Stress and Anxiety Podcast Episode 2

Podcast 2 – Stress – 17 minutes

So in the first podcast, we thought about how we might define stress and anxiety, some common signs and symptoms, and a few of the situations that tend to cause stress and anxiety to members of the University of Oxford student community. In this second podcast, we'll be exploring the concept of stress from more of a physiological perspective, and thinking about some of the various ways in which we can categorise stressful experiences. You'll be asked to think about and reflect on the current stressors in your life, before we go on to think, in Podcasts 3 and 4, about how we might categorise and explain different types of anxiety.

But if you'd like to, let's start this podcast with another breathing exercise – this time, you could try so-called 'box breathing' where you breathe in for four seconds, hold for four seconds, breathe out for four seconds, then pause for four seconds, and then repeat. Remember that you'll need to do this for around 10-12 breath cycles in order to start feeling a bit calmer. If you like, you can then repeat the cycle, breathing in, holding, breathing out, and pausing, all for five seconds this time round, and you might even want to try another round at 6 seconds. Feel free to pause the podcast now to do this, if you'd like to give this a go [demonstrate].

Coming to how we might define stress, then, let's take the definition that we used in Podcast 1 – that is, that stress is the physiological response of your body, brain, and mind to a perceived physical or mental threat. Let's also bear in mind that our bodies and brains probably haven't changed that much over the last several hundred thousand years.

Taking the physical level first, then, we're essentially still animals, designed to react to external physical threats at what is essentially a basic, bodily level. These physical threats might once have included being chased by a wild animal or other hostile human beings, a major change in our physical environment, such as a famine or extreme changes in temperature, or other potential risks to our physical survival, such as being separated or exiled from our social group. Now, whilst these are hopefully not things that happen too often these days in Oxford, our bodies are still primed to react to contemporary physical experiences that we might perceive as threatening in an almost identical manner as to ancient and more fundamental physical threats. These might include anything from having a bit of a wobble on our bicycle on our way to a lecture to sitting in an exam hall for several hours in sub fusc, and from being under the weather with a minor infection to experiencing chronic pain or feeling physically intimidated by someone.

But it’s not only external physical threats that matter, it’s also internal physiological threats, too– in other words, stress relating to our basic internal bodily states. This is because being out of balance physiologically can also contribute to, or exacerbate, any mental or emotional stress that we might already be feeling. Physiological stress relates to any stressor which disrupts homeostasis, that is, the body’s ability to maintain a reasonably constant internal environment in order to optimise survival. What our bodies need, then, is to regulate things like carbon dioxide levels, blood sugar, pH balance, hydration, and body temperature, using processes such as respiration, circulation, the nervous system, the endocrine system, and excretion. We have probably all had the experience that, if our breathing is too shallow or too fast, if we’re hungry, thirsty, or tired, if we feel too hot or too cold, or if we’re just feeling physically ill or in pain, we’ve tended to feel more stressed mentally and emotionally, too. That’s at least in part because, under these physiologically unbalanced conditions, our bodies - including our brains and therefore our minds – are under additional strain, as well. Even consuming too much sugar can cause excessive inflammation and therefore physiological stress in our bodies, and whilst the occasional sweet treat is probably fine for most people, too much sugar over an extended period is likely to impact not only our physical, but also our mental and emotional state, too.

So keeping our physiological condition as well-regulated as we can by breathing well, eating enough of the right things at regular intervals, keeping well hydrated, maintaining a stable body temperature, and ensuring that we are getting enough sleep and exercise, are all going to help our overall stress levels, whatever the underlying causes might be of any additional mental or emotional stress we are experiencing. It’s also important to note that ongoing mental and emotional stress will, conversely, have a negative effect on our physiological state, particularly in the longer term, whether that’s with regards to higher blood pressure or harmful cholesterol, or issues such as gut problems or a weakened immune system. And if you have particular visual, olfactory, auditory, or other sensitivities, then these might also be feeding into your overall stress levels, too.

All of these biological factors, as well as a variety of others, can contribute to our feeling stressed at a physical level, but mental or emotional perceived threats are, of course, very important, too, and what most of us are referring to when we talk about feeling stressed. Indeed, research has demonstrated that even imagining mental or emotional threats can and does have a physiological effect on our bodily state, so even thinking about or imagining stressful events or situations can make us feel more agitated.

