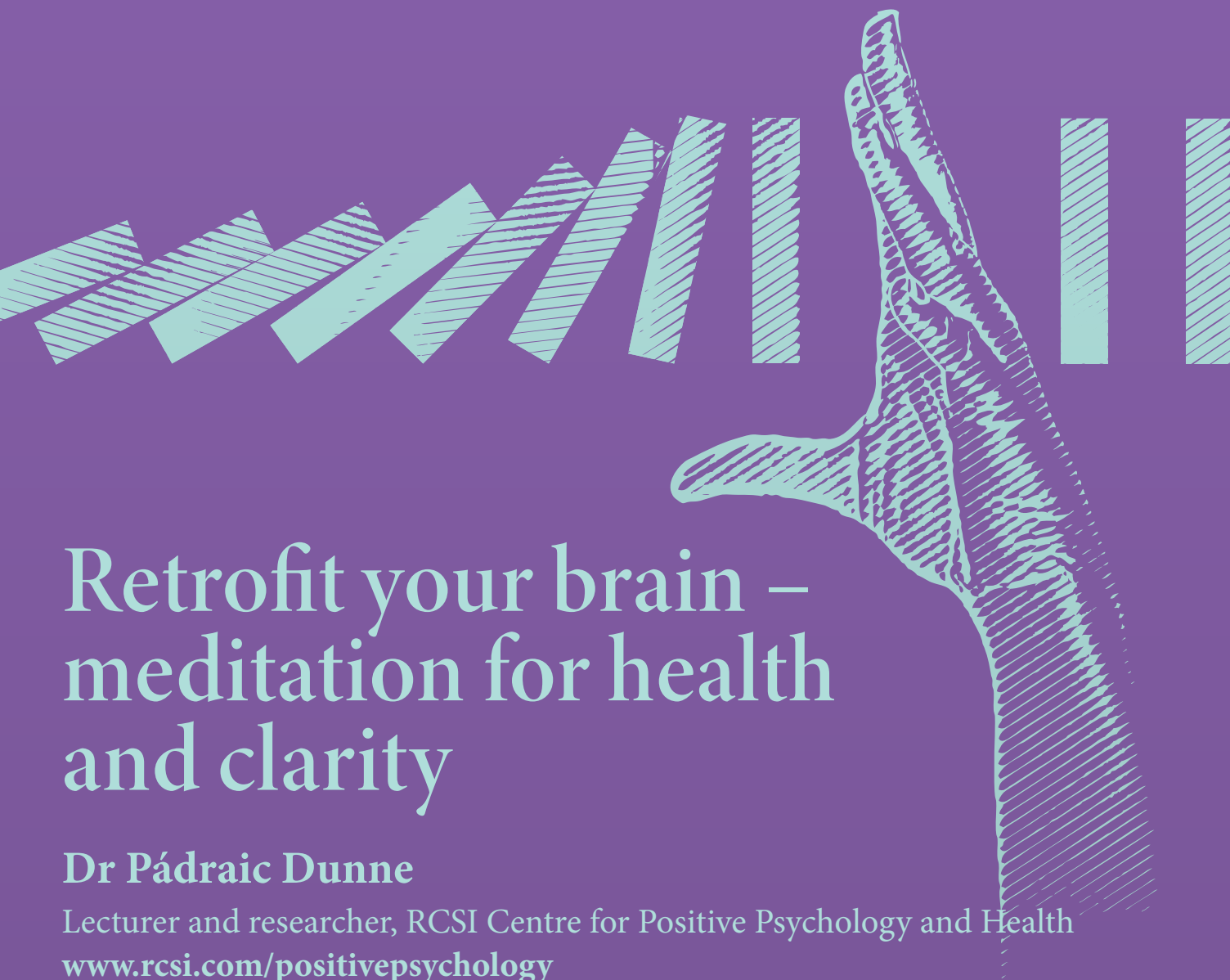




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Retrofit your brain – meditation for health and clarity

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centre for
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**“You have power over your mind - not outside events.
Realise this, and you will find strength.”**

~

MARCUS AURELIUS (Meditations)

If you want to be a better leader ~ *meditate*.

If you want to be a better parent ~ *meditate*.

If you want to be a better colleague ~ *meditate*.

But first - don't believe anything you read in this article
at first glance. Don't dive into the suggested reading and
don't Google the subject matter.

First, test it for yourself.

Dig into the practice and experience it.

You don't need any paraphernalia to practice –
no bells, cushions, candles or icons; all you need
is your breath and a chair.

