Design

Why We Need More Awe at Work with Libby Sander (Transcript)

Chris: Take a look around you. You might not be aware of it, but you're probably having a physiological reaction to your current physical environment. My guest today found three reactions we all have in our work environment, and oftentimes they're totally unconscious and not the best for our health and wellbeing. These unconscious reactions impact how we think, how we perform and how we connect to other people.

Welcome to Work Better, the Steelcase podcast where we think about work and ways to make it better. I'm your host Chris Congdon and I'm here with producer Rebecca Charbauski.

Rebecca: Chris, our guest today is Dr. Libby Sander and her research looks at how a range of different work settings influence our thinking, mood and stress as well as our engagement, collaboration and performance.

Chris: Libby is fascinating. Her work found a causation between the physical environment and stress. Can you tell us more about her, Rebecca?

Rebecca: Yes, Libby is the MBA Director and Assistant Professor of Organisational Behaviour at Bond University in Queensland, Australia. She is a leading thinker on understanding the future of work, and how we can reimagine work to live more meaningful and creative lives. She has spoken at TEDx and is an Agenda Contributor at the World Economic Forum.
If you learn as much from this conversation as we did, remember to like it and share it with a friend or colleague. Here's Chris' conversation with Libby.

Chris Congdon: Welcome to Work Better, Libby.

Libby Sander: Thanks very much for having me on, Chris.

CC: Libby, I was really interested in your research about how the physical environment impacts how we think, feel, and perform. I'm just curious, what made you decide to focus on this aspect of the environment?

LS: Yeah, two things. I used to work in industry. I still work closely with industry for a long time before I became an academic and put that hat on. And what I used to see every day in the different roles I was in was that work was average for a lot of people. The way we designed work, the way we designed the workplace, and there wasn't really a lot of holistic science to understand why it is like this? And so, I decided to start doing some research into the field, and there's been a ton of research done on things like, well, what effect does lighting have on us? What effect do plants and nature have upon us? Air quality and various aspects. But there was very, very little research that drew all of that together because when you go into an office, you don't just react to the plant or the light or whether you have your own desk or not, you're reacting to that entire environment. And there was just a huge lack of understanding of how all those things interrelate to affect how we feel, how we think, how we perform, how we connect to other people. And I fell in love with research.

CC: It does make so much sense. Of course, you can't just isolate one of those factors. I know for research, sometimes you want to go narrow to really understand the influence of one particular thing, but it's a holistic experience. It's not something where you can kind of separate out those individual things, just like your health and wellbeing. Sometimes it is systemic. You have to think about it all together. Right, absolutely. So, your research led you then to develop a scale to measure three things in the workplace. Can you tell us about what those are, what you found?

LS: Yeah, so what I decided to do was try to draw together what we did know and develop a framework that assessed what are the three most important psychological reactions that we have to a workplace or the most important needs that we have from a workplace because we need a lot of things, but what are the three most important things?

And so, what that turned out to be across a program of a number of studies is what we call a cognitive reaction, which was the ability to focus and think and concentrate, which won't be a great surprise. I wouldn't have thought of any of your listeners. Unfortunately, though, the number one complaint we hear in modern workplaces is I'm in an open plan office, I'm in a badly designed space, I can't concentrate, I can't get my work done. And that leads to a whole host of negative outcomes, both for the individual and the organization.

The second reaction was perhaps, I think, much more exciting, but a little bit less, I suppose, considered. And that is, it's an affective reaction, which is an emotional reaction, and that's a sense of beauty. And it's different from a subjective evaluation of beauty where we think, well, I like that art, or I hate that chair design. It's more going back to what is really a fundamental human need that impacts us in so many different ways in terms of our mood, our responses, things like awe and wonder, which are now, these terms are starting to become much more researched and much more familiar in this field because these are such important human reactions that lead to a range of different outcomes, including not just how we feel emotionally, but how we think.

