A CBT look at the brain's design flaw and psychosocial stress:

KNOW YOUR BRAIN: the 'third wave' of cognitive behavioural training uses everything that has been proven to work to help people to literally learn wellbeing and new skills in self management, outside of the traditional model of psychology that was concerned with disease and sickness and focussing on a medical solution for chemical imbalances.

THINKING: If you accept the scientific theory that our brains have been cobbled together by evolution, and are not rational thinking devices that automatically default to rational conclusions, and that most of us have many bad thinking habits that cause us to largely create our own upsettness - then the simple yet powerful core of cognitive behavioural therapy (CBT) is the key to helping you to examine and reframe your own default bad thinking habits, and to work on un-upsetting yourself, creating new rational cooler default thinking responses, and changing your life.

FEELING: This post looks at something equally important: the neuroscience of feelings, and the brains primitive design flaw in how it identifies threats and pumps the body up to deal with them, and how it stores memories of perceived threats and defaults to an innapropriate 'pumping up' when you're anywhere near the 'threat'.

Everybody has heard of Fight or Flight these days. It's not particularly a description of behaviours, it's a scientific term for when the brains threat alert fear centre, the Amygdala, identifies a threat to your wellbeing, and triggers a physiological change to release 'stress hormones' to pump up the body to deal with a physical threat. This can happen in an instant – and is a design flaw, unless the threat is indeed physical – a mugger, a predator, a car crash, something that requires all the blood rushing to the major organs and preparing you to be physically strong temporarily to deal with it…

It is a design flaw because most of the modern world's threats are SOCIAL: –

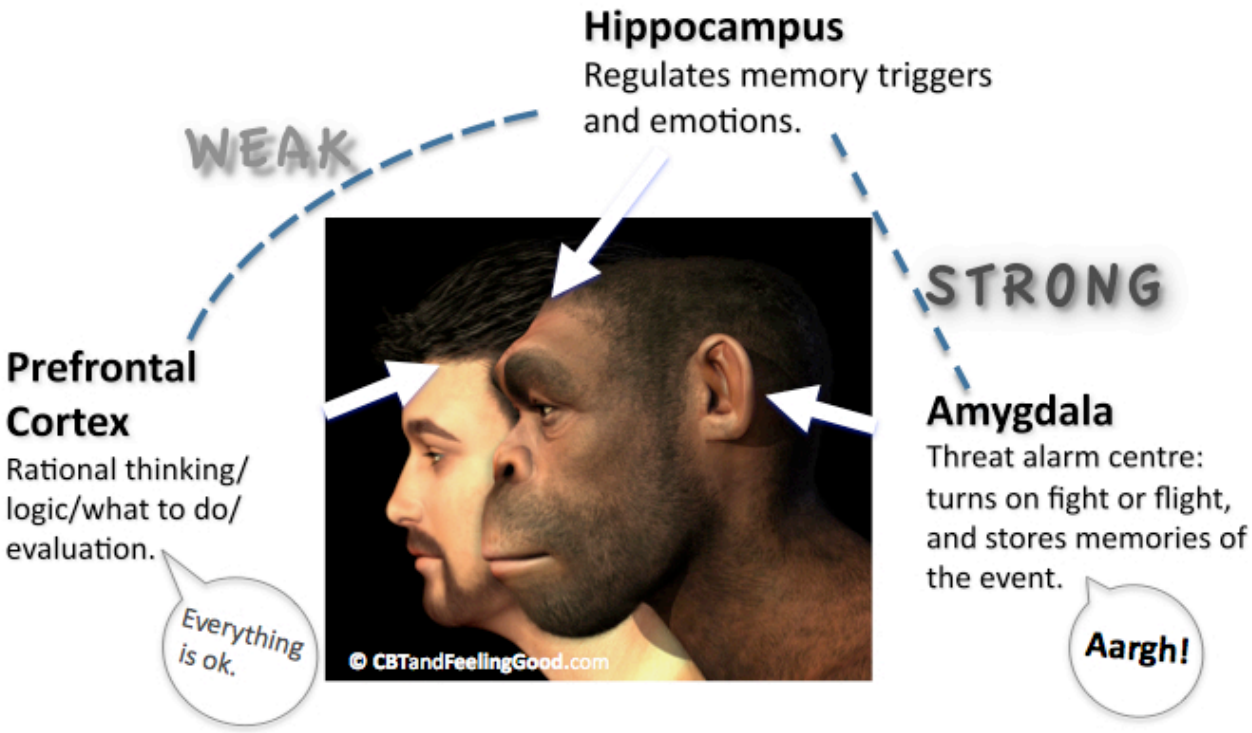
'Do I fit in? Is this good or bad? Is it safe or dangerous? Am I safe or unsafe here? Am I liked and respected? Am I part of the group? Am I loved? Am I behaving properly? Are other people behaving properly? Is my social status being threatened? Am I being excluded or disrespected? Do I have the resources to deal with this situation? What significance does this have? Is this fair or unfair? …..'
And so on…..

