successfully. But it doesn't always, so it can lead to systematic errors where people are all trying to be in the intersection at the exact same time. So heuristics are the shortcuts and biases are the errors, so we should be careful when we're talking about them to not conflate them. So I think another term that sometimes leads to confusion, which is kind of funny because it's a really central term, But the term nudges, I think because it's such a easy phrase, we kind of overuse it and we use it to mean a whole variety of things when technically a nudge has a specific definition. And do want to jump in there and talk about how you define nudges?

ISHIKAWA: Yeah, yeah, yeah. So I would like to tell maybe a little bit of a story of how I kind of became interested in nudges and interested in also boost because it's time when I was working in injury prevention, right? In injury prevention, there's, I mean, there's different typologies, but one important distinction is between what is called a passive intervention and an active intervention. And there's kind of a spectrum between those two. An active intervention is when you tell people that you need to drive and get the competencies to drive very well, obey the norms, and basically is the way to prevent car crashes and injuries related to car crashes, right?

So it's upon the individual to enact those behaviors and to do them correctly in order to prevent injuries. So that's one extreme of the active intervention. In the other end, you have passive interventions to reduce injuries. So for example, an airbag is an example of a passive intervention. The individual doesn't have to do much. You just have to sit down. Put the seat belt on and start the car. And if a car crash happens, the airbag deploys and reduces the injuries. That's why we call it passive intervention.

What was interesting to me about, and not just when I was learning about it, working in injury prevention was the fact, oh, this is interesting because these are passive interventions that are also behavioral. Typically, in injury prevention, the education and behavior change were considered more in the active side of intervention. But okay, if you modify the environments, in this case, the choice environment, people don't need to make any effort.

And so that was the part that was really interesting and a nudge in this context, and that's how I use it, is any elements in this environment, the choice environment, that when placed in the moment when the person is making the choice, and I can steer people's decisions in the direction decided by the person who is putting those elements in this case, like a health practitioner or a health official. Again, we can make a few distinctions now. And it's the fact that not all nudges are necessarily based on known heuristics, right? A lot of them are based on heuristics and biases. Some of them nowadays, not really.

But the main point is that you display them in the moment when people are making the decision. And if you choose well, the person is going to make the decision that you predicted.
APPELT: Yeah, I think that is a lot of a lot of really good value in what you're just saying. And I think another key point, just to reiterate, is that nudges are also ones where we're not increasing the friction of choosing another option too much. There's a behavior that's your nudge toward, but equally you can choose to choose a different option. So they're what we call freedom of choice preserving to use the technical language. And

then I think just to zoom out a little bit, it's a lot of times because nudge is such a handy phrase, people use nudge when they actually mean another type of behavioral insight that is not a nudge.

So something like a behaviorally informed tax that looks at how people behave to design tax policy falls within behavioral insights, but it wouldn't be a nudge because it does very much enforce a specific behavior and make it hard to choose another behavior. So nudges are a subtype of behavioral insight, but there's many other behavioral insights out there.

ISHIKAWA: No, and this is a good point.

APPELT: Also, to say that nudges are a subset of BI, but they're still a broad bucket. Like everything from default to social norms to simple reminders can fall within nudges. So anything that tries to make them just a single thing is really oversimplifying. So we've probably already started to hint at some of the takes we'll have, but there is some clickbait type headlines recently that are suggesting that it's out with nudge and with boost. So I was wondering if you could tell us a little bit about how you see that so-called debate. Who's saying what and why and how would you describe it?

ISHIKAWA: Yeah, well, honestly, I'm not really privy to some of the most recent debates. Before I continue, I'm wondering what have you heard?

APPELT: Yeah, absolutely. I think I would say the folks who are doing the research and practice are characterizing these things as nuance. But by the time it gets into a social media post, it might be a bit more abstracted. I think that's where I've been seeing more of the kind of hot takes of out with the nudge in with the boost. So even had things forwarded to me about students who were saying, oh, you know, how's this going to impact the certificate program now that nudges are out?

ISHIKAWA: Yeah, it's pretty much exactly what I'm seeing. And this is my assessment to some extent. Behavioural science kind of has become a victim of its own success. And by success, I mean its own popularity, right? Because when you try to mix science, any science, palatable, digestible to the general audience, you lose nuance. It's just going to happen, right? You lose context, you lose complexity. You have to. The reason when I started defining heuristics, I said like, is the short version and this is the a little bit more complicated version because that's an issue. There has been a lot of effort in making all these signs of behavior palatable and popularized.