Jonas Salk, when he was developing the polio vaccine, was really stuck on, "I just can't get through this. I can't figure this out." And he used to go to the basilica in Assisi regularly, and he said that the awe and the wonder and the sense of beauty he felt in that space helped him work through the problems he was having in developing that polio vaccine. But historically, workplaces have been terrible. They've had gray carpets, plastic plants, gray furniture, soul-sucking fluorescent lighting, literally, Chris.

And then the final reaction is a relational one. And so it's the ability to connect when we choose to. And I think that's an important differentiator because a lot of the early thinking around open plan office designs and so forth was, well, let's just pop everybody into one big room and they're going to collaborate better and they're going to serendipitously encounter each other, and it doesn't work, and we know that. So yeah. So, focus, sense of beauty, and connectedness are these three reactions that the workplace needs to give us. All of these, just one is not enough.

CC: And as you said, focus just makes so much sense. And our research has found that that's a critical need. One of the biggest things that people are asking for is privacy. I want to go back because I think it's really important that everybody understands this work. I think it's just really groundbreaking. So, let's talk about this issue of control over how you connect with people, because there has been a belief that having those serendipitous encounters, unplanned interactions could be really healthy for innovation and creativity. So, talk more about what it means to feel like you've got control over that and why it matters.

LS: Yeah, such a good point, Chris. And those serendipitous encounters are really important in those accidental discoveries and bumping into people and kind of having a conversation. But I think the key is, as you said, it's about control.

So, I might be moving through a space to go to a meeting or to get a cup of coffee or see somebody else, and I have the opportunity to have that kind of encounter. Walls are very important. It doesn't actually have to be another person; seeing scaffolding of ideas that are being developed on whiteboards is the same as when you're in an urban environment and you might walk past an exhibition and get prompted with these random thoughts. So that's important.

But as you said, one of the key things that we know from decades of research in organizational behavior and psychology is this theory and idea of self-determination and autonomy, which are highly correlated with a range of outcomes for the individual and the organization. This links back to what we're seeing with flexible work since the pandemic. The more autonomy and control an individual has to make choices about how they're doing their work, where they're doing their work, and when they would like to have a conversation with someone else, the better.

But if you are sitting in an open plan office and are constantly subjected, as I hear all the time in my research, to someone having an argument with their partner on the phone next to them, someone eating their lunch very noisily right opposite them, or people randomly having impromptu standup meetings next to your desk, you have no control over that. So as you said, privacy can take a range of different presentations, particularly visual privacy and auditory privacy in a workplace.

So when you can't control that and you might be sitting there trying to, as a lot of modern knowledge work requires, do something that requires deep focus and concentration, your brain, whether you like it or not, is unconsciously attending to all of these things because in an office it might be about you or it might be about something you need to know. So it's almost impossible to switch off your brain. And so that lack of control, then we can talk later about the research we've done in our lab showing causal relationships around these types of issues that are very negative. It just takes that away. But if you're in a space that is effective for you to do your work or a range of spaces that you have the choice to go to during the course of the day, then it's very, very different in terms of, yeah, okay, I'd like to go and connect with someone now, I'd like to have a conversation as opposed to being constantly bombarded with all of these things that I don't even want to know about.

CC: Yeah. Well, I'd like to go there and hear more about that causal relationship because it feels like there's this narrative going on where I hear people who are responsible for workplaces say, well, the only reason people are coming into the office is to see other people. So we don't need to have all that space that is designed for people to do individual focus work. We're going to shift it all or at least a good deal of it over to create more collaborative spaces. And on one hand you go, well, having more collaboration seems like a good idea, but as you point out, not being able to focus is an issue as well. So talk more about that and what you're learning in your research.

