


# Episode 69: "Nudges Work, But Context Matters"

*with Stephanie Mertens, Behavioural Scientist at the Ontario Behavioural Insights Unit.*

*Foundational research developing new theories. Applied research testing solutions in the field. Stephanie Mertens helps us explore different ways of contributing to the behavioural and decision sciences. She also shares her takeaways from her meta-analysis of BI's first decade: Nudges work, but we still have a lot to learn about how, when, and for whom. Stephanie explains how she applies these insights to her work developing and testing BI solutions.*

*Transcript:*

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KIRSTIN APPELT, HOST: Welcome to 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 Stephanie Mertens.

Stephanie is a Behavioural Scientist at the Ontario Behavioural Insights Unit. She previously completed a PhD at the University of Geneva and has also spent time at Princeton University, the University of Victoria, the University of Amsterdam, and Utrecht University.

I first got to meet Stephanie when she was considering what to do with her PhD and I'm beyond thrilled that she chose to join Canada's behavioural science community, we're very lucky to have her. And whether she's in the lab or in the field, Stephanie does really neat work, so I'm excited to talk to her today about all she's been up to.

So welcome to the podcast, Stephanie.

STEPHANIE MERTENS, GUEST: Hi! Thank you so much. It's a pleasure to be here.

APPELT: Do you mind starting off by just telling us a little bit about yourself?

MERTENS: For sure. Although I feel like your introduction already gave away most of it. As you said, I'm a behavioural scientist with the Ontario Behavioural Insights Unit. I joined the team around two and a half years ago I want to say, and before that worked at the Swiss Center for Affective Sciences at the University of Geneva, in Switzerland, where as part of my Ph.D., I conducted research on the cognitive and behavioural effects of choice architecture on decision-making.

APPELT: Awesome. And as regular listeners know, we often like to dive into people's paths to BI because for most of us, they have some twists and turns along the way. So what was your path to BI? How did you first become interested in behavioural insights?

MERTENS: Yeah, that's such a good question. And looking back, I feel I've been interested in BI long before I knew a term such as BI, so it started with me probably right after high school. I had to decide what I wanted to do with my life. I still think it's sometimes crazy how we're so young and already have to make those very important decisions in life.

But I decided that I wanted to study psychology mainly because I was so fascinated by kind of the quirks of human behavior. Like, why do we behave the way we do? And why is it that we're so influenced by what other people say and do? So I was really fascinated by that. I think it came as a surprise to friends and family who were like, “Oh, we didn't know you wanted to become a therapist”, but it was like, “No, no, no, no, no. I don't want to become a therapist. I’m truly interested in the non-clinical side of psychology.” And so kind of without even having spent a minute in a lecture hall or anything like that, I said I wanted to study psychology, to then go out and design dashboards on cars, for example, to help people drive more safely. And to me, it's so funny now looking back at that, because what I do now is not too far from that initial description, even though, again, like at that point, I didn't even know what psychology truly was and what those different career paths would look like. But yeah, that was my kind of initial interest in psychology.

I went on to focus in my Undergrad and Master's in social and cognitive psychology, and then only later on, like as I started my PhD, kind of had my first official touch point in contact with BI where I learned about behavioural economics, about heuristics, biases, and how to kind of supply all of that knowledge to encourage positive behaviour change. So somehow I kind of ended up in BI and I guess there was kind of this, this red line going through all of it, but I didn't realize in the moment I was following that path. It was always more a fascination for human behaviour that got me to where I am today.

APPELT: I love that you went full circle from the idea of dashboards and then, yeah, like you said, that's kind of what we're all doing, variations on that. I also love what you said about clinical, because as someone with a psych Ph.D., I get that all the time. Like, "Oh, can you tell what I'm thinking?" It's like, “No, no, not that kind of psychology”. Well, speaking of the winding paths, behavioural insights itself has a bit of a winding path with people testing different tools and different scenarios. And a few years ago, you co-authored a meta-analysis that investigated whether nudges actually work. And if so, do different nudges have stronger and weaker effects, and in what contexts? Can you give us a high-level summary of what you found?