So the book Nudge presents most of the essence of what has been done in decades of research of very robust effects and findings. But it presented in a way that probably misses a lot of the nuance and a lot of the discussion and research that goes into it. Another example would be the EASE framework, right? Great tool, very practical, people learn it easy, intuitive, boom, done. But at the same time, when you simplify these things is that people acquire a simplified view and understanding of these concepts. For example, I talking about recent state and mortgage. I was watching a lot of your videos on mortgages and stuff. I was pleasantly and a little bit pleasantly surprised that even these random mortgage brokers were talking about money of kind and loss of vision and all of these. But what you hear is that that is not exactly loss of vision and actually saying, oh, people are not willing to drop the price of their condos in this situation right now because of loss of vision. Loss of vision is a little bit more than that. It's not just people being afraid of losing, everyone shades losing.

Right, that's obvious. Loss of vision is actually a little bit more complex. There's a little bit of research. There's actually some mathematical models related to loss of vision. And it's more about the fact that you feel losses more deeply or more harshly than wins or gains of the same magnitude. There's a lot more to it, right? And I think that's what's happening when people, I would say that happens in two levels of conversation. There is the lay language conversation and people read that and have this conversation at this level. And there is trying to put nuance on it, right? You can see it also even historically as well, right?

Michael Hallsworth gave his keynote speaking a note in 2021, I think it was. He was, oh, I'm going to say some things that you might not like. And that was the preparation for the manifesto that came later that day. Yeah, I know that we promoted yeast and it's great. And that we need to start giving a little bit more noise and now we have to study complex systems and now have to integrate more. So that's, think what is happening. For me, think the impetus for doing this, which I appreciate very much is we need to start, one, getting the terminology right and try to promote the correct use of the terminology.

And two, which is something that Michael Hallsworth has been trying to do with his manifesto and many other people as well. It's just, need to, I'm to use this term, level up. We need to level up this knowledge and expertise on behavioral science. In that context, I think it probably goes without saying that I am not really on either term, right?

APPELT: Yeah, I would agree 100%. I think you pulled out two really key ideas. One, that there's the click baitification to coin a new word of something that ends up when you're writing, even within a journal article, the way you capture the results in the results section versus the way it's in the discussion and then in the abstract and then in the title, it's if you're watching the news, they're not gonna say, after the break, we'll talk about and then give you a really detailed nuance. They're gonna say after the break, what you don't know might kill you.

It's always by necessity, gonna lose all the nuance and be heightened. And then I think like you said, in an effort to make be more widespread and more accessible, you do sacrifice some of the nuance so there's finding that compromise of making DI accessible, but making sure that people who are working in the space do have the requisite understanding that the ideas are based on science and that they are, for example, like you said, with loss aversion, it's not just that people don't like losing, which is very obvious, it's that people don't like losing and that's to a certain amount relative to how much they like the same amount in gains. If you read the original paper, it is very complex with like, you like you said, a modeling equations.

And so there's a, there's gotta be a happy medium where we capture the nuance, but we also, make it accessible. And I think, you know, that's a space where we're all still navigating what's, what's the right level. I certainly am not on team nudge or team boost. I'm on team and which is, think, where I land on most of these debates is that there's a lot of great tools out there and it's about understanding when to use which tool, which maybe is a good segue from the quote unquote debate, which we've maybe put to rest to the idea of boost and nudges are different tools and they both have use cases. So I thought maybe we could get into some examples, either examples or rules or times when you think a boost is a better fit than a nudge.

ISHIKAWA: Yeah, I think In light of this conversation, I think maybe we want to level up a little bit and expand it because I think in many ways it's also related. In this conversation about the I frame and S frame, I think is

missed is the fact that if you have a touch point, chances are there is a system level intervention that allows you to have that touch point. I'm just going to give you an example of this. Let's say like a breast cancer screening, We can use nudges to invite people to come to get the screening, right? Or a vaccine program we can use to encourage people to use the program to register, right?

But those programs didn't come out of the blue. Somebody had to get the funding, get a bunch of partnership in place ensure that these places that does do the testing work on the testing, the contact. There is a system already, a system level intervention under which you embed your nudge to get more people to come to that place.

