



[Episode 82: "An Introduction to Mixed Methods \(Part 1\)"](#)

with Rhiannon Mosher, Human-Centred Design Researcher with the Behavioural Science Office within the Public Health Agency of Canada

Rhiannon Mosher returns to the podcast for a two-episode series about mixed-methods approaches. In this first episode, Rhiannon defines qualitative methods, shares examples of qualitative techniques, and explains the importance of doing them well. She also walks through the benefits of mixing methods at each stage of a BI project from scoping to scaling. For further learning, she recommends Sam Ladner's Mixed Methods.

Transcript:

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 Rhiannon Mosher.

Rhiannon is a human-centered design researcher at the Public Health Agency of Canada, and she comes to applied behavioural science from an anthropology background. She was previously on the podcast to talk about turning a BI lens on BI careers, to make your transferrable skills attractive and easy to understand by managers and future employers. I've had the good fortune of connecting with and learning from Rhiannon several times, and I'm delighted to welcome her back to the podcast today for a two episode conversation on an important and timely topic, mixed methods research.

For this first episode, we're going to focus on what qualitative methods are and why they're so valuable in a BI project. And then in the next episode, we'll dig into why a mixed methods approach can help the field in its pursuit towards being anti-racist and Indigenized. I'm really excited to dive in, so I'm going to welcome Rhiannon back to the podcast.

RHIANNON MOSHER, GUEST: Hey, yeah, thanks for having me back and letting me talk at you and your listeners for two episodes. So I think you wanted to start by asking who I am and how I came to BI.

APPELT: Yeah, just a little refresher for folks who maybe don't have it all memorized.

MOSHER: Yeah, I think you gave a nice intro, but yeah, so I was born and raised near Halifax, Nova Scotia on the traditional lands of the Mi'kmaq. I moved to Toronto, Ontario to complete my PhD in Social Anthropology, as you mentioned, at York University, and this is where I still live and work on the traditional territories of the Anishinaabe, Huron-Wendat, Haudenosaunee, and Mississaugas of the Credit. And of course, Toronto is today a meeting place and home to other First Nations peoples, Inuit, Metis, as well as settlers like me from across Canada and newcomers from around the world. I guess going back to kind of our previous chat.

So I completed my PhD, I decided maybe academia wasn't the right fit for me, and I left in 2018 to join the Ontario Public Service through their internship program. And of course if people want to know more about that career transition, they can listen to episode 52 of this podcast.

And at that time, I didn't really know that BI or BeSci was a thing basically until 2019, 2020, when I saw this amazing job ad, I was looking for my first real contract position and saw this ad for a senior policy advisor at the Ontario Behavioural Insights Unit, which was, you know, a dream job, that public service, applied social research place. I got that job and the opportunity to work with a small team of really amazing, dedicated folks who were and still are applying BI as this innovative policy tool, in Ontario to help address behavioural challenges at that provincial level.

And in that role, I learned a lot about applied BI and BI in general. The different organizations in the public sector, in academia and industry, in Canada and also internationally, where, you know, similar work is being done. And this is also, you know, I joined in 2020, and I immediately started hearing these calls for more qualitative research in BI and so I had this opportunity to leverage my background as a social anthropologist, as a qualitative researcher, to help build out the qualitative research service offerings and capacity on the Behavioural Insights Team Unit at Ontario, who's strengths really were in more quantitative side of research.

And then in 2022, there's this new behavioural science office or BeSciO at the Public Health Agency of Canada, or PHAC. And they were looking for someone who had, you know, BI or BeSci experience to lead out their human centered design or qualitative research function. And so to me, this was this opportunity to, you know, be an anthropologist in my day to day job, which is something that I thought I had left behind when I joined the public service. So, um, it was kind of an opportunity I couldn't say no to. And currently, I am the BeSciO's human centered design researcher, as you mentioned. And my role is to integrate and lead robust qualitative research methods as part of our office's mixed methods approach to the application of BeSci in public health.