MERTENS: Yeah, for sure. And maybe it helps to actually go back like a step further and provide a bit of context of why we even conducted that meta-analysis. My coauthors, Mario Herberz, Ulf Hahnel, Tobias Brosch, and I, we started thinking about this meta-analysis right around the ten year anniversary mark of the first edition of Nudge in 2018. And by that time, nudge had kind of become a household name. There were like hundreds of studies that were being published on nudging. There were more and more dedicated behavioural science teams, like the Ontario BIU, being established in both the private and the public sector.

And we thought it was a good moment to kind of take a pause and just see what kind of evidence was actually out there on the effectiveness of nudges, because not a lot of research had been done, or kind of attempts have been made to synthesize all that knowledge that had been generated in those different studies, so we wanted to take that on. And so we conducted that meta analysis, which included around 200 studies. And as you said, we wanted to estimate just how effective overall are nudges in encouraging behaviour change. But also are there systematic differences in the type of nudges or the behavioural domains in which they are applied when we look at the effect sizes. And what we found was that overall, yes, nudges were effective in

encouraging behaviour change. So we did find a small to medium effect size for nudges, which is comparable to other policy intervention measures like educational campaigns or financial incentives. But, while we did find that nudges were generally effective and had a positive effect on behavior, we also saw substantial variability in the effect size. So, for example, we found that certain types of nudges were more effective than others. For example, choice defaults were generally very effective compared to, say, more information-based nudges, such as attribute framing.

But even within the same category of nudge, we saw a lot of variation. So sometimes the effect size was very big. In other cases, it was very small. Sometimes there were even backfiring effects where the nudge had kind of a negative effect on behaviour. So we saw a lot of that variation in the data. And then last but not least, we also saw evidence of publication bias where the literature on nudging reported disproportionately more successful applications of nudges than applications that were not successful had a backfiring effect, had no effect what so ever. I guess publication bias isn't unique to the field of BI, but it is kind of a bit troubling. I want to say for a field that has received so much attention and that is being applied in the field and is impacting people's lives, has policy implications. So it is definitely something that has also sparked a lot of discussion later on, following the meta analysis, and is something that the field is still kind of grappling with. But overall, I want to say kind of the main takeaway of the meta-analysis was that yes, nudges work, but we still know only little about when and why they work.

APPELT: Yeah, absolutely. And I think so many great parts of the meta analysis like this idea that, you know, 10 years in is such a good point to take a temperature check and to see like, should we even be playing in this space or has all of this just been, you know, amusing but ultimately not impactful and finding out that it is impactful is so encouraging. And finding out that it is impactful is so encouraging, and then finding out that there are differences, and what works when underscores a lot of what we said about the real world and the importance of context.

And then the idea of publication bias for folks who don't have the academic lens, it's this idea that, what actually makes it into the scientific journals may not reflect the full scope of the research that's done because academic journals tend to reward significant effects and the splashier effects. So things, if you had a couple of studies that didn't work in a study that did work, you might only be publishing what did work and not publish what didn't work. But I think one thing that gives me hope, because as you were saying it's disheartening if we're only reporting the successes, we're not getting a full picture. But I think one thing that's heartening is that a lot of the behavioral insights units who are releasing white papers, and briefs, and one pagers, they're tending to report everything. And so I think we are starting to get a more accurate picture, but it does mean that relying solely on journal articles is not going to give you the full picture.

And more broadly, I think the meta analysis really underscored two major truths, for me. This idea of BI does work, but behaviour is complicated. And so knowing that, we need to really understand the problems, and carefully design and test the solutions. And to me, that's what makes it such a rewarding field to be in and in such an exciting field because you're always learning new things, and you always have the potential to have an actual impact on people and the planet. But each new challenge is different, so it's not always easy or straightforward to work in. We can't, as Dilip Soman says, go to the "nudge store" and just take a nudge off the counter and check out with it.

And then there's also just different ways to work in this space, so I was wondering, because I know we've had some previous chats about how there's ups and downs along the way, and it's not always roses and happy times. So I was wondering if you could share a little bit more about how you worked through the behavioural sciences and some of the ups and downs for you.

