Understanding the Principles at Work in Mind-Body Programs

Integrating These into Behavior Change Interventions

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What we will cover today

- The theory and practice of the qualities of attending associated with distress and well-being
- The common ground mindfulness and other mind body programmes share with therapeutic modalities such as CBT
- Experiential instruction
- Dialogue, reflection and role-playing in adapting and teaching these principles in ways that make them meaningful and accessible for your clients' circumstances and that can be integrated into daily life.

Perceived Stress in Patients with Asthma Following Mindfulness Training or Placebo

Pbert/Carmody: Thorax 2012

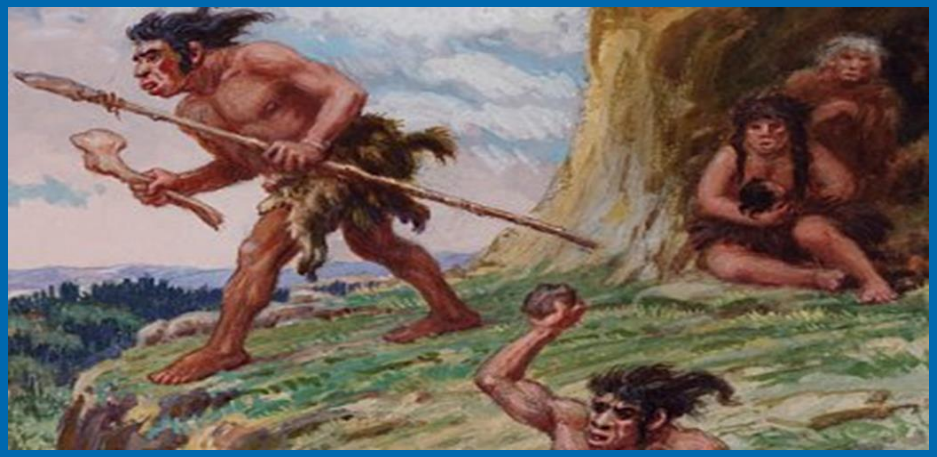
What is the state we long for and seek to cultivate in our lives?

How do you know when it is present?

A basic question we don't usually consider:

- Why are we not naturally at ease?
- Why, after millennia of evolution do we need something like mindfulness?
- Why is some level of anxiety/stress prevalent among people whose material needs are well met?

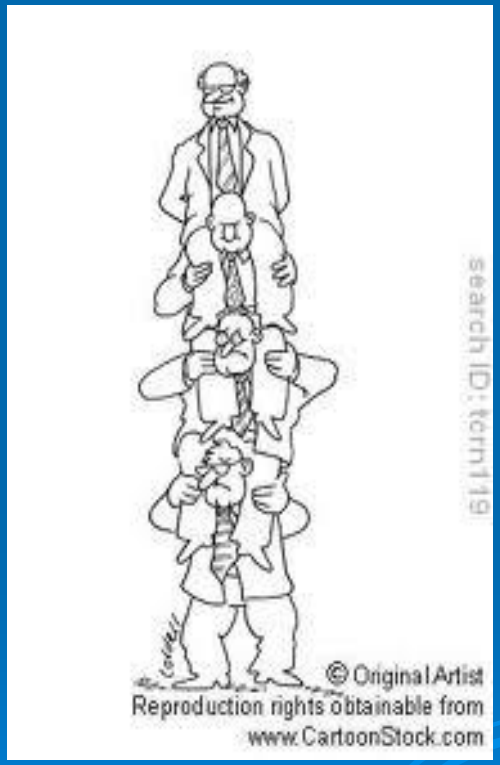
The conditions our nervous system evolved to survive…
Constant vigilance for threat



Evolutionary pressures have resulted in default (unregulated/pre-cognitive) movements of attention to highlight objects in awareness related to needs

In Paleolithic times the monitoring was probably predominantly for physical (sensate-based) threats

With physical safely needs satisfied, attention monitors for opportunities and threats to second-order needs for relationship, status and power...



These needs require considerable ongoing cognitive activity

Unfortunately these default attention processes serve our needs at the expense of wellbeing

What is the process by which this occurs?