LS: It's a really interesting point, and it's so topical obviously, because there's a huge question: why are people coming to the office? Is it learning? Is it mentoring? Is it overhearing conversations? Is it developing networks? Is it problem-solving? We do know that teams perform better when they are face-to-face overall, but they don't need to do that every day. But one of the problems is, as you said, floor plates are now tending to shrink, or the amount of space organizations are taking because people aren't coming in every day on the whole. And the idea being, yes, well, it's to come in and catch up with people and have all of those things, and that's great, but the problem is, and this has been a perennial issue, there is no one-size-fits-all workplace because the work every organization does is different, the culture is different, and obviously the individuals who are in that organization are different.
And while it might be ideal to say, oh, look, on Wednesday and Thursday when I go to the office, I'm just going to be problem-solving, iterating with my team, having meetings, brainstorming, catching up. I don't know anyone for whom that is the reality. You actually have to do focused work as well. And so if you take away any spaces where people can do that, that's a big problem. So you've got smaller floor plates, in some cases, less availability of focus space. And that's a problem because we did a study in our lab, which was a highly controlled experimental design so that we could explore this causal relationship. So, in organizational research, as I'm sure many of your listeners know, a lot of it's correlational, which means, okay, we know there's a relationship between these two things. We're not sure in which direction there's a relationship, but there's some relationship here. But there are a lot of other things that might be contributing to this result. In a causal one, it's much more controlled like we would do in health and medical research to say conclusively A is causing B.

LS: So we created a controlled environment and had pretty standard open plan office noise—not a significantly high level, but the kind of noises we regularly hear: people having conversations, printers, coffee machines, all of those sorts of things. We then assessed individuals while they were completing different tasks, such as editing tasks to evaluate concentration. We objectively measured their stress and mood. What we found was a causal relationship between a pretty average level of open plan office noise and a 34% increase in objectively measured physiological stress. We measured heart rate, heart rate variability, and galvanic skin response, which is your sweat response, indicating stress levels. There was also a 25% increase in negative mood. These are significant findings because you might not feel stressed. Often, we would talk to participants in the experiment and ask, "Are you feeling stressed?" and they'd say, "No, not really. It's fine." But we don't habituate to noise. We might notice it less, and I hear people saying, "Oh, it's fine. They'll just get used to it when they move to this open plan office."
But they don't. This study has conclusively shown that it has a significant impact on your stress level. And also, when you're in a negative mood, I don't know about you, Chris, but I don't really want to be around other people.
CC: I'm not very creative or cooperative.

LS: You're not creative, you're not collaborative. And so what we found additionally was that when people don't have the ability to focus and concentrate, when they're impacted by things like noise—this study was just on noise, but then you add in interruptions—every time you get interrupted, it takes you 15 to 20 minutes to get back to that level of where you were. People actually become less collaborative, they become more withdrawn, and in some cases, they become more hostile toward their coworkers because they're just so frustrated they can't get anything done. Another study showed that with an activity-based work environment, which is supposed to encourage those relationships, because people were frustrated and didn't have that control, they weren't even bothered to say hello to the person next to them. Like, "Well, I don't know who you are. I don't know if I'll ever see you again if you're in a big workplace, so I can't even be bothered saying hello." Completely defeating the purpose of that exercise.

CC: I think just to understand the implication of that for your physical wellbeing and your long-term health. So, I mean, if we're having that heart rate variability, those kinds of stress and mood indicators going on, obviously that's going to have a long-term effect that none of us want.

LS: Absolutely. And the organization doesn't want it either. Wellbeing is a huge focus at the moment, as it should be. But I think a lot of the initiatives are perhaps piecemeal, like going to a yoga class at lunchtime or having mindfulness workshops in the workplace. Those are great, but they're going to make very little difference if every time you go back to your desk, you've got these kinds of things going on.

CC: That's absolutely right. And it does feel like sometimes the way we're thinking about work is divided. Maybe you've got one group of people whose driver is cost and efficiency, making sure that we're getting as much value out of our real estate as we can. And all of that is good and important too. But then you've got another group of people who are responsible for people's wellbeing and being able to be productive and effective. Sometimes that doesn't always lead to the best decision-making process.

