GUTINSTINCT

Seems you can trust your intuition – if the conditions are right. Professor Joel Pearson has the research to prove it, and the implications for individuals as well as businesses are just beginning to be tapped

30 AUGUST 2022 WISH

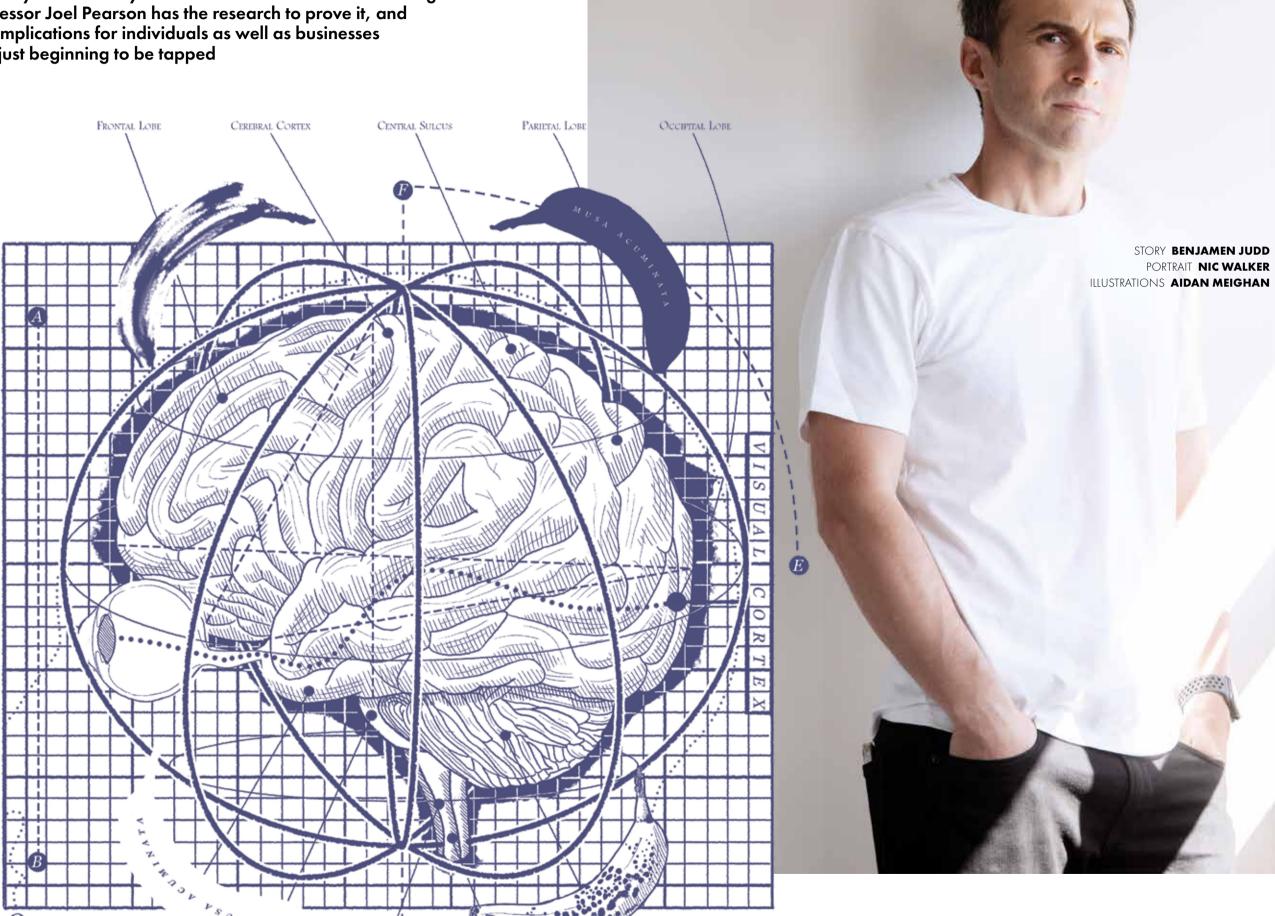
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at hearing that a scientist's area of research is intuition. The topic feels more suited to undved linen and white sage-burning types than it does to someone who works with hard data and analytics. Or at best, a Peter Venkman-esque scenario involving Zener cards and minor electric shocks.