And that to me is one clear example when probably using a nudge is a great tool, primarily because If somebody is registered in that particular program or put their phone, mean, you know that that person has the intention to use it, right? So, and probably what they need is a little bit of a nudge. So they meet the appointment so they don't forget that it's been a year and they need to next your mammogram, right? Similarly, when you're talking about boost and nudges, there is almost, I'm not exactly, exclusivity between one or the other eye, right?

For example, you can use boost, it's better like when I was doing the research in injury prevention is you can use nudges to encourage people to buy a child seat, right? That is to prevent injuries to children who are riding, right? The thing is that that is a behavior and also nudges are really good with these things. But you're going to reach a point where you need people to have judgment. You need people to be able to use some knowledge and some problem solving skills because for example, something as simple as installing a course, it can be incredibly complicated and there is really no way to give these people instructions on every single possible way to use them.

And by that, I mean, it depends on the brand that you make and it depends on the car where you install it. Is it an old car? Is it a new car? And then that's when people just get confused about how do I do this? And basically what you need to know, no, you need to make sure that the seat has this, this and this and this and try to give the people the confidence and the competencies to solve the problem. And that applies to a lot of things in health, which is kind of the reason I became interested in boost is that a lot of those behaviors in health are nuanced and also require some judgment and also require some level of repetition.

I remember that when I started thinking about this, oh, but if people are required to repeat the behavior, we can just put in the knowledge and every time they are exposed to the choice environment, they will repeat the behaviors. For example, if you change the menu in a college cafeteria, because every time the person, the kid or the student goes in, just, okay, they buy the healthy food. So that's one way.

But a lot of the times, for example, if you want people to engage in physical activity, yeah, you can get people to go to the gym, but there are certain requirements that you need to meet in order to get the full benefits of the physical activity has to be. Certain amount of minutes per week of moderate to vigorous, right?
But also if you have chronic obstructive pulmonary disease, for example, COPD, that's a completely different physical activity that you need to do. So again, the behaviors are nuanced and so you will need to get people to understand what the problem is and to make a decision for them to know, oh, am I overexercising? If I suffer from this chronic disease.

Those are examples when you need to kind of probably think about when are you going to use a nudge and when are you going to use a boost. But if you notice in this example, it's simultaneously you use both, right? But just to kind of summarize in terms of behavior, nudge would be good when you have discrete behavior like register to organ donation, buy a car seat, right? Go to the gym. So that's when you probably would want to use nudges.

The other element on the flip side is that if the behavior is a little bit more complex, requires judgment because there's no single answer, then you're probably better boosting people's ability to make the choice and solve the problems. Number two is a lot of the behaviors that you want to promote in health, you don't really have a clear choice environment, right? Or the choice environment is complicated, right?

If I want parents to correctly use a car seat, how I get into the car of the moment where what is not that obvious to do that. So probably it's better to just enhance the competencies of the person so they can do it if they're going into picking up the kid from daycare or whatever, right?

So that's another option. If you don't have a choice environment, probably you're better off using a boost. The next one is what clarity do you have about the intention and the goals of the person? And I think this is something that maybe we want to develop some standards as a community and criteria to you because... We also have been pretty loosey goosey with what counts as intention, right? And I think we need to have a little bit of more clarity on that for us behavioral scientists. But if you have any doubt about what your goals are, then might as well just use a boost and just let people make that decision on their own.

So the other rules, I mentioned, is whether or not there is a marked heterogeneity of goals also, or do individuals have, different individuals have conflicting goals. This is also related to the fact that there is a risk that when you have blanket interventions that basically treat everyone the same, there is a risk, and this is an important element in health, there is a risk of increasing inequalities, right? Because some people may have more access or because some people may experience additional barriers.

Removing certain barriers for a group of people may just create these inequalities. For example, if we send a very successful behavioral intervention combining boost and nudges to increase participation in cancer screening programs, and turns out that is those are more difficult to access for indigenous people in rural areas.

What we're doing is benefiting the people who typically gets the benefits, is like people living in metropolitan areas, right? So if you find a lot of heterogeneity in these individuals, you probably want to reconsider or at least adapt whatever intervention you're doing. If you're doing a nudge, okay, you need to add a few things to that in order to ameliorate the potential inequality that is created by that. The other elements is whether or not the aim is to foster generalizable lasting behaviors. And this is another important reason.

When I was trying to implement nudges, I ended up, oh, maybe boost had more appropriate because recommendations and guidelines are updated on a regular basis, right? I remember that back in 2012 when I was working on car seats at the time, there was a big change in the guidelines by the American Periodical Association and of course then the Canadian Periodical Association. And the thing is that if people learn only the guidelines which is typically what public health would, the public health approach. Let's get okay people

on these guidelines. Use these things this way. If your child is this tall and this weighs this much and is this age, then you do this.

