Leeds University Business School – Research and Innovation Podcast

Episode: Unlocking behavioural insights: how businesses can benefit from the Behaviour Lab

Speakers: Dr Lauren Machon and Dr Helen Hughes

[00:00:05] **Lauren:** Hello, welcome to the Research and Innovation Podcast. My name is Dr Lauren Machon, and I'm the Behaviour Lab Manager at Leeds University Business School.

[00:00:13] **Helen:** And I'm Dr Helen Hughes and I'm the Behaviour Lab Director here at Leeds University Business School.

[00:00:19] **Lauren:** So Helen, you've been here at the Behaviour Lab from the very beginning. Can you tell me a little bit about the vision for the lab?

[00:00:26] **Helen:** Yeah, so, obviously we opened the behaviour lab actually just at the end of the sort of peak covid era, if you like. So this was a building and a suite of facilities that had been developed and scoped pre-Covid. So if you imagine how much the world has changed since pre-Covid. You know, when we sort of put this facility together, we didn't have hybrid working. We didn't have all of these kind of things that we see now as day to day.

But actually the vision for the behaviour lab, is still very much as we'd kind of envisaged it and scoped it then, and that is to really provide us here at the University of Leeds with a bespoke sort of state-of-the-art facility, to study human behaviour in all forms, when applied to a business.

So that could be, where we have colleagues who study consumer behaviour and they want to understand how you market something to a particular audience, all the way through to our colleagues who study finance and want to understand, well, you know, how do you encourage people to buy different things or trade in certain ways or, you know, or invest even perhaps, and when and how do they do that?

And so in the behaviour lab, the idea was that we would sort of have this facility that would be very highly specked - and we'll talk about, I'm sure, all the different bits of equipment we've got in here. But it would be to sort of look at all of those things. And we can apply this for teaching so we can, we can use our facilities in a classroom, which I think provides a fantastic opportunity for students here at Leeds University Business School.

And we can apply it to research. More recently, we're building it into grant funding applications and so on. And equally we can and do work a lot with industry, to kind of understand real world challenges and think about the kind of work that applies to a business audience. So I think really what's always been at the heart of this is that this is a really versatile space, but it's very much meant to be kind of state of the art, and really pushing the boundaries of behavioural science, I think in 2025. And that's what we're all about here.

But I think Lauren, what's sort of most exciting, I guess in this, that vision is all very dry until you actually get to the day-to-day work, and what we do. And, of course, as our behavioural lab manager, you are really close to that. And you spend your days in there and I guess no day is the same. And I wonder perhaps where to start with that? Perhaps you can tell us a little bit about the kinds of equipment that we've got in the lab and the kind of scope of activity that that goes on.

[00:03:04] **Lauren:** Definitely, definitely. So, the behavioural lab itself is actually a suite of three rooms. We have two labs where you collect data and a control observation room that sits in the middle where we can operate the equipment from. So the first lab is an open space. The furniture's really flexible. It's got cameras, microphones. It has a one-way mirror. So if you want to kind of observe an activity in there - could be a group activity, a VR activity, it could be a teaching activity, a training activity, whatever it might be - you can sit in the control observation room and do live observation without interfering, without giving people that white coat syndrome and influencing the behaviour that's going on in the actual data collection facility. We also, you can control the cameras from in there as well.

And then the other room is a computer cluster. So we have 20 PCs. The setup's very much the same. We have cameras, we have communications, so we can talk to people through an intercom system. We have interactive whiteboards in both facilities, and we can obviously record what's happening.

But in the computer cluster, the idea would be that people are sitting at a computer and they are doing something on an individual basis. So they're maybe, they're kind of doing an online experiment, whereas in the other lab it's very much an open space. So that would be where we might have a focus group or we might have some kind of activity, like a business simulation, a boardroom meeting.

Helen, you've mentioned hybrid working. We can use both facilities to basically mimic different scenarios. You mentioned equipment. So yes, we do have virtual reality equipment in both labs so we can host different VR experiences. So for example, it might be really difficult to change an office layout in real life, but you might want to see people's reactions to it, or a shop layout or even like a train station layout, for example.

So you could build that environment in a virtual world and then have people experience that, here in the lab. We also have eye-tracking technologies. So each computer next door is fitted with a HD camera that we can use in conjunction with our software. So we can do eye tracking studies.

