Transcript: Leverage your brain for you

This is a subject that I'm very passionate about.
It's something that I feel you would get a great advantage from knowing- EVERY human would get a great advantage from knowing this.

It's about interconnectedness.
It's about mindset, but not in a positive psychology type way.
It's about mindset as a ‘heuristic’ and how mindset or how your ‘mental models’ interact with a thing in your brain called the ‘reticular activating system’, or the RAS for short.

So what are these things?
What are heuristics?
What are mindsets?

Well, a heuristic, a mental model, a mindset is a method that your brain has developed, of making decisions based on past experience.

Heuristics are deep foundational beliefs, deep foundational models that represent the world, deep, deep ways of thinking that the brain puts in place, when you are in a situation of repeated action, a repeated situation.

The things that get remembered very quickly, or get remembered very strongly are
things that have big emotional ties,
things that have pain attached,
things that are given to you from someone in a position of authority,
things that have danger attached to them or
things that are repeated, things that happen again, and again and again, the brain puts these things in place into habit, basically in our unconscious, like, it packs it away in the big old filing cabinets of our brain.

Why?
To save calories.
Your brain is the highest user of metabolic calories in your entire body - not moving, not running, not any of those things… but your brain.

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So one of the largest reasons that the brain likes to develop habits, mindsets, ways of thinking heuristics, is because it is energy efficient.

And another reason that it likes to do this is that if you have had a lesson that has had pain in it somewhere in life, (and I don't mean a lesson like you asked for it, I mean a cause and effect) that has caused you pain, it doesn't want to be in pain, it doesn't want your body to be in pain. So those lessons are remembered very strongly.

Your brain wants comfort.
And it seeks that comfort in a lack of conflict. In ease, in not being in a position where it's challenged. In being supported in something that it already believes. In routine, because we can put up with so much when it's a habit, we can put up with the most awful things, if it's routine, if it's habit.

The brain likes to engage in habit purely because it's energy efficient, not because it's fun, not because you want to, but because it's energy efficient.

That's a heuristic - sort of an overview of what a heuristic is.

And now I want to talk about the ‘reticular activating system’, which I call ‘RAS’.

If any of you have seen any of my Instagrams on this you know that it's because ‘razzle dazzle’ it just it stuck in my brain when I was learning about this when I was 18, at university learning about psychology.

The reticular activating system system, the RAS, is actually a really small part of the brain, but it's got a big job.

It starts at the top of the spinal column, and it goes about two inches up and it's about the width of a pencil or your little finger (assuming that your little finger is roughly the same diameter as a pencil!). It's about that size.It's not that big.

But all of your senses (with the exception of smell), all of your senses are wired directly into this area of your brain, this little bundle of neurons.

But the thing is that ALL the sensory information that the RAS gets from the world from your senses, (with the exception of smell), is SO vast, it's SO huge, it's billions of bytes of information… It's too much for our conscious mind to process and so the RAS becomes a gatekeeper.

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This amazing little tiny bundle of neurons becomes responsible for the
amount of information and
what kind of information comes into your conscious mind.

So its job is to ensure that the brain receives only what's important for it to receive, and only the amount that it can handle.
And it does this basically according to one category.
Is it relevant or is it not?

Now there are some things that always get through.
If there is anything to do with danger that always gets through.
If your name is called, that always gets through.
And oh, I'm going to have to go back and look this up but I think there is something to do with sex, if somebody has an offer of sex that always gets through, but I might have to check on that one.

So, outside of those things the question is: is it relevant or is it not?

And the information that comes through, is how it decides whether you should be aroused, whether you should be paying attention to something, whether you should be motivated to do a certain kind of behaviour.

So, it kind of controls what comes in, in terms of arousal, attention, sensation, and focus.
But it does so, like I said with a filter in place of relevant or not relevant, relevant or not relevant by being informed.

'what is important?',asks RAS… 'you tell me, conscious mind, unconscious mind, you tell me what's important?
There are some things that I will always find, like "danger"!
But what's important?
What do you want me to look for?'

Imagine, like a little sniffer dog at the airport, like it's been trained to smell for a certain drug.

And there may be different dogs that have specific skills to smell for specific drugs, right? They have a job to do. That's what the RAS does is like: 'what do you want to train me to look for?'