LS: Exactly, Chris. And I really want to hone in on that because we need to shift our thinking from these silos in organizations like, "I'm in wellbeing," "I'm in HR," "I'm in facilities," "I'm in real estate," because these things are not isolated.
And I say to leaders all the time in organizations, we can very easily quantify the cost of real estate and how much we're going to save on our lease by doing certain things and saving certain amounts of space. But do you actually know what the cost is of these impacts on your employees? Payroll is our biggest cost in any organization. It's not a great analogy because we're trying to move away from this idea of people being machines in the industrial age and widgets, but if we had a machine that was operating at 50% efficiency because we weren't optimizing whatever it needed to perform, we'd be onto that in 10 seconds, even if it dropped down to 95% efficiency, Chris. But with people, we just have no idea. So yes, you're 34% more stressed. There are all of these other things going on. The cost of that is going to outweigh any savings in your lease cost by multiple folds. And that's where we need to shift our attention. What's the cost of turnover? What's the cost of trying to attract good talent? And then if you've got people sitting there every day at 50-60% of their capacity, just spending $7 on improving air quality has been shown to make people 20% smarter.

CC: Oh, wow.

LS: So that's a tiny cost. And then if you think about adding that up across all of these dimensions of the workplace, things like noise, privacy, that's where the opportunity is. Because if you don't feel physically and psychologically comfortable in the workplace, then you're not going to be able to perform at your best, despite your best efforts. No matter how many KPIs you've got, you're just being physically constrained and psychologically constrained.

CC: Yeah. I want to go to another one of the factors that you identified, because beauty is another really interesting one. I imagine that there might be a lot of people who, again, maybe they're coming at measuring things from a very quantitative point of view, that beauty would feel difficult to measure. Let's just say maybe a little fluffy. So tell us more about how beauty made this list of these three most important things.

LS: We were looking for an effective or mood reaction because emotional reactions we know are so important for us as humans, but particularly in the workplace as well. Mood drives so much, and emotion drives so much of how we tend to behave and how we tend to feel and the downstream implications of that. And for some strange reason, we had this idea that we have to make our homes lovely, but you go to the office and it doesn't really matter. And just to get an idea of this, you don't even have to be conscious of what's going on for the built environment to have this profound impact on you. A colleague of mine did a study using mobile FMRI, so brain scanning equipment, and he put people into what we would classify architecturally as buildings that make you feel a lot of awe and inspiration, that really significant feeling.

CC: Enriched.

LS: Yeah, enriched, expanded. And we know things like high ceilings tend to have this effect on making us feel more creative. Concrete, on the other hand, which is something architects often love, aside from being extremely impractical and noisy in a workplace to use as a flooring material, makes you feel more constrained and kind of closed in. So he put these people into these buildings, put the mobile brain scanner on, and what he found was that without any other intervention, the building itself was then putting people into a classifiable, measurable, mindful state like meditation, and quite a significant level of meditation, which is extremely inspiring when you think about it because all the efforts we try and put into, "I'm going to go to a meditation class," if anyone's tried to do that, and your brain's going a million miles an hour. So the effect our environment can have on us is so profound.
So in terms of beauty, it is this fundamental human need, and it's not about a particular color or a type of art, but if we think about things like biophilic design, the use of natural materials, introducing nature into spaces, there are a range of different touch points. Essentially, you, I'm sure many listeners, will have been into a space and thought, "This space makes me feel good, it makes me feel happy, it makes me feel inspired or calmer." And conversely, you go into another space and it has the opposite effect, and you can deliberately design for that to give people. So having a sense of beauty in a space is really not optional if we want to provide a space that will enhance and bring out the best in our people.

CC: It's interesting because I think if you were to ask people, and in fact in past research, we have asked people how much that kind of thing matters. And almost like your earlier story where you asked people if they were stressed and they'd be like, "Oh, no." Similarly, when we ask people, "How much does that matter?" they'd go, "No, that's not what's important." But at the same time, you notice people gravitating toward those spaces that you could describe as more beautiful or more enriched, or there's better sunlight. And people don't always know why.

LS: They don't. And this is a great point.

CC: They can't articulate it, but that's where they go.