APPELT: That means you are the perfect person for this conversation and I'm so glad you're here. So one thing we talk about in our new Wiki page on anti-racist Indigenized behavioural science is that the practice of behavioural science is strengthened when practitioners and researchers use a mixed methods approach. We'll talk about that concept more in episode two of this conversation, but I thought that would be a good context to set as we start digging in, and actually, we'll start even at the very beginning with defining terms. So what is a mixed methods approach? What methods are we mixing and what are some of the differences between these methods?

MOSHER: Yeah, I think that's a great place to start. So mixed methods, when we use that term, we're usually implying the application of both quantitative and qualitative research methods. Of course you know you can do a mixed methods project that is just mixing different methods in quantitative or qualitative distinctly. But usually when we use the term mixed methods, we're talking about both together. So what's interesting is that, you know, there's these epistemological differences between both quantitative and qualitative research approaches.

I remember back when I was doing my PhD, I took this short course on advanced methods. And the professor who was teaching it was a Sociologist by training, and he was trained in both quantitative and qualitative methods. And he had this ongoing thing where he was describing the struggle and what he concluded was an impossibility to actually have a truly mixed methods research question. And for him, he was saying, you know, this is because quantitative and qualitative methods ask and answer different types of questions. So it's really hard to combine them together as a research question, but within the same research project, they can be really valuable to kind of bring together and build out the picture that we have.

So from when we look at kind of quantitative research, we're taking this objectivist approach to understanding, the goal is often to support hypotheses, it's confirmatory. So we're asking these questions like, you know, what are the frequency or the odds of a behaviour occurring and by whom and when the duration of that behaviour and so on. So we're asking questions like "How many, how often, how are these and other

factors connected". So, you know, a common BeSci question, a quantitative question is can changing this touchpoint, in a process, increase the desired behaviour?

On the other hand, with qualitative research, we're taking it more of a constructivist approach to understanding and to knowledge creation. So we're really exploring to better understand, and we're exploring to better understand things like experiences, beliefs, feelings, motivations about behaviours, the behavioural context, the barriers and so on. And so the questions we're asking there, how and in what ways? Why? So a question that you might ask, qualitative research question in the context of BeSci might be something like how do people understand the user journey? What barriers or drivers did they say, and/or do we observe to affect their actions?

So when we mix methods, there's always going to be this one overarching goal that's either quantitative or qualitative in nature. As you know, the guiding question for the entire project and that's, you know, the thing that my professor struggled with, but, the goal is often, you know, to understand that behavioral change and the impact of, you know, changing that touchpoint, and that's usually a quantitative, evaluative design, with an experiment like an RCT being held up as that gold standard of research. Of course, there's lots of other ways to do BeSci research.

So, for instance, we might do exploratory research, you know, if we want to bring in more qualitative methods, we're usually seeing it coming in in earlier phases or maybe even concurrently to build out that richer picture. So it might be really common to do exploratory research early on, to better understand that context, and this is where qualitative research methods often come in so that we can build towards, you know, a quantitative evaluation to test our theory of behaviour change. So we might choose to maybe also build in additional user centered research that can help us refine a potential intervention or multiple interventions that we might want to test in the field. We can also use qualitative methods to layer in qualitative evaluation, actually to help nuance or disambiguate our quantitative findings. And I think we'll talk about some of those different approaches a little bit later in our discussion.

APPELT: Yeah, it's such a rich area. And this is going to be a question that demands a lot of simplification, just given the wealth out there. But can you give us just a tasting of some of the methods that fall under the headings of qualitative methods?

MOSHER: Yeah, there's a lot. And there's also, you know, many different approaches to qualitative research. So I am a social anthropologist and, you know, I have been trained in ethnography or ethnographic research, and that's one kind of school of thought and approach to qualitative research, also, you know, done by sociologists and others, other foundations, I guess, for qualitative research come out of things like participatory action research approaches. And more recently, things like human centered design, service design, user experience or user interface research. And when I'm talking about ethnographic research, what I'm trained in, it's really, I think, a suite of methods, but also a research sensibility that you bring to how you do the work. And then within that suite of methods, there's so many different things in the qualitative toolkit.