MERTENS: Yeah, absolutely. And I totally agree that BI is a very rewarding field to work in, and I'm very happy and lucky to be in the position that I'm in. But the path here was, as you said, characterized by ups and downs, although to me it was probably more a love-hate relationship with academic research than with kind of the field of BI overall. But yeah, I mean it all started with an interest in fundamental research, so not so much applied, actually.

As I said, I was interested in understanding human behaviour. That was kind of the main driver for me to study psychology, and just the lab environment and setting, and the fact that you can control every little detail was to me, it just seemed like the way to go, the way to truly understand behaviour. So that's kind of where my research started in undergrad where, yeah, again, I had my first experience conducting lab studies, saw what my professors were doing, read all those papers, so was fully bought into fundamental research. But I also noticed every time I would tell my family about what I was studying, what I was excited about, there was a bit of hesitation, maybe. A bit of a hesitated response, and especially my grandma, bless her heart, being a German grandma, and being maybe a bit direct, she would always say like, “So what?”. Like truly what do we do with all the knowledge that we generate in the lab? What extent does it actually tell us about how we behave in the real world?

And so, during my undergrad, I did an exchange semester to the University of Victoria, as you also mentioned in the intro, and I took a course on environmental psychology. And I absolutely loved it, because it was for me the first time that I saw a kind of behavioural science being applied to encourage positive behaviour change. So, for the first time, I saw like taking all the knowledge and all the methods of behavioural science and applying it to something that is so relevant for a society, that is something that I care about personally too. So yeah, that kind of opened up a whole new world to me almost, And I took that fascination for the more applied research into my Master's, where I got the opportunity to do a bit more applied research. And again, like I loved seeing kind of the bigger, or potentially bigger alignment of that research with what you see happening in the real world outside the university walls.

And yeah, so for, for my Masters, again, I was inspired by the one exchange semester in Victoria in environment psychology that I actually went back for my master's thesis, and then I conducted research, on how priming someone's connection to a place or the unique kind of physical nature of that place encourages people to donate to a pro-environmental cause. So it really went into that applied field and I loved it, I loved that part of the research.

But by the end of it, I have to be honest, I was also exhausted. My Master's was a research intensive program, so there were lots of stats classes, lots of methods classes, we had to come up with like one research proposal after the other, and was like a lot of intense research time. That, plus the fact that it was not only a research-intensive program but also very competitive program where I felt like my peers were already, like, way ahead of me, publishing papers in their first year of their Master's and getting offers to start their PhD. All of that, yeah, I felt there was no way I was good enough to be a researcher. So kind of that exhaustion of doing such a research-intensive program the kind of the kind of social comparison with others that felt like, “Yeah, you're

not good enough for me." Like really made me feel like, "Yeah, this career is not for me." My thesis experience, though I did love the research itself, was also a bit challenging because I had to kind of handle like two professors on two different continents with that bit of distance. Now, it's like such a wonderful example of what research is like, because there are always people who will love your approach and there will always be people who are very critical of it.

After my masters, after I completed it, I wanted to take a break from research and decided to do something completely different, which I also did. I packed my stuff in Amsterdam and moved to Alberta, where my partner worked at that time, and I started working as an Administrative Assistant at a music conservatory. So absolutely not related to research whatsoever but it was actually a very fulfilling experience for me. I had played the clarinet for years prior to that and it was kind of nice to reconnect with that side of me, but I also realized that that wasn't going to be like a career that I wanted to have for the rest of my life so that's kind of where I started doing a bit of soul searching maybe of like, what it was that I wanted to do with that background in psychology with all my research training, and what I realized was well, actually I did love research. It was just kind of everything that had happened during my Master's with like that intense training that led me to kind of move away from research, but actually truly, deep inside of me, I did love research. I do love my data. I like looking at numbers, and that moment where you run your script the first time to see what the results are, I think that is still like the most exciting moment of a researcher and it still kind of drives me today, like it's such a great motivation for me. So yeah, I decided I actually do like research and to me at that point going or pursuing a career as a researcher, meant for me gaining more experience and what was in my head, the easiest way of gaining more research experience, doing a Ph.D.

APPELT: Easy and Ph.D. are not words you often hear in the same sentence.