The practice is as simple and complex as follows:

~ Sit

~ Set a timer for 2 minutes

~ Close your eyes

~ Breathe normally

~ Each time you become distracted from memory,
thoughts, sensations and emotions, disengage and
return to your normal breathing

~ When your timer goes off, get on with your day

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Meditation – the myths

Before we delve deeper into the topic, it is important dispel some myths surrounding meditation practice. First, meditation is not about stopping thinking. No matter how tranquil you feel in the body and how calm your mind is at any given time, there will always be thoughts, sensations, emotions and memories being detected and/or made by the brain. Especially, at the start of meditation practice and for those new to sitting still, without doing. It is the nature of the mind to be constantly active. The goal is not to stop thinking or sensing; the goal is to disengage, move around, beyond and above thoughts, sensations, emotions and memories. In fact, we sometimes acquire greater benefits from turbulent practice; you won't build muscle in the gym by lifting feathers. Secondly, you don't need to practice for hours each day to receive any benefit from meditation practice. Our research¹ and others' show that positive effects can be observed after only five minutes of practice, twice daily for four weeks. Finally, although meditation practice is a core aspect of Buddhism and many religions around the world, including early Christianity, you don't have to be religious to gain the benefits. The atheist's brain can gain the same rewards from regular practice as the devout religious one. These core practices are thousands of years old with clear guidelines and benefits that science is now beginning to confirm.

3

Modern stress and the thinking process

You are not your thoughts. This is a very important statement; one that many of us forget from time to time. This concept is especially important during times of accumulating stress and anxiety, which can often have negative effects on mental and physical health. Your brain will respond in the same manner to a paper tiger and a real one, if you tell it that both represent a significant threat. In the face of either threat, your perception and thinking processes will combine to activate the brain and nervous system, resulting in a cascade of stress hormones, including adrenaline. The consequences are accelerated heart rate and increased blood pressure, increased oxygen intake, decreased digestion, enhanced energy consumption, sweating, dilated pupils and tunnel vision. Additionally, activity in the logical/cognitive part of the brain is often reduced, as the brain's emotional and reactive centre takes control. This is all very fine and necessary, if you need to run from the real tiger. However, it's not all that helpful if you are sitting in a meeting with colleagues, feeling that your career is being threatened. Furthermore, while these necessary stress responses help us in the heat of battle, they can have serious negative impacts on our body, if activated over long periods of time. The outcome can be burnout and chronic anxiety, associated with heart, gut, loss of immune system function, as well as fatigue-related issues.

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“Our life is what our thoughts make it.”

~

Marcus Aurelius (*Meditations*)

If the thinking process is the problem (in many instances), it is also the source of the solution. Remember, you are not your thoughts; you have a choice whether to attribute meaning to these collection of words that emerge in your mindscape. You can choose whether to engage these thoughts or not. More often than not, when we engage these first (often negative) thoughts, they initiate a domino effect that can lead to narratives of thinking, which can be catastrophic in nature, as they project into the future. As I mentioned at the beginning, you can't stop your thinking process. However, you can disengage from these initial thoughts, thereby stopping this cascade of negative and threatening thinking processes. We can use meditation to help us practice this disengagement on a moment by moment basis. Eventually and over time, we learn how much choice we actually have in relation to engaging thoughts, memories, sensations and emotions. We can't stop thoughts, memories, sensations and emotions but we can choose how we react (or not) to them. Meditation limits these engagements, stops the development of catastrophic narratives and reduces the perceived threat. This can only be a good thing and is, in essence, the first and central aim of meditation practice.

4

Meditation – the proven benefits

We have experienced a tsunami of information on the proposed benefits of meditation over the past two decades, with words like *mindfulness* entering the common lexicon. The US National Library of Medicine (PubMed) database shows that 5,979 scientific and medical research articles and reviews were published between 2000 and 2020, with the word *meditation* in the title or abstract. Admittedly, not all of these peer-reviewed, published manuscripts are of stellar quality. However, the point remains that research is booming in this field, with interested parties from a wide ranging multi-disciplinary fields, including neuroscience, medicine, psychology, behavioural science and sociology, among many others.

Meditation practice consistently seems to have a positive impact on mental health, especially anxiety, stress and burnout as well as on pain, the immune, hormone and cardiovascular systems. There is also some tantalising evidence that meditation practices can have an effect at the epigenetic level – a fascinating, relatively new area in genetics.