So there's obviously interviews, and there's so many different kinds of interviews as well. There's structured interviews, semi-structured, unstructured, focus groups, life histories, participant journaling, user experience interviews, to name a few. There's also observation and participant observation is a really key method. Participant observation I like to think of as this deep, intentional, hanging out with your participants. There's also different forms of mapping. So these could be of behavioural or journey mapping, kinship charts, which are, you know, family trees. There's also surveys and questionnaires which favor open ended questions. There's secondary source methods like literature reviews, archival research, media analysis. And then there's

also more participatory methods that you might have heard about. So this could include things like photo, voice journaling or time diaries, card sorting, design sprints and others.

APPELT: I love deep, intentional hanging out. I'm going to say anytime I hang out with friends now that I'm doing research, that's why it's such a valid use of my time. So, pulling on this idea that this is a huge area and we're just doing a little snippet today. Qualitative methods are broad. There's lots of different techniques. It's also deep in that there's a lot to know about when and why and how to use them. Can you talk a bit about the importance of training in qualitative methods?

MOSHER: Yeah. So coming back to, you know, that professor's point about the challenge of mixing methods in a single research project, I think that in a way, this is the challenge that informs how probably most of us are trained as social scientists, as researchers. I know that besides a few undergraduate courses in quantitative sociology, I've spent most of my career building my expertise in pretty much exclusively qualitative methods. And I think that kind of specialization in qualitative or quantitative methods is often the norm.

So one of the challenges that I've noticed in adopting a truly mixed methods approach in the space of BeSci comes down to that available expertise. So when we look at who's doing Be Sci, who gets typically hired into BeSci roles, as you know, the Primary Investigator or even in supporting roles in big teams, we're often seeing a favouring of that quantitative expertise. So that often means, not always, but there's very little training on the team or experience in rigorous qualitative methods. And I know this is changing, but not that much.

So for instance, I still don't see any roles for qualitative researchers at the same level or the same status as quantitative researchers in BeSci offices. And that means that there's, you know, often a gap in expertise which means that people don't know why, when or how to apply these methods to the best advantage. So the outcome is often that we see more lighter touch qualitative methods used, which are really useful and really valuable to have. So this might include things that we typically see in a BeSci project, like a literature review and synthesis, user journey mapping, a behavioural audit of existing materials or touchpoints. So these are of course, very important, very useful tools for understanding human decision making, for identifying barriers and bottlenecks, motivations and drivers in that behavioral context.

But there's so many other qualitative tools that might be the right fit, a better fit, maybe, to help address different gaps or enrich findings throughout the project life cycle. So the challenge is that without someone who has a deeper insight or qualitative research training, we can lose something in creating this really rich project in the same way that we would lose something if we had folks without quantitative research expertise trying to, you know, run those analyses and plan that experiment. So for the gap in qualitative expertise, some of the things that we might lose are, you know, the kinds of questions that get asked and how we ask them, the data that we gather might not be as effective as if someone has a bit more training in qualitative research.

So quantitative research questions look very different and achieve different goals than qualitative ones. And you know, the questions that a quantitative researcher might ask, they don't make sense for the sample size or the purpose that you would with qualitative research sample. It may also be the case that you're unaware of potential ethical considerations when doing qualitative work. So the qualitative researcher, we're really the instrument of research, so interpersonal rapport really matters in how we know what we know. The kinds of questions that we are able to ask in what settings, and how that matters.

I think data analysis is also a big one. So a lot of people are great at asking questions, but not necessarily great at analyzing systematically that data that you've taken so much care to gather. So, careful qualitative data analysis, it takes time. And we need to be able to reflect, you know, as the researcher on our position and on our assumptions as a researcher, and set those aside from what the data is telling us. We may also not be able

to frame those qualitative findings appropriately if you don't have that sensibility around, you know, the strengths and limitations of this set of methodologies.

So, you know, one of the things that we often see, or I often see, in presenting qualitative work is that quantitative minded folks are wondering, you know, is it representative, is it generalizable? And qualitative work will never truly be representative in that same sense. That's not the point of qualitative research. You know, it's really about providing deep findings. And we need to be able to articulate the value of those deep findings to an audience used to seeing numbers.

APPELT: Yeah, those are all very good points. So many things are pinging up, I don't even what to say. But I thought maybe that was a little bit of a like teaser trailer, we could talk more about how a mixed methods approach does improve an individual project at the various stages. So kind of breaking it apart. And if we start at the beginning of a typical behavioural insights project, we usually are starting with scoping projects to evaluate the problem and even figure out if we want to use a BI approach. And then we move into exploration where we're digging into the problem to understand it better and understand the context. So how is a mixed methods approach helpful during those phases of a project?

