



# 1. What happens to our brains when faced with uncertainty or threat?

When faced with uncertainty or threat, our brains often react in ways that actually hinder our ability to cope effectively with the challenge or manage the associated emotions.

Stress is a commonly used word in this context, essentially meaning any pressure or accumulation of pressures (physical or psychological) that are too much for a person to cope with comfortably.

Anxiety is just one way in which stress can manifest itself, and understanding where your anxiety begins can be really helpful in deciding on the best way to interrupt the process and identify ways of more effectively managing it.

## Two different pathways to anxiety

Research has shown that there are 2 fairly separate pathways in the brain that can cause high emotional states such as anxiety, which are Cerebral or Amygdala-based.



### CEREBRAL RESPONSE

Begins in the Cerebral Cortex as a response to perceived threat. Anxiety can be caused by or kept alive by negative thinking and rumination.

Examples of this include worrying about what might happen; ruminating excessively on what's happening currently; catastrophising.

### AMYGDALA RESPONSE

Travels directly and immediately from an external sense of threat through the Amygdala to the nervous system.

This is a source of our emotional reactions, both positive and negative. When faced with threat, it triggers the physical experience of anxiety, often described as the "Fight, Flight or Freeze response".



# 1. What happens to our brains when faced with uncertainty or threat?

## Self Assessment 1: Amygdala-based anxiety (fight, flight, freeze)

Work through the following examples to establish the key sources of your anxiety:

### Assessing experience of rapid physiological response

- *I find that my heart is racing even when there's no obvious reason*
- *I can go from feeling calm to being in a complete panic in a matter of seconds*
- *I suddenly can't get my breathing rhythm to feel right*
- *Sometimes I feel dizzy as though I might faint. These feelings arise quickly*
- *My stomach lurches and I feel nauseous right away*
- *I become aware of my heart racing*
- *I just start trembling with no warning*

### Assessing experience of inability to think clearly

- *When I'm under pressure, my mind goes blank and I can't think*
- *I know when I'm anxious, I'm unable to focus on what I need to do*
- *When I get nervous, sometimes I can't concentrate very well*
- *When I feel panicky, it's often difficult for me to focus on what I need to do*
- *Even when I calm down, it's hard for me to distract myself from how my body is feeling*
- *When I'm scared, sometimes I draw a total blank about what I should do next*

Calming your 'emotional brain' down is really important, as high levels of emotion (e.g. anxiety or anger) effectively act as a dimmer switch to your ability to think clearly, logically and rationally.

### Techniques for helping with this include:

- The 7/11 breathing method: See tool 2 - 'Breathe your way to calm'
- Increasing your resilience: See tool 4 - 'Top tips for building resilience'
- Mindfulness practice – learning to be in the moment
- Setting relaxing routines to help you sleep better
- Finding an enjoyable way to unwind
- Exercise





# 1. What happens to our brains when faced with uncertainty or threat?

## Self Assessment 2: Cortex-based anxiety

Work through the following examples to establish the key sources of your anxiety:

- *I rehearse potential problem situations in my mind, considering various ways things could go wrong and how I'll react*
- *I tend to get fearful and stuck worrying about all the different ways I could tell someone about my concerns or other topics*
- *Sometimes I just can't turn off a stream of negative thinking and it often prevents me from sleeping*
- *If there's even a small possibility that something negative could happen, I tend to dwell on that possibility*
- *I have difficulty in getting myself to stop thinking about things that make me feel anxious*
- *Even when things are going well, I seem to think about what could go wrong*
- *I picture potential problem situations in my mind, imagining various ways things could go wrong and how others will react*
- *I can almost always imagine several different scenarios that illustrate how a situation could turn out badly for me*
- *I have trouble accepting the fact that I make mistakes and I beat myself up when I do*
- *I sometimes see images of terrible events occurring*
- *I'm watchful of people's body language and pick up on subtle cues*
- *I have a tendency to expect the worst*
- *I think I take people's comments too personally*
- *I have a hard time saying no because I don't like to disappoint people*
- *When I have a setback, I find it overwhelming and feel like giving up*
- *If I know a potential conflict is looming, I spend a lot of time considering it*
- *When I know something might go wrong, it's constantly on my mind*



## Techniques for helping with this include:

**Generating coping thoughts**, which are more likely to have a positive effect on your mental state:

- 1 "It's no use trying, things never work" vs. "I'm going to try so at least I'll accomplish something"
- 2 "I just can't cope with this" vs. "this isn't the end of the world - I'll survive"
- 3 "Why doesn't she like me? I want her to like me" vs. "no-one is liked by everyone all of the time"

**Thought stopping/replacing:** This can be successful in interrupting a thought by specifically telling yourself to "STOP". However, the next step is also crucial – if you replace the thought with another thought then you are more likely to keep the first thought out of your mind. Replacing an anxiety-provoking thought with something that engages your mind makes it more likely that you won't return to that thought. This takes practice; the more you do it, it will strengthen an adaptive way of thinking/become habitual (see tool 6).

**Distraction:** It can be useful to think of your cortex as a television. Despite having hundreds of channels to choose from, you get stuck on the Anxiety channel. One way of changing the channel is distraction by thinking about or doing something different, with one of the best kinds of distraction being PLAY and cultivating a sense of playfulness.

**Shifting your thinking and therefore your emotions:** By using the ABCDE model (see tool 8).