MERTENS: I know, I know. I think it just reflects how naive I was. But yeah, it was for me the way to do it like you want to become a researcher well you have to do a PhD and it wasn't even necessarily that I wanted to have like an additional degree. For me, it was more the opportunity to spend like three, four, five years doing research, learning from other researchers on my own research skills. So yeah, my naive little me said, "Okay, let's do a Ph.D." And a friend of mine who was a professor at New Zealand at that point, she forwarded me a posting for a PhD position at the University of Geneva. I applied for it, I got the position and so, yeah, I started that PhD, again like focusing a lot on the cognitive and behavioural effects of choice architecture on decision-making, and as I mentioned before it was kind of the first moment that I got to contact with the field of BI or like knowingly into contact with the field of the BI, or like knowingly into contact with the field of BI and again I was so fascinated because it kind of went one step closer.

Like I had been doing applied research, but this one was like so focused in on like applying knowledge and methods to encourage behaviour change. It was like applied on steroids kind of. So yeah, I was fascinated by that, but what I also learned is that academic research isn't necessarily easy and I know it's probably kind of a cliche but I tend to be a bit of a perfectionist and that doesn't always go well with how you're being evaluated and how you're being evaluated in academia. You're being evaluated for the number of papers, for example, that you wrote and writing to me was always extremely painful. It took a lot of time because I would like rewrite a single sentence again and again and again and again and again. So I knew that if I wanted to pursue an academic career it would be extremely hard for me, like, kind of seeing how I work as a human being and again how you would like how you'd be evaluated in that kind of environment, I knew it would be hard and kind of learning or seeing academic research in action, I also was a bit disillusioned. I know that I was

fascinated by BI, but I also saw that a lot of times the impact of that kind of research ended with, kind of a statement in the discussion section of a paper that said like hey this work is super important should be picked up by policymakers around the world, but do those policymakers actually read that one paper that you published? You don't really know. Yeah it was kind of that that moment for me where I was like maybe an academic career isn't actually kind of the best path for me personally like I did love the research aspect I think right from like my Undergrad to the PhD., I did love that, but, I also had that true drive to kind of have an impact on people's lives.

So, yeah, at one lucky moment I was connected to you, Kirstin, and you told me about kind of the work of Behavioural Scientists in government. And I think that was really the moment where it was like, yes, now I know what I want to do with my life. This is exactly what I want to do. I want to be able to conduct rigorous research, do my experiments, but also have a direct impact on people's lives. So with that knowledge, I several months later, saw a posting for a Behavioural Scientist position at the Ontario BIU. I applied, I got the position and boom, here I am. And yeah, very happy to be here. And I truly feel like I finally found kind of that right balance of doing research that I love in an environment that I love, kind of seeing the impact of the work.

APPELT: Oh, that's awesome. Yeah, I love hearing your story and I love that I could play a tiny role in it. I think a lot of what you're saying is, really resonates around the ideas of how fundamental and applied research are different and how research in academic setting versus the, whether it's government or nonprofit or other parts of the public sector or private sector research are so different. And I think part of what is really challenging, like you said, if you're a perfectionist, like both of us, the academic world is actually like it's kind of like actors going for auditions. You're constantly getting rejected, whether it's journal articles, grant applications, other types of things. And so it can be really tough. You really have to be willing to roll with the punches and constantly editing and reapplying. And so it's so tough, if you have that perfectionist streak, I totally, totally hear you.

So it sounds like you've got a balance that works for you, you're doing research, which you love, but you're having an impact, which you also love. Are there other elements of the work in government that are especially meaningful to you that are especially rewarding?

MERTENS: Yeah. I think the fact that at least in the position I'm in right now, that I get to work with different ministries on different challenges is also so interesting. Like during my Ph.D., I kind of focused on environmental behaviour and sustainability, which again, I love that topic and I think it's so relevant. But right now I get to do some of that work, but I also get to work on social services and labour questions and justice questions, like there's so many challenges. And it's great that the work kind of gives me the opportunity to learn about those different challenges, also get into the topic, going into the literature, trying to understand what has been done on that particular topic, already kind of pushing me outside my comfort zone too when it comes to understanding the individual barriers, but then also working within the individual constraints of a certain ministry or a certain population and finding solutions. I think it's kind of a challenge that I didn't even anticipate so much going into the job.

