

# Caveman anxiety keeps us jittery



Malcolm Falconer

At the inaugural Cognitive Behavioural Therapy conference held at Massey University late last year, one of the speakers, Paul Gilbert, described an evolutionary theory of anxiety.

When "scaredy cat" caveman and "brave" caveman ventured out of the cave and on to the savannah, the grass beside them rustled. "Scardey cat" ran back into the cave, but "brave" concluded it was only a breeze causing the rustle, so stayed out on the savannah.

Nine times out of 10 "brave" was right and it was only the wind. The tenth time he was wrong – it was a sabre-toothed tiger. So, the brain that survived was the "scaredy cat" brain – our brain. We evolved with an over-active amygdala or, in behavioural terms, a spirited fight-flight response. Survival of the fittest was, in fact, survival of the unfittest.

Gilbert went on to say, if a German manufacturer were to design an efficient brain from scratch, it would not be designed the way our brain has evolved. The amygdala would be like a turbo-charger in a Mercedes car – it would kick in only when required.

Evolution has seen our "new" brain evolve to develop language, reasoning, problem-solving and more, but to be subservient to our "old" brain, which features highly reactive amygdalic activity.

## Fine-tuning apprehension

This theory of evolution has important implications when it comes to trying to get to grips with anxiety. We grow up in a dangerous world. We have to learn about sharp things that can cut us, hot things that can burn us, high things we can fall from, etc. Then the lessons get more complex: people we love abandon us; the things that please some people annoy others, and so it goes on.

It is absolutely necessary to have apprehension and anxiety when it comes to adjusting to and avoiding real dangers. But the same mechanisms that are key to our survival can compromise our mental health when we try to make sense of the more complex "threats to our survival" we perceive in our lives.

To explain anxiety, think about what would happen if a stranger walked into your room with a knife. The amygdala would immediately activate the fight-flight response, causing you to hyperventilate. This would increase your heart rate, and the release of stress hormones would cause fast-twitch muscle activation. You would then process all the information you have about people with knives, including your previous experiences, movie images, even your dreams about people with knives. This would provide the data needed for you to take the action your fight-flight hormones and physiological responses require – even demand.

As a result, you would probably either attack the knife-carrier, run out of the room or freeze. But just imagine if, before you did any of these, you noticed the stranger had a chocolate cake in his other hand. This would completely alter your appraisal of the situation – you might be a bit annoyed about the fright the stranger had given you, but then you'd ask whose birthday it was, and your taste buds might kick in as new hormones were released.

However, the fight-flight hormones released by your initial fright would have sent adrenalin into your system, so you might need to take some deep breaths, and shake and stretch to calm yourself. How shaken you became may depend on predisposing factors that affect how nervous you normally are and what threats you have previously been exposed to.

## Cognitive mapping

In previous articles on cognitive behaviour therapy (CBT), predisposing factors such as a toxic family of origin or adverse childhood events have been emphasised in determining how we form our cognitive map of our world.

In conceptualising anxiety, these predisposing factors are often relevant. Children raised in conflict-habituated, abusive, critical or emotionally deprived households correctly perceive these environments as being threats to their survival, and develop hyperarousal and hyperactive fight-flight responses.

After identifying any predisposing factors that may give rise to anxiety, the next stage of conceptualisation is to identify the perpetuating aspects – or the way a person has adapted to anxiety. This is how a person has accommodated, and, in some cases, exacerbated, predisposing factors in adjusting to their environment.

Some people with anxiety attempt to gain control of the chaos

they have experienced by over-compensating and becoming perfectionist. Others develop avoidance as a survival skill, and deal with any exposure to chaos by staying invisible, keeping below the radar, or walking around on eggshells. Others dissociate, or freeze, escaping into an alternate reality of their own making. These survival skills become anxiety-coping strategies that generalise into all aspects of later life in an anxiety condition.

## Relaxation is the key

After identifying the predisposing and perpetuating factors, what is left is the obvious: the here and now or precipitating issues. This is the triggering event, which is sometimes obvious, for example, a relationship break-up, job loss or health issue, but can sometimes be more intangible. The latter can manifest as a sense of being criticised or a perception of unfairness, for instance. This will then escalate a pre-existing anxiety condition or result in a vulnerability to a newly diagnosed condition.

As the diagram indicates, CBT formulation identifies environmental vulnerabilities in the outer circle then separates out the physiological, behavioural, cognitive and emotional aspects of the anxiety state. The immediate health focus is on getting sleep patterns normalised, but, unlike depression, where behavioural activation is typically the lever for change, with anxiety, relaxation is the single biggest change strategy.

The person with anxiety lives with elevated levels of arousal that cause stress hormone boost. This needs to be stabilised.

Breathing exercises, relaxation, meditation, yoga, walking, etc are all useful. Panic states require a bit more intervention, but this will be the topic of a future article.

Anxiety behaviours include control, perfectionism and avoidance. Intervention requires physiological de-arousal, altering beliefs and adjusting behaviours. Letting go of control and accepting powerlessness in some areas, while maintaining responsibility only for those aspects in one's control, can be helpful. Resolving perfectionism requires accepting "unfinishedness" and being comfortable with delegating tasks, or understanding that "perfection" is the result of a refined and reflective process of a work in progress. This means mistakes are OK. I read recently that being content to be discontent is the overall key to mental health.

## Avoidance disables

The most disabling behaviour for people who are anxious is avoidance. By thinking of worst-case scenarios and exaggerating their vulnerability in such scenarios, anxious people allow their fears to rule their actions – with often devastating consequences when avoidance becomes pathological. Systematic exposure to the aversive stimulus, in a controlled manner, using behaviour experiments, coupled with affect regulation and focus on breathing while applying logic to "vulnerability" thoughts, has proved helpful for many people.

The analogy of taking a step back from the edge of the cliff, to see the view objectively, and then responding to this view appropriately, is what CBT for anxiety is all about.

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## Further reading

- Kuyken W, Padesky CA, Dudley R. *The Science and Practice of Case Conceptualisation*. Cambridge University Press; 2008.
- Gilbert P. *The Compassionate Mind: A New Approach to Life's Challenges*. New Harbinger Publications; 2010.

## Five-part cognitive model – anxiety

**Cognitive:** Thought processes, knowledge, perceptions.

**Central Idea:** Our perception of an event or an experience powerfully affects our emotional, behavioural and physiological responses to it.

