

The Uncertain Brain.

A Guide to Facing the Fear of the Unknown.

Dr Sarah McKay



"...in these uncertain and unprecedented times..."

How often have you heard or read this phrase recently?

How long till we get a vaccine? When can I fly overseas to visit my parents? How many people will die? Is the curve starting to flatten? How long will the lockdown last? When will schools open again (And did they actually close)? What is our exit strategy?

The answer is almost always, "We don't know."

Fear of the unknown is perhaps the fundamental fear that underlies all of our very human anxieties and worries. And in 2020, we're all scrambling to find ways to cope.

Waiting is the hardest part

Many life situations we find ourselves in are characterised by 'not knowing' or having to 'wait to find out'.

Have you waited for the results of an important exam, anticipated a text response from a new romantic interest, or spent agonising days for the results of a medical diagnosis?

These common situations require waiting in the face of uncertainty. And people usually find the fear of the unknown a very emotionally uncomfortable place to be.

To reduce the emotional discomfort, people tend to behave in ways they hope will mitigate negative feelings.

Maybe you checked emails every few minutes waiting for an exam result, texted your new lover 'too soon', or spent hours googling for medical advice on your yet-to-be-diagnosed disease.

We can classify the **predictable ways** people respond as:

- worrying
- seeking reassurance
- searching for information
- becoming hypervigilant.

In the first quarter of 2020, we've seen people deploy various responses to cope with the fear and anxiety of the **COVID19** crisis, including 'panic buying' toilet paper and obsessively scrolling through newsfeeds.

Many of the ways we find to cope don't relieve the emotional discomfort of 'not knowing' but send us down an unhelpful and negative emotional spiral.

When worry becomes a habit

Human brains act as prediction machines. Your thoughts, feelings and behaviours are based on your brain's moment-by-moment 'best guess' of what's about to happen next. When day-to-day life becomes unpredictable, the brain creates stories to fill the information gap.

But some stories we tell ourselves make us feel worse, not better.

Worrying involves repeating a story or imagining a possible scenario over and over again. And from your brain's perspective, worrying is a type of 'mental rehearsal' in preparation for the real event. The more you repeat a thought, the more likely your brain is to treat that thought as a habit that needs to be stored permanently and rolled out habitually. When you worry, it becomes easier and easier for your imagination to roll out the worst-case scenario.

Like sitting in a rocking chair, worrying gives you something to do, but it gets you nowhere.

With the news getting worse by the day, seeking out data to 'fill the information gap' may also leave you frazzled, nervous or traumatised.

Why is this?

When the brain networks responsible for threat assessment are repeatedly activated they trigger your physiological stress-response systems over and over again. A hyperactive stress-response system leaves you in a state of heightened vigilance. From your brain's perspective, this is useful — you're on high alert so you can easily detect danger.

BUT at the same time, you'll feel emotionally wrung-out, jumpy and find it hard to sleep. Hypervigilance also has the knock-on effect of leaving you unable to discern danger from safe situations.

What is your tolerance to uncertainty?

It is important to understand we all vary in our tolerance to uncertainty, and different people, therefore, deploy a range of coping mechanisms.

Some people are ok with not knowing how what the future holds.

Other people can't cope with even the smallest degree of doubt.

I saw this play out during a recent Zoom call to discuss a much-anticipated Antarctic voyage that may, or may not, take place later this year. The leadership team simply could not promise whether or not we'll board that boat in November. Many people were ok with doubt and indecision. Others were not. They repeatedly asked for reassurance, requests for more detailed information, or expressed emotions ranging from anger to frustration to deep disappointment.

Why are some people ok with not knowing what the future, whereas others become distressed?

In order to study a behavioural phenomenon, scientists like to characterise and measure it. 'Tolerance to uncertainty' is no different and psychologists have a couple of well-established questionnaires that score your tolerance based on your response statements such as:

- It frustrates me not having all the information I need.
- I always want to know what the future has in store for me.
- A small unforeseen event can spoil everything, even with the best of planning.
- When it's time to act, uncertainty paralyses me.
- When I am uncertain I can't function very well.