I was used to the academic environment where, yes, your challenge is like, can I get funding for it, and how do I recruit my participants? But in the end, like that is kind of, that is it. Or maybe that is just like my recollection of it, my very biased recollection here. But yeah, those, those different challenges of being confronted with different like behavioural challenges but also systematic challenges, and system challenges is wonderful. I love

it, getting to work with different people, finding solutions to their challenges. Also, just the kind of joy of telling people about BI and letting them see how it works, promoting kind of that rigorous research methodology and showing people that, yes, investing that extra time to run an RCT actually adds value to your work and actually makes your life easier.

APPELT: Yeah, I totally agree. I think the ability to work on so many different challenges. There's-- no two BI projects are alike, whether it's because you're like you said, working on social services one day and recycling the next day, or if it's because in one case the data is recorded in a novel way where you have to figure out how you can actually access the data and get it into a format that's usable. And then on another project, it's more about getting different partners at the same table. And so it is like a puzzle, but it's like a different type of puzzle every day like, you know, New York Times app needs one of these, we've got Wordle, we've got Connections, we need like BI people puzzles. But yeah, that's part of what makes it so much fun is we're constantly learning new tools. And I've probably said this before, but every time I start a new project with a new group of partners I have like my little acronym dictionary I create, because we all have our own like jargon and lingo of ways of working, and a word that works in one context is like a no-go word for another set of partners, and so it's just, it's always really fascinating.

Well, one thing I was curious about because you have done this meta-analysis so you have in the back of your mind the results of that. How has that informed the work that you do?

MERTENS: Yeah, I think, as I said, kind of the main takeaways from the meta analysis, at least for me, was that yes, BI works, but we know too little about when and why it works. But the wonderful thing is that BI is also equipped to tackle exactly that challenge. I feel a lot of people, when they think about the BI, they think of nudges, but to me that is only actually one part of the story, like the knowledge about how small changes in our environment can affect our behaviour. But then there is kind of the whole research analysis part too, like analyzing what are actually the key barriers that keep people from engaging in a particular behaviour. So I feel that research part sometimes gets overlooked when we think about BI and the meta analysis really, to me just highlighted the need for exactly that part of behavioural insights.

So I feel at the BIU we have in the past and still continue to spend a lot of time on that what we call explore stage, where we try to understand the drivers and the barriers of a certain behaviour using varying methods, and then kind of build solutions based on all the insights that we gain from that. But even when we have done all of that, like very thorough exploratory research, we still don't know for sure if an intervention is going to work or not. But that's why we test it again, we don't know exactly when and why nudges work, so this is why we need to test them. So we do take a small sample from the population, and then randomly assign them to the intervention, the control condition, to status quo, to a passive control condition, and we see what works and what doesn't. If we need to readjust certain things, if there is something that we maybe missed in our intervention design.

So I think experimentation is such a powerful tool to see again, if our interventions work or not, but also kind of as a risk mitigation tool. So in case something does go wrong like we have an opportunity to stop right here and there before like any big damage is done. And that experimentation part is truly what I think the meta-analysis highlighted for us-- like the need to continue doing experiments in our field to evaluate our nudges, at least, as long as we don't have that kind of profound understanding of when and why certain interventions work. So that is kind of one thing, kind of continue doing the research that we have done already in the past.

But to us, it has also kind of highlighted a bit the need to pay closer attention to the nuances in nudging effects. So I feel looking at the literature, a lot of the attention has gone on main effects. So overall, what is the effect of this intervention on the population? But what is interesting to me is also to look at how does this particular intervention, this nudge, affect different segments of the population? Do they have different effects on Group A versus Group B? And I think the field overall lacks research on that topic. It's kind of starting to dig a bit more, dig deeper into those interaction effects. But it has definitely also inspired us at the BIU to, to look more at interaction effects of nudges, which isn't always that easy, because contrary to popular belief, government doesn't know everything about you. So it can sometimes be a bit of a challenge to get the data that allow you to look at those different segments of the population.