Mental or emotional stress might include major life events such as leaving home, moving from one culture to another, sitting your finals, submitting your dissertation or thesis, or

moving on from university. It might encompass difficult life experiences such as breaking-up with a long-term partner, losing a loved one, having an excessive or impossible workload over an extended period, finding work too difficult or not challenging enough, or experiencing repeated macro- or micro-aggressions, for example, as a member of a racialized or other minority. Mental or emotional stress might even include positive events or experiences such as falling in love, passing your exams, getting married, starting a new job, or passing your viva.

But mental or emotional threats can also include minor life events or the small irritations of everyday life, too – so such things as feeling unprepared for a tutorial, dealing with everyday problems with housemates, coping with an endless stream of emails, feeling let down socially or, conversely, feeling socially over-exposed, or getting your timetable or work deadlines at short notice can all have an impact as, for some people, can lights being too bright, people standing too close, or having to use an escalator. Ultimately, what is often most significant about whether you find an event, situation, or experience stressful is what it means to you. And just to reiterate, by reinforcing particular neural networks, even thinking about or imagining minor stressors or mini-threats can contribute cumulatively to our feeling stressed or overwhelmed, whether or not the events, situations, or experiences would be considered stressful by other people, and whether or not they actually go on to happen in real life.

In addition to the physical and physiological, versus mental and emotional categorisations we've just outlined previously, other ways in which we can classify stress include helpful versus unhelpful stress, acute versus chronic stress, and macro- versus micro-stress. And what can be useful about understanding and applying these categorisations is that they can enable us to begin to identify what it is that is making our own day to day lives feel so stressful, which are the stressors that we can change and which those we can't, and above all, which approaches we might start to employ to begin to address them, where possible. Even doing this classification exercise can give us a greater sense of control over our own lives, which in turn can help us to manage our stress levels. But first of all, let's explore what we mean by each of these different categories of stress.

Helpful/unhelpful stress

We've already mentioned in Podcast 1 how being a bit nervous before the start of your finals can often make you feel energized and focussed enough to enhance your performance, perhaps helping you to do that last bit of revision and then to dredge up from somewhere the facts, thoughts, arguments, or quotes that you might need, and to get them all down on paper that bit faster than you normally would when writing an essay or problem sheet at home. But while the narrowed focus, heightened concentration, and

rapid reactions associated with stress can be helpful when you're sitting an exam, this response is a lot less helpful as a default reaction if you're just a couple of minutes late or feeling a bit unprepared for a tutorial, if you're going to a social event, or if you respond by flinching when a friend raises a hand in amicable greeting. So what might be helpful when dealing with a major but more occasional mental or physical challenge might be less helpful when triggering your body's stress responses in reaction to a relatively minor but more everyday situation.

This kind of unhelpful stress can leave us feeling emotionally drained and unable to think straight, make ordinary decisions, or take appropriate action, and it can even leave us with a sense that we have little or no control over events, and feeling permanently uptight. So we might be irritable, short-tempered, or panicky, unable to breathe properly, nauseous or with an upset stomach, our shoulders up round our ears, and perhaps suffering from back pain or frequent headaches. Sometimes, if we're experiencing extreme stress over a more extended period, we might find our hair starts to fall out, our gut becomes really over-sensitive, our hearing or eyesight goes haywire, or we might get more migraines, low level infections, find our hormones get disrupted, or that we even start to experience flu-like symptoms when we haven't got flu. These unhelpful stress responses are essentially an over-reaction by our body to what feels like a physical threat but actually isn't, and which doesn't then involve the physical release that running away from a wild animal, for example, would usually entail. Unfortunately, with extreme frequency over an extended period, this can not only lead to physical and mental health problems, but also to potentially serious medical conditions, such as burn-out or hypertension. Cortisol increases blood sugar levels (through gluconeogenesis), which supply the energy for the 'fight or flight' response, so chronic stress and elevated cortisol levels can also, for example, eventually lead to insulin resistance.

Acute/chronic stress

Both helpful and unhelpful stress can also be thought about in terms of what we call 'acute' and 'chronic' stress –a brief, 'peak' response to dealing with a one-off, short-term situation, such as nearly being run over by someone on a bicycle, sitting a difficult exam, or having to put in an extension request, or a more continuous reaction to dealing with a long-term situation, such as an excessive ongoing workload, feeling socially isolated for an extended period of time, or coping with chronic long-term IT problems, when your stress response might be switched on more permanently.