MOSHER: Yeah. So I think, you know, this is kind of an interesting question because the earliest part of the BeSci project life cycle is already usually the most qualitative. This is usually where people think to apply some of those qualitative methods. And sometimes, you know, as you said, kind of the line between scoping and exploratory phases can be quite blurry. And this is especially the case when you know we have a potential client or a potential, you know, project we want to work on, but we're not really clear if it's a BeSci opportunity yet. So we usually see the scoping question tackled with these qualitative approaches, like a literature review or review and synthesis of existing documents or data, such as client feedback or even, you know, starting to have those probing conversations with, say, a service provider to better understand the issue.

And one of the ways that a richer qualitative methods approach might be employed at this early stage and into that exploratory phase, might be to go and do a deeper dive into understanding that context, into understanding those barriers and drivers for, say, a particular program or service. So this kind of work might look like doing some preliminary user or frontline worker interviews. It might involve conducting thematic analysis of data, secondary data like client correspondence for reviews, if you know that's appropriate, if you have access to that kind of data for research purposes, or it might include jumping into some user experience research, such as a behavioural journey map with partners or users, or perhaps even doing some observation or participant observation to better understand, you know, that behavioural context.

But, you know, coming back to the outcomes of exploratory work, including those later touch participant observation pieces maybe, for scoping and exploring, you know, it can be really valuable. And when you're facing this massive, multipronged challenge like, a project we're working on at BeSci is around antimicrobial resistance or AMR, huge, huge global challenge. And it can be really hard to zero in on that granular behaviour that you want to change. So, you know, this is where talking to people on the frontlines, like physicians or nurses or farmers or veterinarians, can be really valuable as a way to help better understand where BeSci can make that impact.

So in the work that we're doing at the PHAC BeSciO, we have this randomized control trial underway now in long term care homes across Canada. And so in addition to a literature review, that the PI and team had started, before I joined the team, and that literature review has been published, you can read it online. The team also did interviews with physicians and other frontline workers who became part of this really valuable working group that's been informing that project, but it allowed them to better understand, you know, what is

the landscape of AMR in long term care? What does that look like? Where are those pain points? What are the challenges that we need to prioritize in this space, and where can BeSci help and where is it not really the right tool to address those challenges? So leveraging more in-depth qualitative work can help zero in on what those challenges might be that BeSci can actually be well-suited to address.

So for instance, in the case of, you know, health care, public health, while BCI might be able to smooth out some of the processes or make it easier for health care workers to do their job well, and the way that they want to do it, we can't use BeSci to address systemic challenges like staffing shortages on the floor, you know, so applying qualitative approaches alongside those quantitative ones like, say, analysis of historical administrative data, it can really help us get that fuller picture of the different challenges that people actually face in a process and where, you know, we might want to prioritize applying BeSci.

APPELT: Yeah, that's such a good example. And I really liked actually that you mentioned farmers or veterinarians, because I think that's even just that idea of thinking of the different populations. That's something you're not getting from the quantitative approach. It's that qualitative approach of talking with folks who say, "Oh, yeah, it's actually also in the animal setting or in this other setting that you wouldn't even have the right populations or all of the populations in mind if you're not thinking from this and using these qualitative methods".

MOSHER: Yeah, for sure.

APPELT: So when we move gradually and messily from the exploratory phase into the design phase, we're starting to design our BI solution, how is mixed methods useful at that point?

MOSHER: Yeah. So coming back to that example of, say, healthcare staffing capacity, doing the work up front to build that deeper understanding of the behavioural context, it can help sensitize us to those broader issues and those broader attitudes as we develop our solutions. So if we're working in, say, long term care, where staff capacity is already quite limited, you know, we've just gone through this global pandemic, we're very well aware of some of the challenges in long term care. We don't want to create a solution that adds more to these people's already full plates, right.