"The first thing I always explain about my research is I'm not talking about anything extrasensory or anything spiritual," explains Joel Pearson, founder of the Future Minds Lab. "In fact, everything I'm talking about can be 100 per cent explained by the science we have so far. I normally try to get that out of the way very quickly."

Challenging what both the cynical and the "spiritually awake" may think, Pearson has developed a rigorous scientific method and conducted studies that prove human intuition – that inexplicable gut feeling we get about a person, a situation or even an object – is not only real but also measurable. No, we cannot bend spoons, or predict the lottery results. But we can in fact make decisions based upon our intuitive responses.

"Intuition is simply the positive, productive use of unconscious information, or decisions, or actions," Pearson tells WISH. "Productive, as in it helps in the use of unconscious information for decisions or actions. We see it when we're making a decision, but there are arts, what was called COFA back then, so at the same also physical examples of it in sport, like making a hand movement and action using unconscious information. and did filmmaking." That's the simplest definition I have chiselled it down to at the moment."

But there's a catch: it's productive and positive as long as the right environmental factors are in play. Because of course if intuition is to be scientifically proven there have to be rules to measure it by.

For example, Pearson says you need to be in the right mood in order to process the rapid information, or signals, available to you at any given moment. This can't happen if you're in a state of heightened emotion, he explains. "If you are overly emotional, if you are anxious or depressed, you're not going to be able to tap into the signals. If you ... just had a break-up, maybe even just won the lottery, stay away from using your intuition, because you're not going to be able to pick up on subtle feelings and vou're going to make a bad choice. You're going to tap into something I call misintuition, which is when intuition goes wrong, because you're not picking up on the signals."

But this innate tool - and Pearson does believe intuition is a tool – is one any of us can access, train, hone and sharpen, much as we can our memory or a muscle. It's more a matter of knowing what scenarios it can benefit us in, and when we're in a calm enough state their intuition is just the surface of Pearson's research into the human mind.".

He isn't your average scientist, at least not in any Hollywood trope sense. There's no tweed in sight; the 43-year-old wears a simple black T-shirt, chinos and white Common Project sneakers. Even some well-

hard to suppress a feeling of mild surprise, even shock, curated jewellery. Then there's the lab – a functionally chic common area with exposed concrete, industrial detailing and leather sofa that branches off into seven smaller practical research rooms. It could be a graphic designer's office, or an edgy new startup.

> In fact, Pearson describes what he and his team at Future Mind Labs and his adjacent project, MindX which has been tapped by businesses such as Lexus, which is seeking to integrate a more successful work model by understanding its people better, or testing creativity, and even tracking intuitive movement for "an intuitive car" – as just that, a startup.

> Pearson arrived at his current research in what is still an emerging field via a series of tangential pathways. After leaving high school, his first stop was to study architecture before transferring to science. He quickly found science boring – or rather, he found the teaching methods boring. "I went to a pretty small high school in the Blue Mountains," he says. "It was a little alternative, a bit like a Steiner school, with really small classes – two or three people in my chemistry and physics classes. But when I started university I was actually enrolled in architecture before swapping to science. I did a vear of this and it was boring – the way they were teaching is to just go and memorise this stuff. Then I switched to fine university I am at right now. I studied there and loved it,

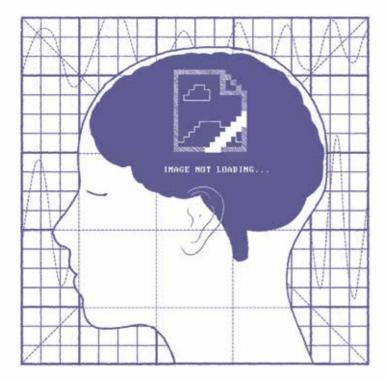
> Ironically, it was while studying for his art degree that Pearson fell back in love with science. Or a particular element of it: the mind. "Halfway through [my degree] I started reading and listening to a lot of audiobooks and things on consciousness," he says." And that's what started pulling me back towards psychology and neuroscience. I wanted to study consciousness and the nature of reality."