And then the guidelines change like, oh, so what are you telling me? Like everything that I was doing is wrong? Are you basically saying that your science is not a good science, right? And. And people have a difficulty just adapting to the new rules. If you're basically nudging people to do certain things and then how do you keep the behavior despite the fact that the norms have changed? And the reason which are very useful that is that if you know really the bottom line, then the meaning of the information and the reasons why it's important to use a booster.

It doesn't really matter if they change the age from eight years old to nine or doesn't matter. I know that what happens is that the child has not fully developed and the muscles are not fully developed. I need to get additional protection for my child. So boom, done. That is kind of the other element to the side between boosts and nudges. So the final thought that I have about it and it's the reason I, if you notice, I have refused to say one or the other and skip it because to me it's a little bit weird that somebody has at their disposal a number of toolboxes and I want to use this one because it's the one that I learned and it's my favorite. No, sorry, no, you should be using everything that is available.

And if I'm better off if you combine things, the reason I'm coming probably, I don't know if that's easier for me to see because I come from a different place to behavior science, that is injury prevention. But in injury prevention, you have what is called the five E's. Education, engineering, enforcement, the environment and equity, right? And no one is saying that one is more important than the other.

Even those who work on education, which kind of a generic term for behavior change, right? Yeah, I recognize this. I recognize that you need to develop a culture that is better every time, of course. And that's the engineers oh mission or objective. So nothing is off the table in that sense. My invitation for anyone in these papers and to read beyond the headlines is just use the tools that scientists have developed and have put in front of you.

There's no reason to just reject one or the other because one is newer or whatever. I do think that maybe part of the reasons sometimes feel that way beyond the headlines is that When scientists present something new, they always present it in contrast with what was old. And a lot of people interpret that as a criticism or they're basically saying that this is bad. No, no, no. They're just trying to show what is the part that they do that explains what the other theory doesn't. From nudges to boosts is a little bit of the same thing. They have to.

For many years, we focused on the bad part of heuristics. What they say is, no, no one is saying that that doesn't exist. The bad part of heuristics, biases, that is still a thing and they're still sometimes useful to use them. But what we say is that we should go to recover this positive aspect of heuristics. And that's why they always insist on going back to Herbert Simon, because that's the one who kind of, that was according to them this with the original spirit of the notion of bounded rationality. When they, because they do so, they use in the paper, they use the word replace. When they say replace, they're not saying which they design that we have this model and this model includes everything that came before and also these other things. That's it. That's what it means. No one is saying this is bad and we should just abandon.

APPELT: No, I agree. Think it's a newly publicized option to add. It's not a replacement. And I would say maybe to just distill what you said, we opened by talking more about heuristics. If you want a heuristic about when to use a nudge or a boost, it depends on the situation. It all comes down to your exploratory research. You want to choose the right tool for the right problem. So learn about the problem, learn about what the barriers are, and then evaluate, is this a case where specific nudge works or that specific nudge works or this specific boost works or that specific boost works or is it a case where we're going to have a boost in the nudge or two nudges in a boost. So it's about coming up with the right set of tools for the problem.

There's not going to be just a if then guide where you can say like, it's this problem. So it's going to be this tool. It's about the specific context, the population, the problem, the barriers, all of that comes together. So explore before you choose would be the heuristic. I think just to maybe give some other examples outside of the health context. So one of the ones that comes to mind for me is some of the most famous early nudges were around financial behavior and nudging people to save more.

And a nudge can help you save more, but it's really hard to have a nudge help you save at the right rate for you. If you're someone who is young, or someone who is closer to retirement, you should be saving at different rates. If you're someone who has a high debt load, then maybe you shouldn't even be saving. You should be paying down debts rather than saving. So boosts could help you understand, given your situation, what's the right savings rate. A nudge could get you to save, but it's going to be a lot harder to come up with a tailored nudge that gets you to the correct rate for you.

ISHIKAWA: That's a great example, yeah.