So we're already primed, having done that qualitative deep dive research up front to be mindful of things like the limited mental capacity, limited time capacity that, you know, our target population might have, you know, say to learn new things or to be more attentive to messaging that doesn't have a clear value add in their day to day. But then we might also want to bring, say, user or target audience perspectives more explicitly into how we actually design those solutions. So a little bit more seeking feedback, validation, even co-creation into how we're actually building those designs.

So there's lots of ways, of course, to bring the perspectives of those with lived experience into our work at the solution design or prototype stage of a project. So, for instance, if you're working with a subject matter expert or frontline advisory group, you might want to seek their feedback on your proposed solution or even your experimental design about how it will be received or any issues that they foresee with that proposal. Or you might want to validate one or more designs by doing user experience interviews or testing before you decide to take that to the field to evaluate that solution in the field you know, quantitatively.

So this kind of approach, user experience interview approach is really common in service design work. So for instance, a user interview is often a very structured form of interview that prompts potential users to share their thoughts and their experiences as they walk through that new, say, web portal or tool. But that's an approach that can be used to also seek feedback on interpretations and perceptions of things like, you know, a

form, a letter, a process, those kinds of things that we use in BeSci quite often as those touch points that we want to tweak. So another way to bring in more qualitative evidence into solution design could also be to host, as I said, you know, co-design sessions with participants where you're actually asking them to do the work with you as partners in identifying and building those potential solutions.

APPELT: Yeah, I love this. It's reminding me a lot of some of the projects I've done where we were really coming in on a problem, where we just had very little experience. The project that comes most to mind is working with snowmobilers in remote areas in BC on caribou protection, and we had all these ideas like, "Oh, we could have maps that they can, you know, like attach to their gloves or something". And then they're like, "Maps just blow away". And we had ideas about signage and they're like, "Well, the same sign is either going to be 80 feet under the snow pack or 80 feet in the air, depending on where in the season it is".

And that's just, you know, the kind of thing that you have no idea. You have all these solutions that are great in principle but terrible in reality. And like you said, qualitative research and that collaborative brainstorming is the only way you realize what solutions are actually potentially going to work in context. So once a solution is designed and it's in the field or gathering data, or maybe the data is already gathered, how are mixed methods useful at this stage?

MOSHER: Yeah. So I think we need to kind of think about what kind of BeSci work we're actually doing as well, to be able to talk about how to apply mixed methods to solutions. So when we're looking at projects that end up being more advisory, so in the cases where, you know, BeSci has something to offer, but there's not really the capacity to test or to evaluate quantitatively, I think that this is where qualitative approaches to evaluation are already widely used. So we might want to rely more on that user feedback through focus groups or asking our project partners about their observations of change.

And then on the other hand, in, you know, the gold standard type projects where we're striving to evaluate behavioural changes. So the RCTs, the pre-post, experimental surveys, other ways of evaluating quantitatively, you know, where we see that emphasis really on the quantitative outcomes, those methods. The goal is of course still to produce high quality representative evidence about that target population using statistical analysis. But we often, you know, less commonly see that qualitative evaluation paired in and layered on. And I think in many cases that can be a missed opportunity because of what qualitative research can offer, if it's feasible.

So as we discussed, you know, the quantitative and qualitative research approaches, they answer different types of research questions. So we know you know, quantitative data is really valuable because it helps us answer how many, how often, how are these factors connected those kinds of questions. But one of the challenges with interpreting quantitative data is that it can't explain the 'why' of those numbers. So in cases where you end up with, say, a ceiling effect or a null result or a counterintuitive result, especially if you have, you know, an action-oriented audience, like I do, in public service. They may be asking you "Why?", right? And this is where having that layer of targeted but deep qualitative evaluation can help support a richer interpretation of your results. So if you've already done a deep dive during your exploratory research phases, these insights might help you situate those quantitative results within that context.

And to give you an example, there's this project that was done by the Office of the Chief Human Resources Officer in the Government of Canada on Federal employee self-reporting of sociodemographic information. It's a mouthful, but I think it's a really great example. And it was actually a lightning talk at the BIG Difference BC conference in 2021 by my former colleague at BeSciO Doctor Meera Paleja. So this project took on this interesting phased approach, moving between explicitly human centered design phases and more traditional, quantitative BeSci experimentation.