Meditation also seems to change brain activity over the short and long-term. In short, meditation can retrofit the brain, allowing for greater focus, attention and cognitive control as well as emotional regulation². For more information, I would recommend a recent special edition of Scientific American Mind³.

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Closer to home, we, along with colleagues at the Royal College of Physicians in Ireland (RCPI), St. James's Hospital Dublin and the Trinity Translational Medicine Institute (TTMI) have shown that Attention-based Training (based on mantra meditation) had a positive impact on 42 members of St. James's Hospital Emergency Department. Using a randomised controlled trial methodology, we showed that Attention-based Training (ABT) over an 8 week period, reduced burnout, anxiety, stress and the stress hormone cortisol, while simultaneously boosting immunity, sleep and heart health⁴.

Are all meditations the same?

The short answer is no. Broadly speaking, basic meditation falls into three types of practices, with three central aims: (1) metacognition (thinking about thinking), associated with the development of self- and other-awareness - mindfulness falls into this category; (2) concentration-based meditation, which employs an anchor such as the breath or a chosen phrase (mantra) to develop a focus and attention that ultimately serves to transcend turbulent thought and emotion – examples include attention-based Training (ABT), mantra and Zazen (Japanese) sitting meditation; (3) meditation focused on cultivating compassion and gratitude for self and others – e.g. loving-kindness meditation.

Recently, a German group of researchers based at the Max Plank Neuroscience Lab in Berlin, have conducted a large study ([ReSource Project](#)) on these three different types of meditation and their impacts on the mind and body⁵. The study group experienced three different types of meditative practices over 9 months that impacted differently on the brain, body and behaviour. In other words, if you want to use meditation practice as a clinical tool to help individuals suffering from different conditions then you have to use the right instrument (or meditation practice) for the job. For example, attention-based meditation boosts attentional performance, focus and memory. Emotional awareness and compassion is enhanced by mindfulness and loving-kindness meditation practices – this can prove useful for healthcare practitioners experiencing burnout. Conflict negotiation skills can be enhanced through compassion-based meditation. The bottom line: use the right meditation tool for the right job.

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Leaders who meditate

Meditation isn't just for Buddhist monks and aging rock and movie stars. Many world leaders advocate meditation practice as an essential component of their success⁶. Among these leaders are **Bill Gates** (founder of Microsoft), **Ray Dalio** (billionaire hedge fund manager and founder of Bridgewater Associates USA), **Bill Ford** (Executive Chairman, Ford Motor Company), **Tony Schwartz** (Founder & CEO, The Energy Project), **Padmasree Warrior** (CTO, Cisco Systems), **Larry Brilliant** (former director of Google), **Jeff Weiner** (CEO of Linked-in) and **Robert Stiller** (CEO, Green Mountain Coffee Roasters Inc.).

Gates has been quoted as believing that meditation is one of his most impactful practices:

*“For me, it has nothing to do with faith or mysticism. It's about taking a few minutes out of my day, learning how to pay attention to the thoughts in my head, and gaining a little bit of distance from them.”*⁷

Dalio, the hugely successful American hedge fund manager is a strong proponent of daily meditation, making it a requirement for senior executives in his board room:

*“Meditation more than anything in my life was the biggest ingredient of whatever success I've had”*⁸

It's not only business leaders who attribute daily meditation practice to their success; Olympic athletes, as well as both soccer⁹ and rugby players have described the positive impact of regular practice on their game¹⁰.

Finally, I think we can all agree that the world's military are not regarded as shrinking violets, hell-bent on enlightenment. NATO has organised mindfulness training for military leaders at the highest level, while the US Marine Corp and Special Forces groups, Royal Navy and New Zealand Defence Forces have all incorporated meditation training for team work in combat as well as to manage post-traumatic stress for soldiers returning from conflict¹¹.

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Conclusion

Regardless of the emerging evidence and origins of different types of meditation practices referenced here, the most important take-away from this piece is that you practice. Although we are all time-poor these days, most of us can find two minutes in which to sit and disengage. Be your own researcher – test the experience for yourself. Research from University College London shows that it takes on average, 66 days to form a new habit¹². Practice for two minutes in the morning and evening for 66 days:

- Sit
- Set a timer for 2 minutes
- Close your eyes
- Breathe normally
- Each time you become distracted from memory, thoughts, sensations and emotions, disengage and return to your normal breathing
- When your timer goes off, get on with your day

Remember, you are not your thoughts. Use this simple meditation practice to retrofit your brain and help take control of your daily reactions. **The result will lead you to being a better leader, parent, colleague and friend.**

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