Hmm, now, you may start thinking, Oh, hang on a minute. Now, I see how the RAS and your mindset can play *together*.

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What we believe is important, is kind of based on what we believe, is true.

So we can split ‘relevant’ into two separate categories. -there's what we believe is **important** and
-what we believe is **true**,
and there is an awful lot of overlap within those two things.

So in terms of what we believe is **important**, if I invited you into my office, and I said that you're going to walk from one door, and you're going to go out the other door, and as you pass through my room, I'd love you to see all of the things in this space that are yellow, you may go through, and you'll be like, Oh, well, you know, there's that, there's that, there's that there's that……

And when you get to the other side, I'm going to say right, Okay, I want you to close your eyes and I want you to tell me how many things you saw that were blue.

And your eyes would shoot back open again, and you’d be ’hang on, you told me, you want me to look for yellow things, now you're asking me for blue, but I wasn't paying attention to the blue things, I was paying attention to the yellow things!’

Now the entire room could be painted blue, but because you asked your brain to find yellow things, that is what your brain looked for.

It's the same reason that when you get a new car, or a car in a certain colour, or you decide you're going to do something to your house, or the decisions that you make in life, as soon as you make them, you suddenly look out for it.

For me it was when I was pregnant. I hadn't noticed anybody being pregnant before.
And then when I was pregnant, suddenly I was looking around.
And it seemed like every other woman, every other human with a uterus around me was pregnant, or had just had babies.

Because my brain was primed for what was important to me at that point in life.

But it's really important to recognise that just because those are the things that you're RAS’s picking up, it doesn't mean that those are the only things. That is not a true representation.

For example, my room, my office does contain blue things as well - just because you didn't notice them
when you asked your brain to look for yellow, it doesn't mean that the blue ceased to exist.

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Just because I noticed a lot of pregnant humans around it doesn't mean that there were *only* pregnant humans right?

Right! My RAS was looking for the specific thing that I was interested in that was important to me.

And then what I believe to be **true**, this is like the basis of ‘cognitive bias’.

We will see data, we will find data, or we will interpret data in a way that suits how we already think.

This you'll often find in court cases where the same piece of information can be given by both sides.
And as a spectator we may say that the lawyers or the solicitors or the barristers, we think they are twisting the information when actually they are seeing the data from their perspective, they're seeing it from the mental model of supporting or defending or, prosecuting. They will find a way of looking at that same piece of data.

Like with statistics- exactly the same statistics can give very varying interpretations.

Cognitive bias is when we see data that reinforces, that confirms our mindset, (our heuristic, or opinion) and this is because our brain quite simply doesn't want to use the calories to think differently. Right?

There is comfort in knowing that we're right.

Dogma comes from righteousness, this ‘right’ness and ‘wrong’ness.

When you know that, actually, there's a brain faculty working towards that, I hope that you will offer a little more compassion to yourself, if you find yourself in a position that you are dogmatic or you are righteous, or you are with somebody who is behaving in that way.

But who programmes what's relevant, who programmes this amazing sniffer dog?
Well, our life does.
And then our awareness does.
We do.
Heuristics do - we believe them so deeply that we often don't question them, we just believe that they're true.

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Like, ‘you asked me to look for yellow things, I find the yellow things’
Like ‘you asked me to believe this thing’, says the reticular activating system.
‘You asked me to believe that thing, from any one of 1000 things?
Ok I will find you evidence for that.
That's my job’.

And because we find evidence, we don't question the truth.

So if you have a mindset, if you have a mental model that says, I'm rubbish at this, or it takes me a really long time to pick things up, you will find evidence to support that.

That's the job that your RAS has been given.

If you have a deep belief that bad things happen in threes, for example, and one bad thing happens, you will be on the lookout for the other two.

If you have a deep belief that it is dangerous to speak up or tell the truth, which may have been based on an experience in your life, or things that you have been told, lessons that you have learned, you will have found repeated evidence for that in your life.

And you will continue to because when you're looking for yellow, you're not looking for blue, when you're looking for evidence that it is dangerous to speak up, you're not looking for evidence that it is not, that it is safe to speak out that there are spaces where people would love you to speak up.

We always find evidence for what we believe to be true.

