



## RID STRESS & ANXIETY

How exercise really affects stress and anxiety

# HOW TO GIVE STRESS AND ANXIETY A PHYSICAL BEATING

*By Margo White*

**The link between physical activity and psychological health is clear but also misunderstood. We ask health psychology researcher Amanda Rebar about how exercise really affects stress and anxiety.**

**MARGO WHITE:** What exactly is stress and anxiety?

**AMANDA REBAR:** It depends on who you talk to. The way we picture it, stress and anxiety is both an emotional and physical state. It's that feeling of activation, of having lots of energy, but a negative feeling is tied to that.

Some people tease stress and anxiety apart further, distinguishing between stress, which generally has a source and is a consequence of something happening in your life, and anxiety, which doesn't necessarily have a cause – you just wake up feeling anxious, even though you can't pinpoint why.

But overall the evidence is that physical activity reduces stress and anxiety, both psychologically – that feeling of negativity – as well as physiologically – that activated, energetic feeling, the gut feeling in your body.

**In a way we've always known that – that if you're stressed, you might go for a good walk.**

In a sense you're right. It's a solution people have always had to reduce that overly activated feeling – to “burn some energy”. There are some theories that the feeling of stress, that feeling of activation can, as long as it's not too negative, help motivate you. So that activated feeling motivates you to move, but people often want to burn off that feeling.

**There are myriad theories about the physiological mechanisms that explain why exercise reduces stress and anxiety. If you google “exercise and stress” you’ll find, for instance, articles about how exercise releases endorphins. But that’s not true, is it?**

The endorphin hypothesis has pretty much been debunked as an explanation for the mental health benefits of physical activity. But that’s not to say there aren’t neurotransmitter effects underlying the beneficial effects of exercise.

Research is pointing to a number of physiological explanations, such as how exercise promotes neurogenesis, or how exercise helps regulate what’s called the hypothalamic-pituitary adrenal (HPA) axis, the interaction of hypothalamus, the pituitary gland and the adrenal glands in our body, which controls reactions to stress.

**Are you convinced?**

The annoying part of this is that there are so many unanswered questions. It’s likely that the anxiety-reducing benefits of exercise are due to several mechanisms manifesting at a neurophysiological level – on a combination of neurotransmitters in the brain at a physiological level, but also psychological mechanisms.

**What sort of psychological mechanisms?**

Such as exercise distracting you from whatever is worrying you, from ruminating on what might or might not happen. So just pulling yourself away from that and focusing on other things can mediate stress and anxiety.

But it depends on the type of exercise. Social connections and support helps reduce stress and anxiety, and exercise is often done with other people. And the psychological benefits you get from hanging out with friends can be magnified if it’s combined with some kind of physical activity. So if you go on a walk with friends, that’s going to have more of an effect on anxiety and stress than sitting down and having a coffee with them.

**When health researchers talk about the cognitive and psychological benefits of exercise, they tend to emphasize the importance of cardiovascular exercise, of getting the blood pumping and the heart rate going ...**

That’s the fitness hypothesis, which says that the mental health benefits of exercise are based on changes in fitness, and that you have to reach a certain physiological change for mental health benefits to occur. But that’s just not the case. You don’t have to get to a certain level of fitness to get either the immediate or the long-term benefits of exercise.

There are definitely benefits to becoming fitter, both physical and mental, but there is a risk of underselling the benefits of low intensity activity. Knowing that if you just go for a walk, you’re going to feel better, is much less daunting.

There's a huge body of evidence for the benefits of walking, so it’s important that we don’t undersell that. Any exercise is better than none, especially if you’re looking for quick relief; the benefits are quite quick when you get active, even if you’re just walking.

**What about the idea that by physically stressing your body, it will make both body and mind more resilient?**

New evidence is suggesting that exercise helps you manage stress, not only because your body is better able to cope with that activated feeling, at a physiological level, but also at a psychological level.

The way you’re thinking and feeling affects your physical states; you can feel it in your stomach, and head, you’re heart rate. So, if you have somatic symptoms – like your heart is racing fast – and you’re always associating that with anxiety or stress, it can make you more stressed and anxious. Whereas if you’re used to it in a more positive way – your heart is racing because you’re doing physical activity and it’s fun – you may learn to associate that feeling with something that feels rather good. So some of the somatic symptoms of stress won’t stress you out so much.

**Presumably there are behavioral factors involved too? If your waistline starts shrinking, your strength and stamina increases, you’re might start to feel more in control of your body, and possibly your life.**

That feeling of being in control has huge benefits. But this isn’t because your waistline is reducing or your strength is increasing, rather the fact that you are achieving your behavioral goals – that you’re getting out walking every day,

or enjoying friends in an active environment. That's a feeling we call "perceived control". You remember that you can control the way you think and what you do.

So the more you engage in activity day after day, the more in control of your behavior you feel, and that generalizes beyond exercise, and make you feel more in control of the rest of your life.

The beauty of exercise and motivation is that it's cyclical. If you get up and do it, you're going to be motivated to do it for longer and do it again. And the more you do it, the easier it will be to do, and the more benefits you'll get from it.

**Your own research is about motivation – how to motivate people to exercise. How do you motivate people who aren't particularly motivated to exercise?**

I'm really against giving a recommended amount. More is better than what you're doing now, and any is better than none. And do what you enjoy, something that you'll look forward to doing.

There are numerous campaigns telling people that exercise is medicine, that it will help them from developing mental or physical health disorders, but that isn't getting people off the couch. It has got to be something you want to do, something that is easy to do and becomes second nature over time.

You don't want to treat exercise as something that has to be done, something you have to cram into an already busy day. That's only going to make you feel busier and more stressed. You want to do it in a way that makes your life more efficient, such as walking instead of driving, or have a meeting while you're walking.

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