You mentioned around consumer behaviour, so maybe you have different adverts or different setups and you want to see where people's attention is drawn to. You can use that. And we also have some galvanic skin sensors and heart rate monitors, so that can be quite useful in terms of it's not all necessarily self-report data, so you do something to change how somebody feels in an experiment and maybe you can actually, triangulate what they say in terms of feeling stressed, in terms of what their heart rate readings are doing, what their galvanic skin centres are doing.

[00:05:53] **Helen:** I mean, it's so exciting. I'm sort of, every time I, we sort of introduce the lab to anyone, I always find it really exciting to talk about. And I, and I think it almost when you, go through and kind of break down the different bits of equipment we've got, it's - if you are kind of a, you know, a psychologist as you and I are, or really anyone who's interested in behavioural science - I think there's a bit of a kid in a sweet shop kind of vibe to it, isn't there. Where you kind of think, where do you even start with this? Like, how do you even design an experiment?

And I think just to, I mean, there've been so many projects in the last couple of years since we opened that we've been involved in. But I think, you know, even some of the student projects we've had in the space, you just reminded me there, that one of our dissertation students working with an organisation last year who do a lot of design of workspace.

And they were studying things like the effects of one and two-way conversation, weren't they? Do you remember this? On behaviour and performance and I think these things are so relevant in today's world. So in that experiment, for instance, they had people sat at the individual stations doing experiments, but some of them heard a one-sided conversation and some of them heard both sides of the conversation.

And if you can imagine, you know, in an open plan office in today's world versus on Teams calls, they were really interested in actually, which is more distracting? You know, which of these things is more distracting when you're trying to perform and concentrate? And for me, the lab and the equipment we've got, there's just so many opportunities for you to think about these questions that are really kind of pertinent and burning in today's world. And we can start to work with people to develop answers to those things.

Lauren, you've worked on so many different projects with colleagues and students and PhD students and businesses - what's, I guess, your favourite, which one sort of springs to mind at the moment that you think, actually, this has been a really interesting project?

[00:07:58] **Lauren:** Well, there's quite - first off, there's a lot to choose from, in that. I guess probably the most interesting thing that stands out, was how we brought in some exercise bikes into the lab. So yes, we've got the equipment that we've got, but we can also bring in different equipment.

So the thing that was quite unusual that stands out in the last year, was a study where we brought in spin bikes into the lab to do some work with a colleague. So that was quite different, to see different equipment brought in. And the idea there was to, basically, see how, you know, using the bikes during an exercise class and how different information that was given to them in the exercise video influenced their experience of that.

I've really been impressed, with this this year, with a student who undertook an eye-tracking study. So they were really interested in, how, you know, where people's attention goes when you go on a website. They were really good. They created a website that looked something a little bit like, you know, just something that you'd see. So it was quite, it fit with, your average website when you're shopping. But they basically manipulated the information that the different people doing the experiment would see, to see whether or not adverts with faces or no faces or a video, had differences in terms of people's shopping behaviours.

So they, so they kind of had those, that was really impressive. But generally, I get a lot of people coming into the lab, so a little bit like you, Helen, you know, children in a sweet shop. I think it's really great to speak to so many different people because they come up with so many different designs or ideas that I guess one person, just could never, think of, and I get to help them adapt it and bring it to life actually in the lab.

So I think, you know, earlier you asked me what do I spend my day doing? And I guess it's helping people translate their research ideas into how the lab works and, you know, can the equipment that we've got facilitate that or do we need to have a different configuration? Do we need to bring in something different?

But I think this environment really gets people to think creatively and also embrace new ways of collecting data. So, you know, we're not just questionnaires or we're not just interviews. We can

really think about bringing in new types of data collection techniques and innovate how we actually do research here.

So, yeah, so they're my two favourite projects at the moment, although that's not to say there's not been more.

[00:10:23] **Helen:** Yeah, I know, and it is where, where to start. As you say, there's been so many different things that we've been involved in and I guess so many things that we are going to be involved in as we move forward as well, because we've got quite a lot of new projects on the horizons. I know we've got a new module that we're going to be working with and that, that is really exciting.

But when I say new module, you know, for those people listening who aren't in the university system, of course we can use this kind of lab to collect data, but we can also use it to train people of the future. Because if you are a business and you're going to employ students or graduates as they will be, from Leeds University Business School, the idea is that you're going to get people that actually potentially know how to use this stuff and can apply this to their consumer behaviour when they come and work for you or can really be attuned to the kind of the effects of communication in the workplace when they come, or a manager in your organisation.