But what we have started to do in some of our projects, is to look at census data, for example, say, income, or the proportion of newcomers, or the distribution of different languages in neighbourhood and make that link to target behaviour that we're trying to influence, to encourage. And it's just kind of a proxy, but it is one step for us, or one way for us to account for some of those nuances and in nudging effects. And it was something that was kind of inspired by the results of the meta analysis, for sure. And then, yeah, the meta analysis, and I feel the results on publication bias has also been kind of that last push, maybe we needed to also fully embrace the best practices that are known in the BI world. So we have started to pre-register all of our trials, meaning that we kind of publish our research plan. So what is the broad context? What is the research question that we're trying to answer here? What are the methods? What are our hypotheses? How are we going to analyze the data? Are we going to collect the data? And like, do all of that publish that before a single data point is collected. So that is one thing that we have started to do. Again, following best practices in the field, and then, where possible, we also strive to make our data publicly available. So kind of fully embracing that open data principle. So I want to say those have been kind of the main changes and/or just reinforcement of what we have already been doing at the BIU for us following the meta analysis.

APPELT: Yeah, there's so many good takeaways there. I love the idea of the importance of the exploratory research and understanding the barriers, both from the point of view of the population, but also from other research, and then the idea of testing, and the different effects in different populations. But I was wondering maybe if we could just do a bit of a deep dive of one of your projects, because you do have so many cool projects at the BIU, and I know you've been doing some work applying BI to communications. Could you tell us about one of those projects?

MERTENS: Yeah, for sure. So one of the projects which we recently completed was together with the Treasury Board Secretariat of the Ontario Government, and it was on encouraging employees of the Ontario Public Service to provide their sociodemographic information.

Now, why do we want to have sociodemographic information from public servants? It's basically to allow the Ontario Public Service to kind of engage in their commitment for employment equity. So the OPS, the Ontario Public Service wants to be an equitable employer, and for that they need to identify kind of what are the systematic employment barriers that employers may be facing, where and how are different socio-demographic groups represented in the workforce, what do career paths look like in the Ontario Public Service? Like all of those kind of questions have to be answered based on data. But, of course, the data only makes sense to use if they are actually like high quality, and if they are a good representation of the real world.

So in order to do that, the OPS launched an organization wide initiative to collect sociodemographic data from their employees. Now, the program was launched in 2020, and there was an initial good response to that data collection program but at some point, participation stagnated and plateaued. And this was when the Treasury Board Secretariat approached the BIU and asked us for our help and to get kind of working on that challenge. Around the same time, I want to say, we also learned actually from a similar collaboration of our colleagues at the federal level on a similar challenge. Like they worked on encouraging public servants on this federal level to provide their socio-demographic data. And so we were very excited by this opportunity to kind of do something similar, but then, on a on a provincial level.

And as I said, we always spend a lot of time on the explore stage, so we started kind of assessing our target population a bit and what we realized was that we were basically dealing with two different populations, I want to say... one group which, proposedly had already the intention of providing their sociodemographic data. They were absolutely good with it. But then other, there is like your typical BI barriers of like procrastination, prospective memory failure, all of that, limited attention span may keep them from actually doing so. And then another group who may not actually be at the stage of having an intention to provide the data yet they may still be hesitating still be in the process of making a decision on what they wanted to do now.

Now, to kind of get some first results, we decided to focus on that first group, which you could refer to as our Intention Action Gap group. Like these people already in our mind have the intention of providing sociodemographic data, but then kind of the environment made it harder for them. After all the promotional activities had been like two years ago maybe, so people may simply not be aware of it. Limited attention span like, how many emails do you get? How many things do you have on your to do list? Do you actually have the time to go into an HR portal and provide your socio-demographic information when your manager is sending you messages all the time about, like, 'Hey, where are you with this report' and what about this briefing? Prospective memory failure: People are simply forgetting the way of collecting the data was also somewhat cumbersome and that it was within our HR Portal that is not easily accessible, and then sometimes hard to navigate. So that was another barrier, inertia, an overvaluation of the upfront costs. So it probably is like super effortful, takes a lot of time. “It will take me half an hour to complete this” when in fact it's like a five minute, if at all, activity.

