

Struggling to find the motivation to exercise? Blame your brain

We all know that working out makes us feel better. So why do most of us find it so difficult to actually do it?

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Finding it difficult to keep hitting the gym? You're not lazy – it's your brain that's to blame.



Humans aren't the fastest or strongest species. We have no wings, fangs, claws, venom or armour. Physically, we're largely nature's also-rans.

'Also-ran' is an ironic term, though, because humans do physically dominate all other species in one area: long-distance running. Our bipedal gait and unique sweat glands mean humans can keep running long after other species collapse from exhaustion.

Basically, humans evolved to spend long periods physically exerting themselves – that is, exercising. But while many people do indeed enjoy exercising, the less crowded gyms and abandoned New Year resolutions of mid-February reveal they're in the minority. Even though, as a species, we've evolved to do it.

Why? The baffling complexity of the human brain is to blame. Evolving an ability doesn't automatically mean we'll want to use it; after all, creatures with armour don't actively want to be attacked. Granted, physical exercise isn't that bad, but it's still typically unpleasant and uncomfortable. It has to be. You're pushing your body to its physical limits, which leads to significant discomfort – they're limits for a reason.

Another issue is that the human brain is highly sensitive to wasted effort. Studies have shown that it contains dedicated circuits, within the insula cortex, that calculate the effort required for actions, the likely reward we'll get from them, and ask "is it worth it?"

It's an evolved tendency to stop us squandering vital resources on pointless endeavours (for example, walking 20 miles for a handful of berries). But regular exercise, to get in shape, requires constant, considerable effort, for gradual progress and uncertain rewards (it's

impossible to guarantee ahead of time that you'll succeed). So, your brain's tendency to ask, "is it worth it?" will be hard to ignore.

This trait also means we typically prefer things that offer minimum effort for maximum reward. So, we take the path of least resistance, stick to routines, dwell within our comfort zones and so on.

Taking up exercise means changing all that for uncertain results. And our brains typically tend to put more significance on risk over potential reward (in other words, we prefer to play it safe), meaning we're even more reluctant to take up physically demanding activities.

So, while our bodies may be adapted to constant exercise, our brains have, in many ways, adapted to avoid it. And we've built a world for ourselves

where avoiding physical activity is a viable option. It's often encouraged, if anything.

Thankfully, the human brain is a terrifyingly complex organ, so has a few tricks up its metaphorical sleeve.

Most obviously, it isn't ruled by the more primitive, immediate instincts and drives. While many species' thought processes are limited to: "Food... Eat it!"; "Danger... Run!"; "Pain... Avoid!" and so on, we've evolved beyond that.

Human brains can form, and adhere to, multiple long-term goals and ambitions. We're rarely content with just day-to-day survival: we can simulate a desirable future scenario, figure out how we'd achieve it, and do that. Or at least work toward it.

This directly impacts how our brain processes motivation and willpower, in many interesting ways. For one, it makes us capable of delayed gratification: we can recognise that rejecting a reward now can lead to a greater reward later, and act accordingly. In this case, we understand that eating four family bags of crisps while bingeing Netflix shows will be enjoyable right now, but going to the gym, while altogether less enjoyable, will mean we're fitter, stronger and healthier later. And we decide accordingly.

There are also things like the 'just-world fallacy', where we inherently assume the world is fair, so studies provide the idea that discomfort and 'suffering' will surely lead to rewards. In short, this means that 'no pain, no gain' is a widely accepted concept.

Our brains frame these various motivational factors in a variety of forms. The self-discrepancy theory suggests we have several 'selves' active in our minds at any given time; our 'actual' self, our 'ideal' self and our 'ought' self.

Your 'actual' self is your current state, how you are right now. Your 'ideal' self is what you want to be. And your 'ought' self is the self that does all the stuff required to become your ideal self.

It's the self that does what you ought to be doing; it's the road between points A and B.

So, if your ideal self is a professional footballer and your actual self isn't, your ought self is the one that spends a lot of time training, exercising and getting better at football.

That's just one framework for how motivation works when it comes to physical exercise. There are, of course, many other factors that play an important role, such as time constraints, body image and mobility.

But as far as your brain is concerned, there are processes that discourage exercise and processes that encourage it. Ideally, you'll end up putting more weight on the latter than the former. And moving weights around is a go-to type of exercise, so it helps to start somewhere.

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