People who score *low on tolerance to uncertainty* are much more likely to experience emotional distress compared to those who are more resilient.

Uncertainty goes hand and hand with anxiety, and those already suffering from anxiety are more likely to have a fear of the unknown. Low tolerance is also seen in people who struggle with mental health issues such as panic disorder, depression or social anxiety.

How to train your brain to be tolerant during COVID19

People who are exceptionally tolerant of uncertainty often have good cognitive and emotional control. They're easily able to compartmentalise their thoughts and choose what to pay attention to and what to ignore. And they're usually skilled at emotional regulation and keeping their responses 'in check'.

None of us can see into the future, so what do those of us less tolerant to uncertainty do to survive this period of time mentally and emotionally intact?

The good news is tolerance to uncertainty is like a muscle and can be strengthened.

In the good old days of 2019, psychologists would probably recommend you practice feeling uncertain and "act as if" you're tolerant. The theory being, role-playing you're very resilient and repeating healthy coping behaviours over and over again is like "worrying in a good way". And after a while, there's no "acting" necessary.

But it's a very different world we're facing in 2020.

Like it or not we've all found ourselves in a global 'Tolerance to Uncertainty' Boot Camp!

Here are seven actions you can take to train your brain to be tolerant of uncertainty.

1. CONTROL WHAT YOU CAN. The external world has become unpredictable and chaotic. Creating predictability and order when and where you can give you a sense of control. Even simple tasks such as organising folders in your computer, making your bed in the morning, or delegating tasks to a team create internal order.

WHY? When people feel that they have no control over a situation, they may begin to behave in a helpless manner. Helplessness can become something of a vicious cycle and people then fail to seek out opportunities for hope or action.

2. SET A DAILY SCHEDULE. Daily routines are your secret weapon against anxiety. Schedules are not just for home-schooled kids, they're a well-established prescription for reducing anxiety.

WHY? Setting a daily schedule automatically provide structure amidst chaos and anchors your mind to the present moment.

3. FALL BACK ON SYSTEMS AND PROCESSES. In a crisis, pilots are taught not to 'rise to the challenge', but to 'fall back on systems and processes'. A daily schedule provides you with a system to follow.

WHY? When we're stressed or uncertain, emotions degrade the quality of our decisions. We become distracted, indecisive and make poor judgements.

4. MOVE THE GOALPOSTS CLOSE. The work or life goals you set earlier this year may now be meaningless. The goalposts have not so much shifted as evaporated. To regain a sense of purpose, move the goalposts close and set yourself small, doable tasks. Now might be the time to shift your focus from the big picture to the details.

WHY? You're taking action. Feeling like you have accomplished even a small task will keep your motivation up and you moving forwards. Feeling 'on purpose' in your work is a key contributor to positive emotional wellbeing.

5. REWARD YOURSELF REGULARLY Now more than ever it's important to find joy in the small things, and to wallow in moments of pleasure. Schedule indulgences that you can look forward to. Pat yourself on the back for a job well done.

WHY? Research shows people who are highly intolerant to uncertainty are less responsive to rewards. They experience less enjoyment and quickly loose motivation and purpose. The feel-good neurotransmitter dopamine is released not only when we receive the reward, but in *anticipation* of a reward or completion of a goal.