So, this kind of module, I think, is a really exciting next step for us, and it enables us to kind of bring some of this together. But we mentioned earlier we're also sort of beginning to see this facility built into different funding calls, aren't we? And, I guess in my world, we've built this recently into a grant around, looking at how you embed technologies into healthcare, into the healthcare sector.

And we can use this space, even on a more kind of commercial basis to kind of evaluate the properties of different technologies and think about how, you know, how different users experience them, and use some of our camera systems to just, you know, put stuff in a room and just see what happens and sit behind, as you say, that window and just watch how people use it and watch what they do.

When we think about what's next, what's coming up on your agenda, Lauren?

[00:12:10] **Lauren:** Well, obviously we do have the module, and we have a summer school, international summer school as well. And so that's going to be about using this space to bring students in and getting them to really think about, you know, when they're designing their research projects, when they're going forward in their careers, how can they, you know, what data exists, how can they actually use it?

So I'm really busy at the moment doing all of the materials for that. But for example, today, I have meetings later where somebody's interested in using the lab to host focus groups, so pedagogical research, so you know, research into learning and working with students.

We obviously have the medical technologies project that you mentioned going forward. So that's again, I guess with the lab you can think of research in two ways. Yes - we're set up to do experiments where you would control for all the variables, but you would tweak something and look at something in a lot of detail. But we can also use all of the technologies to almost just observe.

So that might be, you know, we're not necessarily, we don't have experimental conditions, but we might just want to understand consumer experience or like you mentioned with the medical technologies experience, it might be getting somebody to use something that they're not used to as part of their role. Maybe it is a piece of technology, to do with like surgery or for example, and you can observe that behaviour.

So, Helen, you mentioned the project around embedding technologies. I wondered if you could maybe expand on that and just kind of give a really tangible example as to what that actually looks like.

[00:13:41] **Helen:** Yeah, so I think there's lots of behavioural stuff that sits behind any sort of implementation of any sort of technology. And that applies to all sorts of changes as well that you might want in organisations. One of the pieces of work that we're interested in doing within the health sector is understanding how patients, and others actually, interpret patient information sheets.

So, of course when you get some new medication or you get informed, you need to come for a scan and this will happen - you get all sorts of information typically in the letter. And some people, you know, come to those appointments. Most people come to those appointments, but there's a good proportion of people that don't show up.

And so one of the things we're particularly interested in within the Health Tech Research Centre is understanding actually what are the barriers to that. And we can use the eye tracker, or at least the eye tracker offers us a really interesting opportunity to not just sort of sit and have focus groups on, you know, "read this information sheet and tell us what you think of it".

But actually to sit people in front of one of our computers with the eye tracker and read the information. And the eye tracker enables us to go actually, which words stand out, which things are they ignoring, which things go completely by the wayside and we think would worry them, but actually they don't even notice in the information sheet?

And so that's the kind of thing we can do with the eye tracker, and I think it offers a really valuable new perspective on stuff that we've been doing for a long time, but in sort of typical focus group environments. And I think actually those principles you can apply, much more broadly to industry. You know, we've got people who've asked us, "can we do a similar thing looking at the strategy document we're creating?" or some sort of communication that they're going to be sending out to their team members, you know, which of these words are going to really alarm people? Which of these words do we think are relatively benign? And they sort of sit and ruminate on for some time afterwards. So yeah, the eye tracker, I think, is a really cool piece of kit that we've got here. And again, there's lots and lots of unexplored opportunities for us to use it.

So it's been really fascinating to talk about the lab, Lauren, and I think there's so many more things we could we could say and will say, but I think maybe this is a really good point to just leave people with their interest peaked and to say that that actually, what we'd like people to take away from this is that we're very much open for business and that we are looking to, you know, actively to collaborate. And that's obviously with internally within the Business School, but we, I think, see things much, much more broadly than that, don't we?

And so from my perspective and I, and I think yours too, if you are an organisation and you're interested in hearing more about the lab or you'd like to collaborate in some way, or you think that the kind of work we do here could be really useful for you, we'd really like you to get in touch.

Similarly, if you work in a lab or you run a similar lab, we are very much of the view that you do things better when you do things together. And so we'd again really like to hear from you and sort of work towards developing a bit of a network of labs and partners. And finally, if you want to participate in a study in the lab or you'd love to see the space and you think, actually, I'd really like to participate in one of these things, again, there's lots of ways that you you can do that. So again, please get in touch. So thank you very much Lauren. And thank you for listening. If you'd like to find out more, the details are all in the show notes.

[00:17:07] **Lauren:** Thank you for listening and bye for now from the Behaviour Lab.

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