APPELT: Yeah, sometimes it's the nudge is And this is a generalization, there are nudges that are very specific, but often nudges are more of the blunt tool where they aren't always able to take into account, like you said, the differences between situations. Sometimes they do, but often a boost can be really helpful in that kind of situation. Well, any other considerations we want to bear in mind or other thoughts you wanted to bring to the table for our Nudge vs. Boost, which is actually a nudge and boost conversation. Or nudge and boost and system and all of the things because that to me I think We have reached the point, and by way I mean behavioral science has reached the point where we are tackling more complex challenges.

Kind of goes back to the way I started with this legislation, things that you can do that are pretty impactful. And that basically means that we reached the point where we need to level up. We need to start using the terminology correctly, start using the methodology correctly, start expanding our knowledge to other things, Not only boost. There's a lot of other, because as you mentioned, applied behavioral science existed before nudges. A lot of that is kind of based on rationality, like all these theories of behavior change, like the theory of planned behavior.

Right? No one is saying that those are invalid. They still work. They still are relevant in some instances. I think these days what we need to is just to, I don't know if they were right, is maturity as a profession, as a community, as a discipline, but we need to start basically doing this exercise, clarifying this terminology and moving from the easy simplest definition for lay language to nuanced understanding of everything that we do.

Because as you mentioned, everything is related to the situation and the more nuance you have, the more you understand and the more you know, the more flexibility you have to do different interventions and basically

play around the obstacles that you're going to face anyway, regardless, and still come up with a good intervention that produces the intent that you decide. What about you?

APPELT: Yeah, I think it comes down to an idea that I've talked about or a phrase I've used a lot, which is behavioral science is a big umbrella. So a lot falls within that umbrella. And we're not trying to carve off pieces of the umbrella and say that certain parts of the umbrella are better than others. All of these tools, like you said, boost, nudges, theory of planned behavior, there's so much that falls under this umbrella and all of it works in different situations and some work together, some are better in different situations.

I think the idea of getting more precise in how we use the language will open up more opportunities. I think something else that's happening in this space is people are, of course, still doing the smaller tweaks to existing products, but also moving up to behaviorally informed policy and trying to use behavioral science from the beginning rather than always just at the end. And part of that is, of course, going to be recognizing the parts beyond nudges and boosts and the tools to understand behavior and change behavior in other ways. I think there's room. For so many tools and so many perspectives. And so it just makes it such an interesting space to work in.

ISHIKAWA: Yeah, yeah, absolutely. Absolutely. It's kind of like a playground to apply multiple things.

APPELT: Exactly. The behavioral playground. Well, we've used up a lot of your time this afternoon. I'll just ask you one final question, which is, do you have a message for our BI practitioners in training, the folks new to the field? I mean, this whole episode has been really good for those folks, but any other message for newer folks to the field?

ISHIKAWA: No, I think the newer folks will be being exposed to this quote unquote, controversy. Yeah, make the effort to go beyond the headline, right? Yeah, I don't know if this is an issue of the times when people are getting used to short videos and TikToks and hashtags. Go beyond the headline and you will be surprised. You'll be pleasantly surprised of the nuance and complexity that we're trying to put out to do this work.

APPELT: As you learn, learn deeply and not just superficially. And you'll be, like you said, both rewarded and I think really interested to see the layers of information that are there.

ISHIKAWA: Yeah. And that doesn't negate that this is a good tool. Again, it's not either or, isn't it? Exactly. Just look beyond that. And there's a richness there that is not in the obvious part of the tool.

APPELT: Yeah. Go beyond the one-pager, too. Look beyond the executive summary. Yeah, that's great. Well, thank you so much for being on the podcast today. I think there's this has been such a rich discussion and I think it's very timely given some of the headlines and it's really nice to talk about the boost and nudges, but also just some of the other ideas around the forced dichotomies that are really not dichotomies. So it's been a really great discussion and thank you for doing work in the space and thank you for thinking through it all with us today.

ISHIKAWA: Okay, no, thank you for having me. And thanks to our listeners for joining another episode of Calling DIBS.

Calling DIBS is recorded and edited on the traditional, ancestral, and unceded territory of the xwməθkwəy̓əm (Musqueam), Skwxwú7mesh (Squamish), and Səlílwətaʔ/Selilwitulh (Tsleil̓-Waututh) Nations. Calling DIBS is edited by Rishad Habib, Siobhan Cook, Isabella Jaramillo, Parnian Ashrafi, Kashish Khatri, Olin Becker, and Kirstin Appelt. Intro and outro music are excerpts from “resonance” by airtone (2020; http://ccmixter.Org/files/airtone/61321), licensed under Creative Commons Attribution Noncommercial (3.0).