And so what they were able to do is kind of leverage those findings throughout to build a better, you know, sociodemographic information reporting kind of system, but also to understand some of the challenges that and the barriers that people were facing in volunteering that information, and having that deep qualitative insight helped them, you know, develop those solutions, but it also gave them a deeper understanding of the user and behavioural context. And so it helped them make sense of their quantitative findings.

And usually, you know, in BeSci less is more. But in this particular case, people were very concerned about, you know, what is the employer using this information for and why should they volunteer it? So having more information actually worked better and had the better effect because the context mattered so much, right. So yeah, that I think that's an interesting example of how you can use that deeper dive information to better nuance your quantitative results. Of course, you can also, you know, after the fact, do this information seeking qualitative work more explicitly. You can ask your target population about their experiences, beliefs, feelings, motivations, and so on in relation to the solution you're testing. You can do that concurrently with your quantitative evaluation, or you can do it kind of post, as well. So it might be something like doing semi-structured interviews or focus groups or observation, depending on the kind of solution that you're testing.

So in that project that we're doing at BeSciO on antimicrobial stewardship in long term care, we are also planning to run focus groups with our target population, as well as interviews to help us get that better understanding of how the quality, improvement and educational materials that we're evaluating are actually received by, you know, our target audiences. And with that project, we had the good fortune to be able to run a pilot in just one long term care home before running the larger RCT. And we learned so much from that pilot, specifically from the qualitative work that we had done. And the findings from that pilot helped us to revise our planned solutions before rolling them out to other homes as part of this step wedge trial.

APPELT: Yeah, that's so important. And yeah, there's so many times where we get results that are, even whenever it works well and we're like, "Well, why did it work so well?". We thought it would. But you know, why in this case, did it really resonate? But even more so, when it doesn't go to plan, and there's an unexpected effect and there's that, if you talk to the audience, it's often, "Oh, that makes sense", you know, it's just this light bulb moment of, "Okay, yeah, I totally get why that happened." And so this is yeah, such a good explanation. Curious about as we move to the typical last stages of a project, reporting and scaling. What's the role of mixed methods there?

MOSHER: Yeah. So I think it's interesting because when we think about, you know, reporting and scaling, we're talking about a few different things. We're talking about broader implementation advice, but we're also talking about things like knowledge translation and mobilization. So when we're thinking about implementation, you know, there's this clear role for potentially undertaking that additional research looping back around to explore in cases, you know, where there's these unanswered questions like you mentioned or new considerations.

So especially in the case of like sometimes these RCTs or experiments, they take a long time in the field and things change between, you know, what the landscape was like when you started and what's actually happening by the time you're done. So, for instance, if the context has changed since your evidence was, you know, gathered, generated, you might need to get a sense of whether those drivers and barriers that your solutions addressed actually still hold, they actually still match up in the behavioural context. There's also an opportunity to do some follow up research to better explain those quantitative results as we were discussing.

And we might also want to just do some more qualitative research if we decide to iterate on the project. So say that we uncovered some additional barriers the first time around, and we want to come back and address

them. This is that opportunity to dig a little bit deeper and understand them a little bit better. And then when we're thinking about how we translate and share our findings in a report, this is also a space where bringing in different perspectives from both quantitative and qualitative methods can help us to best reach, you know, our audience or various audiences.

So in academia, you know, we have this privileging of peer reviewed publications, for better or for worse, which have this academic audience and in applied contexts like public service or industry, we anticipate communicating to more action oriented audiences, for better or for worse. Even if we simultaneously also plan to publish in academic journals or present at conferences or things like that. You know, we often use decks and PowerPoint presentations as the key vehicle for reporting in these applied places.

So I think that there's a lot about research sensibilities that should come in here. So there's research sensibilities associated with qualitative research around who's the audience, whose voice, what perspectives, where are they coming from? And that's nicely aligned with research communication or storytelling because you need to consider how to translate your findings to your audience in a meaningful way. And those audiences may have very different goals for the outcomes of that research, right. So this means that we're not always going to have the same needs for framing or content or format.