LS: Yeah, we tested this when I developed the scale because actually my PhD supervisor was a really funny character. And he's like, "Oh, look, this is all really fascinating and cool, but it doesn't really matter to me. You could put me in a cardboard box and I'd be fine. I can work anywhere. It doesn't affect me. I wouldn't even notice." So we developed a measure as part of the process to test if you are someone who cares a lot about the space around you, or you notice it, or vice versa, someone who wouldn't even have an idea, does it make a difference? And what we found was it doesn't matter. Regardless of if you say or you think, "Oh, it doesn't have any effect on me," the effect is still the same because the reactions in that scale are unconscious, psychological needs and reactions. So I think it's a great point. And it's also really important because we'll say, "Oh, it's only the people that really care about design." No, it isn't. It's actually all of us.

CC: It's everybody. So while we're talking about these things, I want to go to a topic that has been getting a lot of discussion, particularly since we've been through the pandemic, we've been through this big experiment with remote work and hybrid work and people asking those existential questions. What is the office even for anymore? What do we need the office to do today? And I'm curious what you think the role of the office is today.

LS: Look, yes, absolutely. Some organizations have made the decision to go largely remote, but as far as I'm aware, most of them still have a physical presence of some sort. So I think the office is very important, and place has always been important. As humans, we want to be together a lot of the time. And so aside from expressing the identity of the organization, it's important to bring people together. Most people don't want to work at home five days a week by themselves. They want to be around other people. So, the role of an office, I think, is to provide both that expression of the identity of the organization, but also a place where people can come together across a range of different spaces that suit whatever work is done in that organization and the people who work there. So that's going to be different for all organizations. Some might have a range of smaller regional offices or kind of that model. And so it's going to vary, but I think that it's extremely important to come together for team interaction, team cohesion, and innovation. Those things have been shown to be important for building networks and relationships. But I think where the narrative gets a bit lost in the media headlines is, well, we have to do those five days a week or four days a week. And that isn't true, because if we go back to before the pandemic, offices were never a hundred percent full.

CC: Full.

LS: At best, they were around 70%, which was considered high occupancy because people are on leave, they're out having coffee, they're going to meetings, they're traveling, whatever they're doing. So yeah, it's a curious thing since the pandemic, this idea that, well, our occupancy's only at 70 or 80%. And I think it's sort of this amnesia that before the pandemic, they weren't. And also, productivity has been declining for decades. Engagement's been declining for decades. So, it wasn't this utopia before the pandemic when people were in the office five days a week. In fact, it was pretty terrible in most organizations.

CC: So…

LS: We need an office, we need to design them better. Some organizations do it very well, but it's purpose-built for each organization. What are the types of spaces we need for the people who are here and the work that we want to encourage?

CC: Yeah, sometimes I feel like I'm taking for granted the fact that we work in a pretty awesome workplace, and sometimes I just keep thinking that everybody has that experience. And then sometimes I get the opportunity to go and visit other places, and I think, oh my gosh, how do you do it? How do you work here? Yeah, exactly. And I wonder how did we let that happen? I mean, what do you think went on as organizations were making decisions that kind of caused that to just be okay or be the norm?

LS: Yeah. Look, I don't know that it was any bad intent. I think it's a combination of the fact that there was really not a lot of evidence-based research to tell us what we should do. And then it's a very systemized process. If we look at real estate, it's very top-down. Frank Duffy used to talk about this decades ago about how it all happens. So by the time we actually get to designing the office, it's sort of a fair way along this predetermined process. And often the first question from the architect or the design team is, well, how many desks do we need here? How many power points do we need? And that's happened more than once. And it's like, this is the wrong question. We're starting in the wrong place, but often we don't know where to start, which is way before that, which is co-creating, thinking, what's the intention of this space?
What outcomes are we hoping to achieve for the various stakeholders using this space? But at the end of the day, there needs to be a much greater understanding of the impact of poor design on human performance than is generally represented now in terms of workplace.

CC: So thinking about how we might design workplaces going forward, one of the areas that we've been really interested in is looking at really great communities as a role model, if you will, because there are things that, just like we were describing, people are drawn to certain kinds of spaces when they come to work. The same thing happens on an urban scale. People are drawn to particular neighborhoods or public places. And when you mentioned Frank Duffy, it made me think about one of my heroes, who's Jane Jacobs, and some of our listeners are very familiar with her. For some, they may have never heard of her. So maybe we can take a minute, because I know you've studied her work and some of those concepts as well. And I'm just wondering if you could kind of translate what we might learn from thinkers like Jane Jacobs about how great communities could translate into the workplace?

