What’s happening to me?

Our environment is evolving at a faster pace than our brains. Anxiety is produced by a brain circuit that was designed to keep us safe back when our greatest threats were saber-toothed tigers rather than final exams.

Our brain has evolved into three basic layers. The first and oldest layer is called the brainstem, otherwise known as our reptilian brain. It controls basic involuntary functions like your heart beat, breathing and our fight/flight/startle response.

The next layer of brain is referred to as the limbic region, also known as our emotional brain or our fuzzy little mammal brain. This layer of brain is responsible for our emotions and implicit memories. The memories it creates are very powerful and are linked to biological and bio-chemical reactions, such as anxiety. The limbic region and the brainstem are wired for maximum efficiency. Together they motivate us to find safety, and reflect on our experiences later. You can imagine that the limbic region would be very helpful in avoiding poisonous plants, hungry predators and dangerous foes, but not with a high stakes test. In situations where one isn’t actually faced with death, our emotional brain can over do it.

The third and most recent layer of the brain is our neocortex which includes the prefrontal cortex (illustrated above as our “higher porpoise”). This is that part of the brain that we want to use when taking a test. It provides us with a capacity for reasoning, forming concepts, using language, organizing information and manipulating symbols. It is also the part of the brain that normally keeps our emotions in check by sending signals to tone down activity in our more primitive brain systems.

Unfortunately, when we feel stress, our brain can interpret it as a sign of danger, thus releasing adrenaline and triggering the survival reflexes of fight-flight-freeze. When a threat is perceived our brainstem and limbic systems can override our prefrontal cortex and activate the deep alarm system of survival reflexes. We might experience them as shortness of breath, nausea, headache, profuse sweating, light-headedness, rapid heartbeat and blanking out. To complicate matters the brain takes these physical symptoms as evidence that a threat indeed exists and pumps even more adrenaline through the body, thus strengthening the emotional experience. Additionally, our brains are so efficient at avoiding danger that when we experience a frightening event, we may come to feel fear in similar situations; thus performance anxiety is born.

The good news is that it’s never too late to change our minds. Indeed, even in adulthood the brain has incredible potential for neuroplasticity. People who access support for anxiety have very good success rates. If anxiety creates additional barriers to major life activities, you may want to contact Straub Hall/ Counseling Center. In the meantime, the following strategies may help you cope.

Coping

Anxiety is an emotion, and emotions are chemical molecules that act as command circuits to your body. Renowned neuro anatomist Jill Bolte Taylor (if you have a chance, google her TED talk) discovered that it takes 90 seconds for our bodies to process the hormonal reactions associated with fear, anger and grief. If you experience these reactions without resistance the emotions will disappear. They may return again, but only in 90 second waves.
It may seem somewhat counterintuitive, but the more we resist anxiety, the stronger it becomes. Trying to escape or fight the feeling triggers more emotion, which only serves to feed the hyped up brain circuit. The best defense is to simply notice the feelings without judgment. In fact, studies by neuroscientists at UCLA have shown that using words to describe and label an internal experience can soothe limbic firing and bring balance to overactive feelings. One way to do this is to take a moment to reflect on what is happening. You might think to yourself, “Oh, this is anxiety. It’s a brain circuit that’s attempting to save me from a threat.” You can even go so far as to thank your panic for its concern, but let it know that its enthusiasm isn’t necessary. It may sound ridiculous, but really what you’re doing when you observe your experiences in this way is wiring a new brain circuit. It’s impossible to observe anxiety and fully experience it simultaneously. It is also helpful to reconsider the thinking habits which contribute to performance anxieties. Reframing habituated thoughts can lower the stakes internally. The following chart taken from getselfhelp.com illustrates unhelpful verses helpful thinking habits. Are there any traps that you fall into?

<table>
<thead>
<tr>
<th>Unhelpful</th>
<th>Helpful Thinking Habits</th>
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<tbody>
<tr>
<td>Emotional Reasoning: I feel bad, so it must be bad! I feel anxious, so I must be in danger.</td>
<td>Just because it feels bad doesn’t mean it is bad. My feelings are just a reaction to my thoughts— and thoughts are just automatic brain reflexes.</td>
</tr>
<tr>
<td>Mountains and Molehills: Exaggerating the risk of danger, or the negatives. Minimising the odds of how things are most likely to turn out, or minimizing the positives.</td>
<td>This is one measure of what I retained from this course. It is not a measure of all of my abilities as a student, nor is it a measure of my worth as a human being.</td>
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<td>Catastrophising: Imagining and believing that the worst possible thing will happen.</td>
<td>OK, thinking that the worst possible thing will definitely happen isn’t really helpful right now. What’s most likely to happen?</td>
</tr>
<tr>
<td>Shoulds and musts: Thinking or saying ‘I should’ (or shouldn’t) and ‘I musts’ puts pressure on ourselves, and sets up unrealistic expectations.</td>
<td>Am I putting more pressure on myself, setting up expectations of myself that are almost impossible? What would be more realistic?</td>
</tr>
<tr>
<td>Memories: Current situations and events can trigger upsetting memories, leading us to believe that the danger is here and now, rather than in the past, causing us distress right now.</td>
<td>This is just a reminder of a previous testing experience. That was then, and this is now. Even though this memory makes me feel upset, it’s not actually happening again right now.</td>
</tr>
<tr>
<td>Critical self: Putting ourselves down, self-criticism, blaming ourselves for situations that are not (totally) our responsibility.</td>
<td>There I go, that internal bully is at it again. Would a friend say that about me? Is this something that I am totally responsible for?</td>
</tr>
</tbody>
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**Relaxation Resources**

Many people achieve relief from anxiety through the practice of relaxation and mindfulness exercises. These exercises allow one to focus on the present moment rather than worrying about the future and the past. It’s important to remember that the neuro connections responsible for powerful emotions are very efficient, thus it is a good idea to practice relaxation exercises and the reframing of thoughts before you find yourself in a testing situation. You may want to practice them at home and then try them in less threatening situations whenever you feel a slight sense of anxiety. The following are some web based resources. In addition you may want to search YouTube for some guided relaxation videos.

Get Self Help: Mindfullness - http://alturl.com/kmwr4
Get Self Help PDF - http://alturl.com/zihou
Relaxation Technique PDF - http://alturl.com/i4xdb

**References**

John Medina, Brain Rules, 2008 by Pear Tree Press