And I think that we often miss the opportunity to actually apply BeSci principles in how we communicate our BeSci research findings, because we ourselves default back to our own status quo in reporting. So if we think a little bit more about the who of our audience, what they're looking for, what's the value proposition for them of our work, and what do we want them to do with it? We can better translate and mobilize our research findings and perhaps create better impact as well.

APPELT: Yeah, absolutely. And that reminds me, actually, of one of my first positions after leaving my postdoc and moving into a consulting position. And my training had all been about, you know, we report the results in an academic journal, p less than 0.05 yada, yada. And then I gave that to my manager and he was just like what does this mean? And like this whole step of translating results and interpreting them was just like so new to me. And I had to work through that. And it's such an important skill, and I think, like you said, overlooked. And the idea of that's really, in some ways one of the most important times to revisit these ideas of making things easy and attractive and social and that they are meeting the audience's needs.

And we often at the end of the project, we're either so deep in the weeds that we can't pull ourselves out and abstract, or we are just so done with the project that we don't take the time to do that stage well. And I think, like you said, that's where qualitative sensibilities can add a lot and really improve how we do that final wrap up. Speaking of wrap up, I think this might be a good place to wrap up our first episode, and I know you actually have a message for our practitioners in training for each of these episodes. So as we wrap up our first episode on mixed methods, what's your message for BI practitioners in training?

MOSHER: Yeah. So I think, you know, one of the big challenges for BI practitioners and I touched on this earlier, and it comes from my experience, but often your strength is going to be in quantitative research. So that means that even though you might want to better leverage qualitative methods, you aren't sure how or where or when to best do that. So for folks who are out there, BI practitioners in training without qualitative training, you know, you might be tempted to just jump in, but that can lead to less thoughtful or appropriate lines of questioning and less rigorous analysis. And so for me, I see that as one of the big challenges in adopting qualitative methods into kind of a true mixed methods program, because when they're not done well, and they're not able to be backed up and explained appropriately, people, your audience, may just interpret qualitative findings as anecdotal or not real data, which I think is a huge detriment to the work that we do.

So I would recommend that, you know, BI practitioners in training take some time to learn a little bit about some of those key methods like semi-structured interviews, focus groups, which are not always the answer, and participant observation as well as, you know, analytical approaches like thematic analysis. So you don't need to become an expert in qualitative research, but you should know enough to know what you don't know, and to know when to reach out to those who have that kind of expertise for advice and guidance, or even to partner on a project. So if you're looking for a place to start, I really recommend a book by the Sociologist Sam Ladner called *Mixed Methods, A Short Guide to Applied Mixed Methods Research*.

APPELT: That is a great tip, and I think it mirrors a lot of what we talk about when we talk about quantitative skills. It's the same idea of you don't need to know every possible analysis out there, but you need to know enough to know when things are being done well and not, and knowing a bit about your own limits so that you know when to reach out for that expertise. So my traditional last question, any last thoughts or questions I should have asked and didn't?

MOSHER: Yeah. So I find this funny because when I'm doing interviews, this is always the question that I end on as well. I like it because it creates some space for research participants to go in a different direction, or to circle back to something that you might have already discussed. And I think it's really valuable in exploratory, but also even in kind of evaluative approaches to research, because it can surface issues or experiences or beliefs that you didn't know you should be asking about.

And then because a lot of qualitative research is, um, you know, part of this iterative cycle of noticing, collecting, thinking and analysis, you can incorporate those new threads into your research or interview guide and uncover something really useful from your participants that you didn't expect or you didn't know that you should be asking about, right? So to me, that's I think, one of the most exciting things about qualitative research. And when you incorporate these methods more rigorously as part of a mixed methods BeSci practice, there's so much they can bring to enriching our work.

APPELT: Yeah, I've often found it to be one of the best questions in the interview, so I don't take credit for creating it. I did borrow it, but it's been fantastic. So I think that's a good place to wrap episode one. And we'll be back with episode two.

That wraps up our brief introduction to mixed methods, and how mixing qualitative and quantitative approaches can improve the stages of a BI project. In the next episode, Rhiannon and I will zoom out to look at how mixing methods can strengthen the practice of BI more generally and help us in our move towards an anti-racist and Indigenized practice of BI. I hope you'll join us for that episode. In the meantime, thanks for listening to Calling DIBS.