LS: Yeah, I think it's so fascinating. Her work is more relevant now than ever because if we take a step outside the workplace, loneliness in society is a huge issue and disconnection in general, and especially since the pandemic, the number of single-person households is exponentially rising. So bringing people together doesn't just have to be around work. And so great urban design and city design and community design actually do that. So, she talked about, one of the things I loved particularly was the sidewalk ballet.

You go out for lunch, you get a coffee, and it's literally this inspiration as you go through. And obviously she was in New York, but you might overhear conversations, you might see something on a wall, you might hear some music. So, if we are thinking about innovation and creativity and this feeling of being connected to something larger, those types of encounters and interactions are so, so important. We have this idea in organizations that everything comes from within, which is completely false. And if we look at innovation research and knowledge spillover, that's not how it happens. It's more like her approach. And so, in the past, we've had this idea of very closed campuses with a lot of offices. You go in and then everything is contained within and just stay in there for the whole day.

And that's really not very helpful for anybody. Encouraging people to move for a start is so important for physical and mental health, but for all these other things. So not putting an office in the middle of some industrial park in the middle of nowhere, we should be connecting them with cities and communities where people can walk and catch public transport and go out of the building regularly, go and work in coworking spaces. I think we need to think more about the connection between offices and the city and the community around them and how we can bring them together.

So what can we do to create interest, to create serendipity? Most of the time we put an agenda item, new ideas, innovation, and we put people in a boring meeting room. And then after we've been through all these boring things, we get to the bottom and everybody's too tired and has run out of time to talk about anything innovative. And that isn't how creativity and innovation happens, but we're not making widgets anymore. We don't need to optimize the efficiency of this tiny piece for the car for most people who are working in knowledge work. So we need to completely change our thinking and ask differently…

CC: Questions. Yeah, I agree with you so much. I think about what that lively sidewalk experience looks like in the office? Because I've literally been in some office buildings where it's just these long hallways…doors going off, and there's nothing interesting between here and the other end of the corridor. And what might it be like if you thought about having the office equivalent of park benches or little, small pocket parks or parklets along the way or anything that kind of during the course of just moving through your day, you would begin to have that kind of stimulation and opportunities for interaction, right?

LS: Absolutely. And I was recently in Tokyo, and it was at Uniqlo's head office, which is an incredible building. Each floor is like an acre and a half, so there's 10,000 people. It's only, I think, five or six floors, but it's called Uniqlo City. It's very strong. Japanese design influence is built around this idea of how you would interact in a city. And we often hear companies saying this, my office is like a city, but it really isn't. But this particular office had this incredible library with a mezzanine level as well, where the books are regularly changed, and they just want people to come in there and it's right next to this beautiful Japanese cafe. And they just want people to come in and just think and explore, and lots of different topics, lots of different disciplines. There are other park benches, a whole range of different areas where you feel genuinely like you are in this city. So it's very possible to achieve this. It requires effort, it requires thinking differently. And most of us don't like change. We don't like to think differently. We just want to replicate what we've done before. And unfortunately, that's just not going to cut it anymore.

CC: I think you've given us so much to think about. It can feel a little daunting because you're right, change is something we're all uncomfortable with. So, thinking about making big changes in a workplace might be daunting for some of our listeners, but I'm just leaving this conversation feeling a lot of optimism, that there's actually some clear science that tells us some things that we can and that we should do to help make a better work experience for people.

LS: My pleasure, Chris. I've loved our chat.

Chris: Rebecca can you tell us who's on the show next week?

Rebecca: Next week we're talking about the loss of global brain capital with Harris Eyre (air). Harris is part of a movement to focus on brain mega trends. He says all of this change we're in the middle of is harming brain health. And the global economy is suffering. He has ideas about how the work environment can help.

Chris: Talking to Harris gave me a sense of urgency I'm not sure I had before. Be sure to listen in.

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Thanks again for being here and we hope your day at work tomorrow is just a little bit better.