Now, that doesn't mean that the evidence that our RAS finds is wrong. It doesn't mean that the things that it's seeing out there in the world aren't actually happening. It's just not the whole picture, right.

Like I said, there were blue things in the room, the whole picture is that the room has yellow and blue in it.

Now, if you don't know this, if you don't know about this faculty of the brain, it's a total pain in the arse to move away from a belief whether it's serving you (and that's great), or whether it's not serving you and you would like to move away from it, if you are not aware of it.

If you're not aware that it's a belief, and if you're not aware of the function of the RAS, you can feel really stuck.

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Inside the Sovereign Safety Masterclass (SSMC), we do a lot of work on unpacking these things, on unpacking the things that we assume are true about the world, that we have banks and banks and banks have evidence to support.

And another thing that we do is that we see the structure of the brain are very often simple functions like this that I've just described to you.

I mean, it's a sophisticated filter, it's a sophisticated gatekeeper, the reticular activating system… But it's simple.

I mean, once you know, you can't unknow right?

I want you to know the functions of all the different parts of your brain that can lead you well down a track that you don't want to go down.
Because when you do, you can leverage the information.
You can use it in a way that benefits you because heuristics can change.

So as much as the RAS can support a belief that for example says there's something fundamentally wrong with me, and I can find so much evidence for that, (which by the way, is not true, there is nothing 'wrong' with any human in the world)

If it can support *that*, then exactly the same structures in the brain can be leveraged to support a *different* belief.

It can equally support a belief that you are 100% worthy, which I would love to offer you is something that I believe is fundamentally true.

It *serves* me to believe that, and it serves you to believe that, and it serves you for me to believe that, it serves other people in the world for you to believe that.

Beliefs that serve us, that add to life that add to humanity… I'm all in on that.

So let's leverage our brain with what we know about it, to benefit ourselves to benefit humanity to increase the positive gain that we can have.

Unpacking old mindsets, and priming your reticular activating system with new and intentional and serving mindsets, is not Pinterest positive psychology, this is deep.

This is neuroscience.

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But it's simple.
It does not have to be complicated.
It does not have to be opaque.

This is accessible to you right here. Right now, today.

There have been numerous studies on how a shift in mindset, a shift in heuristics and your mental models, how it can change your physiology, how it can change things from metabolism, which has been quantitatively registered in glucose markers, all the way through to success rates from surgery, or the time of recovery time taken to recover from surgery.

Mindset.

Dr. Alia Crum, (I will link to her in the show notes) was part of a clinical study where there were children with peanut allergies and there was a control group, and half of the children were told that the side effects that come from being treated with micro doses of peanuts, actually showed that their body was beginning to tolerate the peanuts and their success rates and approval rates went up during that clinical trial versus the children who weren't given that information.

Shows how we think about things that can make a physiological difference in our body.
You can do this now.

When you know that your reticular activating system finds what you want it to find, you can programme it.

Okay, you can look today for all the ways that you're supported by the world, in the world.

You can look for all the ways that show you that there is so much joy in what you do, that you're great at what you do.

You could look today for all the evidence of how loved you are, how loved you are by humans in your life. And I'm going to give you your first piece of evidence for that now, because I love you very much.

I hope you take a moment to sit and really think about this.
Because by changing a heuristic and mental model, and mindset… and this may be something that somebody outside of you can help you with, whether that's a therapist or a coach or a trusted other can help you see what your mental models may be - because sometimes, you know, when we're swimming around in something, it's actually quite a challenge to see what it is that we're swimming around in.

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But you will be able to know that you are swimming around in something because of the results that it is creating.

When you look at these old heuristics and you start to dismantle them, if they're not serving you, and you put new ones in place, it makes a ‘foundational’ change to your life.

And in the same way that the heuristics (that you may wish to move from because they're not serving you) in the same way that they have been efficiently stacked in your brain, exactly the same functions will stack these *new* heuristics, will store, will make efficient these ‘New heuristics’ these ‘new mental models’.

You have this available to you now, today.

Please use it.

I'll speak to you soon.

Reference:

Dr Alia Crum - adaptive mindset increasing biomarkers of allergic tolerance in patients receiving oral immunotherapy for food allergies: Changing mindsets about side effects | BMJ Open

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