6. MOVE YOUR BODY. Schedule time for daily exercise.

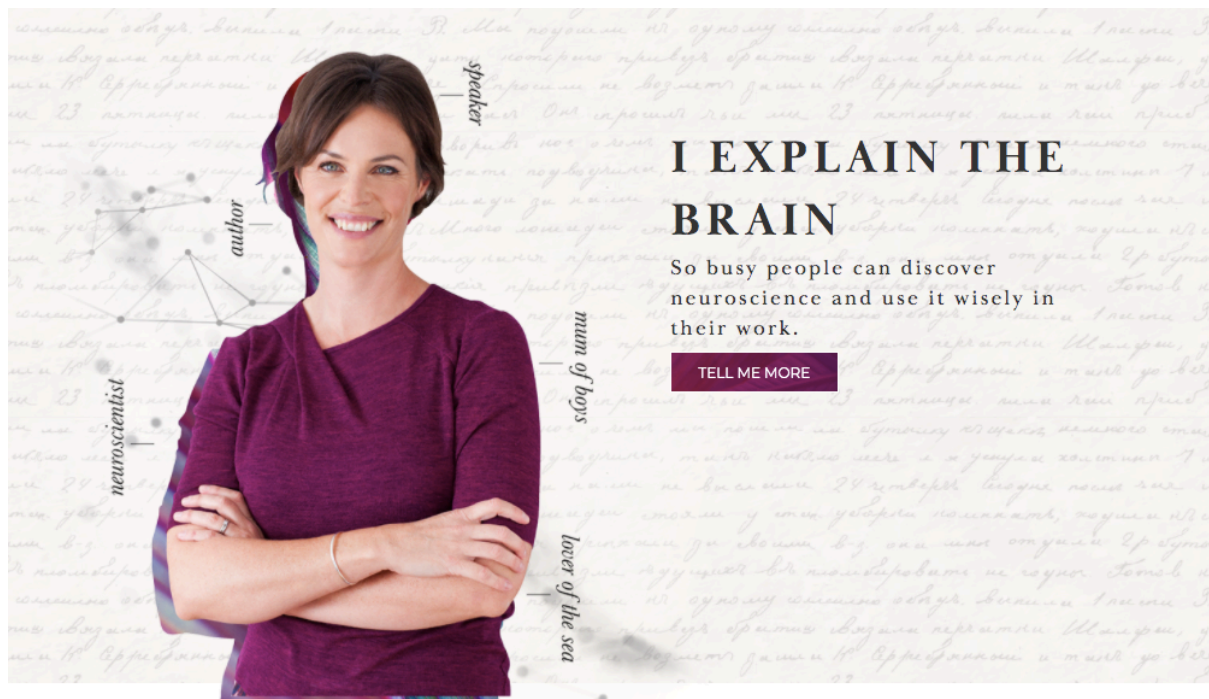
WHY? Not for the reason you might expect! When you exercise you're taking action. You're getting out of your mind into your body. And by moving your body you're reminding your brain that you retain agency. Your brain evolved to move your body through the world, so moving your body reminds your brain you're not helpless — you can still act independently and to make choices.

7. SUPPORT OTHERS. We're in this together, but separately. So if *you're* feeling lonely then resist the urge to look inwards for answers. Take action by supporting someone else. The upside to this crisis is it happened in 2020 when our ability to connect has never been so straightforward via phone, Zoom, FaceTime etc etc. 'Social distancing' is about being physically apart, not emotionally distant and socially isolated.

WHY? Feeling alone stems from the brain spending too much time and energy on self-contemplation. Contemplating your perceived loneliness is very similar to worrying — it won't solve the problem, and can easily make it worse. Lucky for us, feeling stressed triggers the release of the neuromodulator oxytocin (the so-called love or social neurochemical) And when oxytocin is released when we're stressed it encourages us to reach out to others.

As **Sue Carter** the doyenne of oxytocin research says,

"The protective effects of positive sociality seem to rely on the same cocktail of hormones that carry a biological message of 'love' throughout the body The same molecules that allow us to give and receive love, also link our need for others with health and well-being."



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Hi, I'm Dr Sarah McKay

I'm an Oxford University-educated neuroscientist, educator, presenter, media commentator, director of The Neuroscience Academy and author of *The Women's Brain Book: the neuroscience of health, hormones and happiness*.

I teach coaches, therapists, teachers and other helping professionals all they *need* to know about the brain so they can confidently apply insights and tools from neuroscience to their work.