Macro-stressors/micro-stressors

We can also divide stress into what are termed 'macro stressors' and 'micro-stressors'. Macro-stressors are major life events, some of which we've already mentioned, such as traumatic childhood experiences, a serious illness or accident, or even more positive things like moving house or taking on a challenging new research project - basically, any experience which most people would experience as being somewhat stressful, even if it's sometimes positive, overall. Micro-stressors, on the other hand, are those relatively minor life events or experiences by which some people might feel temporarily irritated or overwhelmed but not others, such as lots of minor but tight deadlines in rapid succession, feeling you're always the one who has to clean the kitchen, or repeatedly having to look for the lights on your bike, all of which, whilst relatively trivial on the grand scale of things can, over time, leave some people feeling drained and exhausted.

Combinations of categorisations

Of course, these different categorisations can also all be combined in various ways.

So you might experience acute emotional stress in response to a macro-stressor, such as the death of a loved one, or chronic emotional stress because of an accumulation of micro-stressors, such as a permanently excessive workload together with chronic IT problems lasting for several months.

A class test might be categorised by some people as an acute mental micro-stressor, in that it might only last for an hour or two, but be perceived as a potential threat to their sense of identity as being academically exceptional, whereas other people might not find a class test stressful but might instead see it as an interesting challenge.

Sitting your finals, in contrast, might be categorised as an acute mental macro-stressor, as finals usually only last for a few weeks, but will probably be experienced by most people as a somewhat stressful experience.

Why do these categorisations matter?

Well, one of the reasons these labels can be helpful is that they can help us to be realistic about our own reactions to stress when we experience it. Often, we beat ourselves up for not dealing better with an experience which, in fact, most people would probably find pretty overwhelming. Conversely, we might minimise the impact of what we think are relatively minor issues that we feel we shouldn't be 'making a fuss' about, but which potentially might well be causing us significant long-term harm.

As with most mental health and wellbeing issues, however, as we've already outlined, stress is usually a combination of genetic predisposition meeting unhelpful experience – in other words, whilst we might have a familial tendency to getting stressed, we've probably

also had a number of experiences in the past which mean that we have learned to react in particular ways, which might have become a pattern. And as we'll go on to see in Podcasts 3 and 4 with anxiety, we might not always consciously remember the experiences that have led to these patterns getting established, but our unconscious minds and our bodies are likely to remember them, anyway. Essentially, then, stress might be seen as a specific type of anxiety that we'll go on to discover is called 'signal' or 'anticipatory' anxiety, where our body, brain, and mind are flagging to us that we are feeling unequal to meeting the particular challenges we are facing at a given point in time, and that this perhaps reminds us of a situation we have experienced before which did not go well for us, whether or not we consciously remember this. Whatever our genetic predispositions or experiences might be, however, starting to replace some of our unhelpful learned reactions with more helpful responses, at least as far as micro-stressors are concerned, might be a good place to start.

You might want to pause this podcast now and make a note of the factors that you feel are causing you stress at present. Remember to be kind to yourself as you do this, as it might make you feel a bit stressed even thinking about them. Try to include everything you can think of, from the bigger things, to the myriad smaller things that might also cumulatively be causing you stress. Then try classifying the stressors you have listed into the various types of stress we've talked about so far, using the categories of helpful and unhelpful stress, acute and chronic stress, and macro- and micro- stress.

You might also want to practise taking a particularly stressful situation you are currently facing and identifying the combination of different types of stresses it involves. Even starting to think about the causes of our present stress and making a list of the kinds of stress to which we feel we are currently being subjected can start to give us a sense of breaking the problem down into its component parts. And whilst few of us can control the macro-stressors in our life – after all, not feeling in control of them is part of what makes them feel stressful – we can often do something about the micro-stressors - those more minor, day to day issues with which we all have to contend - once we have actually identified what they are.

So do try to include some micro stressors in your list, too, even if you feel they might be a bit silly, because these are often the most pernicious ones that can build up surreptitiously in the background. Thankfully, they are also usually the easiest ones to start addressing, because once you have identified and broken them down, you might be able to start doing something about them, bit by bit, and one at a time. And once you have made your list, try not to feel overwhelmed or defeated by it, but to see it as a useful tool that can help you to make a start on getting some control back over your life. Then choose one of the stressors

on your list – perhaps one of the easiest ones to start off with - and make a decision to take a step towards doing something about it by the end of the week.

In this podcast, then, we've thought about what stress is, different ways of categorising stress, and some of its common causes. In Podcast 3, we'll go on to consider different ways of categorising anxiety. As ever, however, if you are feeling particularly stressed and want some help, do think about making an appointment with the University Counselling Service, or if you are finding your feelings really unmanageable, make an appointment to see your GP or College doctor. And in case of life threatening emergency, please go to the Accident and Emergency Department at your local hospital.