So that was kind of our list of barriers and the kind of method of delivering the intervention that we went for was an email campaign because it was easily implementable. We do have the email addresses of Ontario public servants. An email doesn't cost any money, so and we can also get interesting secondary behavioural measures such as email open rates, email click-through rates, which could give us even more insights into some of the factors, and some of the things that are that are happening there. T

So yeah, we developed a total of four different email versions that we wanted to send to employees, one of which was like a very standard one with a lot of text that was kind of comparable to emails that had been used um before and that was kind of our control condition. Then we had a simplified instructions email that provided very clear and easy instructions on how to provide the sociodemographic data kind of addressing that limited attention span and the overvaluation of upfront costs that we identified as a potential barrier for employees. Then we had an implementation-intention email design which tied the sharing of the demographic data with an existing kind of behavioural habit that a lot of employees already have, which is going into the HR

Portal once a month to confirm their attendance. So this is something that people are already used to and while they're already in the HR Portal, they may as well like do an additional click here and there and enter their information. We wanted to tie the two together to make it easier for employees to kind of remember doing that sociodemographic data entry. And then last but not least, we also had an active choice email which prompted the recipients to make a choice basically here and there of like, “Yes, I absolutely want to go ahead and enter my data” or “No, you know what, actually, I need a bit more information about this”. And then we link them to like an information website that explained exactly why the data was being collected, how it was going to be used, so we had that as our fourth condition.

Now, we had the different solutions, what do we do with different solutions? We take them to the field and test them. And so in this case, we ran a randomized controlled trial with 15,000 employees of the Ontario Public Service, who were randomly selected to receive like one of the four email designs, and we used the remaining 55,000 employees as kind of a passive control condition that didn't receive an email whatsoever.

Now, what we found was that employees who did receive an email that encouraged them to provide their sociodemographic information, were up to 25% more likely to provide that information compared to employees in our passive control condition that didn't receive an email at all. But interestingly, I mean, that is a great success in itself, but interestingly, we did find a difference between those four email versions that we had. So the control, very kind of standard government email performed just as well as the active choice email, we didn't find a difference there, which was so interesting for us, and definitely unexpected. But what made it even more interesting to us was that we did actually see differences in the email engagement. So people were more likely to open the email when it was an active choice email. But after the first step, we found that they were more likely to click on the links that we provided in their email.

But then in the end, when we looked at the actual behaviour of providing the data, we did not see a difference, which kind of made us think that something else might be going on here and that maybe interacting with that, as I mentioned already, kind of difficult to navigate and access HR portal may be an added bottleneck that may keep people from providing their data.

And that kind of assumption was backed up even more by some additional research that we did, where we found that employees of the OPS were actually quite willing to provide their sociodemographic data in a bi-annual kind of employee satisfaction survey, you could say. So there we had extremely high uptake rates. A lot of people provided their sociodemographic data in that survey, but they did not in that HR portal.
So again, to us, it made us think that interacting with a portal could be kind of one of the main barriers here. It's less so like a mistrust, for example, in how the data is being collected and how it's going to be used, which, again, is so interesting because that is exactly what our colleagues on federal level found. For them, mistrust was one of the key barriers that they found in their research, but for us, we actually didn't find that so much. So, it's such an interesting project for so many reasons. But I love that it also highlights the value, again, of testing. Like something that works on a federal level, doesn't necessarily work in the specific context of the Ontario government, for example. So yeah, it's an exciting project overall, we did find that like once the email was scaled, like again, we did find an effective email. So in the end, our partners at TBS decided to scale up one of the emails and send it to all the employees. We did find a four percentage point increase in overall provision of sociodemographic data, which is still like a success story.

And based on that additional research that we did, with the survey data, for example, we were also able to make recommendations on like, hey, look again at that HR Portal. And if there are other ways of collecting that information, because people are probably very willing to give you the information, it's just that it's, you're making it too hard for them. So, yeah, overall, I think a very successful and interesting project for sure.