> An intangible, outlier topic more familiar to philosophy majors debating Descartes, but one that draws on his own multidisciplinary background, the concept of consciousness in Pearson's hands is malleable. On the one hand, it's the study of what essentially makes us uniquely us: "Everyone's brain is very, very different," he says. "More different than fingerprints. It's just the mind ,and consciousness is simply what it feels like to have a complex thing like that."

On the other hand, it's the practical way the mind makes sense of the world, and how we respond to it and predict it. This includes studying memory, measuring the imagination and creativity, and perhaps one of the more fascinating components, aphantasia, or the inability to form images in the mind. "Aphantasia is to use it. But teaching people how to tap into, and use, a complete lack of mental imagery, and in particular visual imagery," explains Pearson. "So it's just black on black. When you try to form a mental image, nothing happens in a sensory way or in a visual way, depending on whether you have imagery or not. If you don't have imagery, that's hard to understand."

If I were to ask you to imagine a banana, you'd picture

'Positive nudges have been used to get people to wear sunscreen or donate organs. But the negative, dark ones, we call these sludges. They are manipulating people's behaviour'



the bright yellow peel, maybe some brown pigment spots and the dark stem at one end. Imagine the weight of it, its texture. For those with aphantasia, this isn't possible; no pictures are able to be created. This difference – and it is a difference, Pearson stresses, not a disability, but more on that in a moment – is far more common than we realise.

"It's way more common than scientists realise," he says. "The study so far has really only gone to, like, 4 per cent. But every time I give a public talk on aphantasia there are always a few in the audience who come up and say, 'I think I have this. Oh my God, I never realised that's what imagery was. I always thought imagery was a metaphor, people didn't actually see something.' And they're shocked by this idea that you can have this fleeting sensory experience in the mind's eye."

While the symptoms of aphantasia throw a spanner into the works of those who preach the technique of creative visualisation, Pearson says meditation has also turned out to be one of the more common DIY methods of discovering that people have aphantasia. "So a lot of people have written to me and they'll explain how they tried this meditation and had to picture this and visualise that, and they just couldn't do it. They became really frustrated, so they Googled it, and came across this thing, aphantasia, and they were shocked. And that's a pretty common way for people to discover that something seems different in them from other people, simply by trying to do meditation."

Pearson's study on aphantasia, like the rhizomatic topic of consciousness, goes beyond just the inability to produce imagery within the brain. It's also connected to understanding how PTSD affects each individual differently, the sensation of empathy, and even the way our memory works. Rather than being a disadvantage, aphantasia actually has some surprising benefits.

According to Pearson, people with aphantasia showed a higher ability to retain information in the face of distraction. In a series of experiments, he and his team compared how different test groups – those who could produce mental imagery and those who couldn't – responded to a range of memory tests. Using flashing lights, they attempted to distract each subject from being able to remember details. People who relied on imagery to recall could get distracted. Those who had aphantasia had a higher success rate with recalling what they had been tasked with. "The people with aphantasia were using more high-level [methods of recall] so the lights don't make a difference," explains Pearson. Unlike those who used visualisation, Pearson says that those with aphantasia each had a unique system that allowed them to focus. "Some of them use semantics, some of them geometry, mathematics, but they're not using imagery."

Another bonus: if you have aphantasia you're less likely to experience PTSD. "We know there's data already out there that suggests that the stronger your imagery, the more likely you are to get PTSD after a trauma. And one of the conclusions here is that therefore if you don't think in pictures, think of it as a silver lining. You should be more immune to trauma and PTSD."