The old social model of Maslow's Hierarchy of Need, showing the prime needs of human beings, was dominated by social safety and belonging – and any threats to that trigger the pesky 'pumping up' response. After all, for the primitive brain, rejection by your tribe would mean you have no safety, no group to hunt and gather and procreate with, and exposure to predators - it's a danger.

With social threats, you would prefer your cool rational brain, the prefrontal cortex, to kick in and be stronger than your emotional/fear brain, the amygdala, wouldn't you? To allow you to evaluate the 'threat' rationally, and deal with it. But, alas, the brain's threat default response is to pump you up and flood you with adrenaline and cortisol and oxygen, as if there was a tiger threatening you - causing your rational brain to take a backseat to the emotional brain.

This can leave you with emotional reasoning: 'I feel bad, therefore it is bad!'. And of course, it disturbs your bodies relaxed balance, and is when you tremble and blush and become unfocussed and 'panicky', leaving you unable to cope with the (real or imagined) challenge - at different levels depending on the threat status, low, moderate or high. High being an actual panic attack, low to moderate being a normalised state for many people with an anxiety disorder. It's a real physical disorder, and can only be managed effectively through knowledge and deliberate application of 'thinking differently'.

Examine the model below – think about the beautiful science of the brain, and how we got a pretty sweet deal in the animal kingdom, but we are constantly adapting to deal with modern challenges, and that's ok, once we have the tools and skills to do it.



A common response during CBT is a client exclaiming '**but what about my feelings!?**' – well, feelings are not facts. Feelings are the neurobiology of how your brain is processing the world, and are often 'off' because our brain design is quite imperfect, and that is simply how it is. If you approach CBT with a curiosity, and a fascination of science and how human beings are wired, you can make amazing changes in how you 'feel', retraining your brain and dismantling old inappropriate alarm bells, helping you to deal with social challenges and threats with your rational brain – noting it is just the amygdala and not necessarily because of the situation, belly

breathing, thought stopping and reframing situations and how you think about them - consciously and deliberately, through '*learning and doing*', literally changing your brain structure and strengthening your rational brain. It's a science, believe it.

Did you know: your prefrontal cortex, your 'rational brain', is only 10,000 years old, while your amygdala fear centre is millions of years old?

Did you know: psychosocial stress is the biggest cause of illness in the workplace? This is the wonderfully accessible description of psychosocial stress by the noted academic Elizabeth Scott (see how it fits in with this theory of the social challenges?):

> Psychosocial stress is the result of a cognitive appraisal of what is at stake and what can be done about it. More simply put, psychosocial stress results when we look at a perceived threat in our lives (real or even imagined), and discern that it may require resources we don't have. Examples of psychosocial stress include things like a threat to our social status, social esteem, respect, and/or acceptance within a group; threat to our self-worth; or a threat that we feel we have no control over. All of these threats can lead to a stress response in the body.
>
> When psychosocial stress triggers a stress response, the body releases a group of stress hormones including cortisol, epinephrine (or adrenalin) and dopamine, which lead to a burst of energy as well as other changes in the body. The changes brought about by stress hormones can be helpful in the short term, but can be damaging in the long run. For example, cortisol can improve the body's functioning by increasing available energy (so that fighting or fleeing is more possible), but can lead to suppression of the immune system as well as a host of other effects. Epinephrine can also mobilize energy, but create negative psychological and physical outcomes with prolonged exposure. That's why it's important to manage psychosocial stress in our lives so that the stress response is only triggered when necessary. It's also important to learn stress relief techniques to effectively reverse the stress response so we don't experience prolonged states of stress, or chronic stress.

Get it?

Walk around my blog at www.iVeronicaWalsh.wordpress.com for further details and practical theory and application models...

Think different, feel different, behave different - put the work in and 'learn and do'. Good luck!