APPELT: Yeah. And I love the idea of different effects in different jurisdictions, like you said, federal versus Ontario. And it really highlights this refrain we've had throughout the podcast of the importance of context and testing. And then I also love what you were saying about it answered several questions about, you know, willingness and are people even reading the emails, but then it raised this other question of like, is it something with the portal? And I think that's one of the most important things to realize is like sometimes people get very focused on the statistical significance of the behavioural insight solution, but a lot of the value of a BI project is the additional questions it raises, the additional information that you're learning throughout. Like, you know, before this project, people might have just thought, well, of course, everyone uses the portal all the time. Why would this piece be harder? And so I just think that idea of like thinking of new questions for the next-- now, you know, there's a very clear next to be a project to do. And I love that about how it continually raises questions and helps you refine questions.

MERTENS: Research is an iterative process, just as you say, like you get results on one thing, but that opens up like a whole new package of other questions. But it's great. Like it gives you guidance in what to explore next, and like, piece by piece you're getting a better understanding of what's going on and you also find solutions. So hopefully by the end of it, you are closer to your desired behaviour and kind of the benchmarks that you set for yourself.

APPELT: Yeah, absolutely. And you just learn so much at every stage. So it's really rewarding and enriching and then it just like helps people think about problems from a different perspective. Like in this case, it's not that people aren't willing, there's something else going on. And so we don't have to approach this from a contentious, like, just tell us your information. Like, it's actually more of a collaborative, let us hold your hand so you can share what you want to share.

So I love that. Well, I know we are just about out of time today, so I don't want to run over, but I thought I'd use our traditional last question, which is, do you have a message for our new BI practitioners in training?

MERTENS: Yeah, I do. I'd say don't be discouraged. I hope I was kind of able to show a bit of the ups and downs in my own career path, and I feel sometimes the downs don't get a lot of attention, and people may not always be open to sharing them because who wants to share like the downs of their lives. But it's absolutely normal. It's normal to sometimes love research and to sometimes hate it and just be frustrated by all the challenges it gives you. Also, don't be discouraged because a lot is going on in our field right now. I think there is a lot of discussion around the validity of our research, a lot of criticism on BI as a field, the kinds of methods, the promises, all of it. Don't be discouraged by that criticism. I think it's just a sign that our field, which is still a relatively young field, is growing and maturing. And we need to have those difficult discussions to actually advance as a field. So yeah, don't be discouraged, that's kind of my main message here.

But also, I think I want to highlight again what I mentioned before about go out there and promote the value of BI, and with that not only kind of that idea of nudging and making small changes to have a big impact, but also, that BI offers like this super advanced toolkit of methods to evaluate what works, what doesn't. And I

know it can be difficult to explain that to your partners, to your collaborators, to your colleagues. It might be a bit difficult to get them on board and convince them to invest that extra time. But I think it's such an important message, again, not only to advance the field of the BI, I think evidence-based decision-making is so important and BI can provide that evidence. So if you want to do us all a big favour, please go up and promote that part of BI as well, and again, don't be discouraged if it's hard, it's worth it.

APPELT: Yeah, I think that's such a wonderful message. And I think it's kind of funny, this idea of, like you were saying that we all have ups and downs, but we don't always share them. But, you know, we're doing research on human behaviour, but of course we're humans behaving. And so, we are also having our own ups and downs, our barriers and obstacles, so it's natural. But then somehow it feels like we should be doing better. But at the end of the day, we're still human.

And I also liked what you said about don't be discouraged, because I think sometimes there is the reaction of, “Oh, there's challenges to the field, we shouldn't pursue the field”, and I don't think anyone's suggesting that. I think it's saying it means we need to be careful. But it's not saying that, “Oh, we shouldn't look at human behaviour” like we don't want to throw out the idea of looking into human behaviour. That's hugely crucial, whether we adjust the way we report results are, we adjust how we do the methodological pieces, preregistration. Those are all improvements that we're doing to do better. We're not just saying “Shut it down, human behaviour doesn't matter”. So I think that is key. And I love that final message on evidence based decision making.

So thank you so much for sharing the ups, the downs, the lefts, the rights, every piece of the journey. It's so cool to hear what Ontario is doing and how you're continually changing what you do, and just been also such a treat to hear more about your work and your journey. And I have no doubt you'll continue to do amazing work in the field.

MERTENS: Thank you so much for having me.

APPELT: And thanks to our listeners for joining another episode of Calling DIBS.