Resistance to PTSD, an ability to recall despite distraction via complex systems... it sounds like a checklist for suitable army recruits. Pearson admits that that might be something to be considered. "It feels weird to say that, but maybe that's a criterion that should be taken into account when they're hiring," he says. "I guess it's worth having that discussion."

This insight into how his studies of the mind and brain can be applied to real-world scenarios is perhaps Pearson' best example of honing and using that intuitive skill in

his own career path. What was once left-field has become an area so in demand that he and his team at Future Minds Lab are being hired by companies and brands that stand to benefit if they have a deeper understanding of just how the mind works; not just consumer patterns, but the actual machinations of the mind. Particularly when it comes to assessing cognitive biases and using what Pearson describes as nudges, a practice that has both positive and, depending on which end of the nudge you're on, less positive effects.

"[Some positive] nudges have been used to get people working outside to wear sunscreen. Or donate more organs. These are positive uses and people love talking about it. But all the negative, dark ones are usually kept very private, and there are plenty of them. We call these sludges. To a degree they are manipulating people's behaviour. Supermarkets do it. Most retailers will do it. Every website does it to a degree. When you look at a single one by itself, it's like, it's not really changing the world, it's not a big deal. But that little nudge over and over every second of the day over millions of people adds up to millions of dollars and huge change."

It's not just the parameters of Pearson's area of research that are expanding. Various sectors of industry are seeking him out: medical fields and psychology are givens. but there are also companies wanting to operate better, more efficiently, or even gain a better understanding of the way a customer, client or group of people think, including their own employees. Because if you understand how they think you can create a space for increased productivity. Or happier staff. Or happier customers. Which produces a happier ROI. Part of the goal of Future Minds Lab, and MindX, is to translate findings into practical methodologies companies can use to do all of the above. Their work isn't just theory driven, says Pearson, but is applicable to benefit businesses from big finance to design.

One of the workshops on offer at the lab is on learning how to successfully apply those nudges in your business model and workplace. Pearson and his team designed hard copy tools to help users put the skills he's teaching into practice on a daily basis. "There are hundreds of cognitive biases, but we picked the top 43," he explains. "[We also found] that if people have a hand in building something or making something, they'll like it and they'll use it, and if it's rule based you'll follow those rules much more."

There are also workshops on more opaque concepts – internal stresses that can affect productivity or workplace satisfaction, such as ambiguity: "Macquarie Group came to us and said, 'Uncertainty is the big thing we're all facing so can you design a workshop for our staff on uncertainty?' And we designed it and we ran that very successfully. And that involved taking some of the neuroscience, some clinical psychology and some other stuff in between, some coaching and other things, and putting it together into a practical, almost one-day workshop."

To adapt his discoveries for company heads who might be sceptical but are nevertheless open to an innovative approach, Pearson even created a new type of methodology he describes as agile science.

Developed in the lab over the years, it's a way of doing science that integrates most other sciences within it, Pearson says, adding that it's good science with less money. As a bonus, Pearson says his agile scientific methods are faster. Learning how to simplify testing procedures or rollouts, pivoting and even general development are leaner, quicker, less risky, and save both time and money, he says.

"People in industry are often 'thank God someone's doing this. This is how science should be'. They love this idea of doing quick, agile experiments to test things, getting some data and moving quickly. They've often had not so positive experiences with researchers where things were very slow and no one responded to emails for weeks."

By now, a 30-minute interview has stretched to two hours and Pearson shows no signs of slowing down. ("We haven't even touched on AI yet.") The intuitive understanding that we haven't scratched the surface of what is happening inside Future Minds Lab – and inside Pearson's own mind – sits heavily in the air. So a final question: If he could predict the next phase of his research, what might that look like? "Creativity's one we've started playing with now," he says. "I'd love to develop a whole new way of measuring creativity. It's a hard one, but it's obviously going to be the hottest topic over the next 10 years." ^(M)