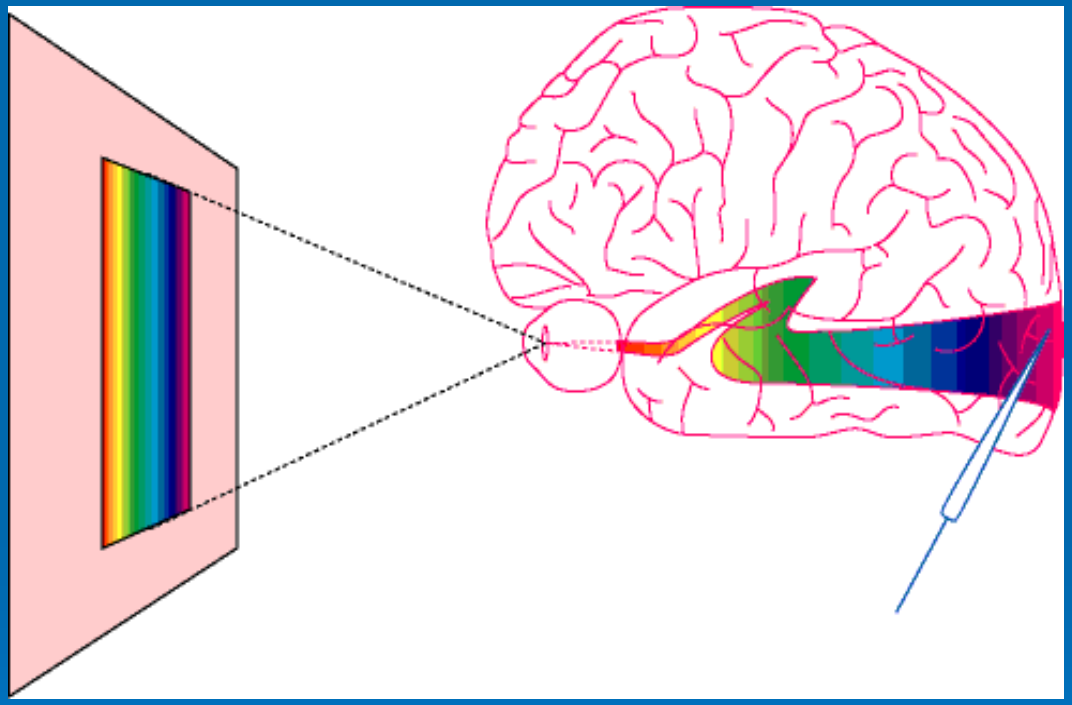
How can we conceptualize mind-body programs, and their effect on well-being?

A way that uses everyday constructs and makes clinicians' conceptualizations and patients' choice simpler.

"Everything should be made as simple as possible, but not one bit simpler."

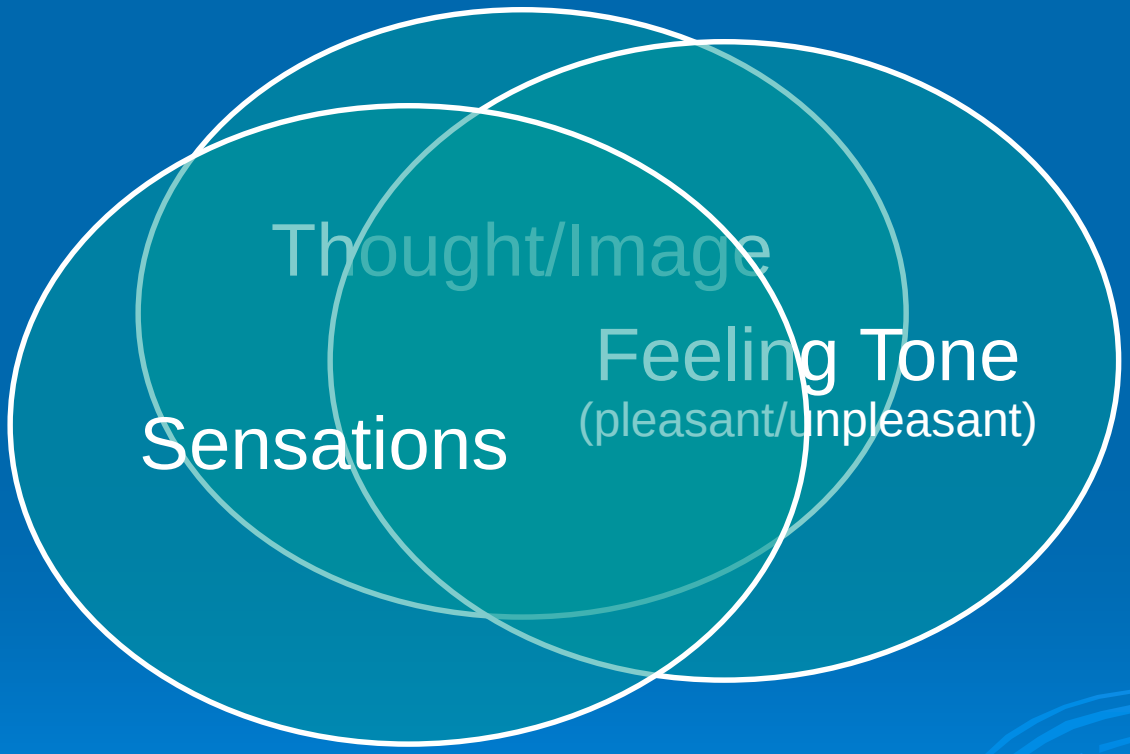
Albert Einstein

Everyday experience is a construction of the mind
It was something we had to learn
The simplistic version of vision is portrayed like this…



But the eye is not a camera
Rather it is a motion, pattern, colour detection organ
It is the mind that sees…

The richness of memory, imagination and emotion are symphonies of these fundamental elements.



In everyday life the components are largely undifferentiated

This is also the situation patients find themselves in…

- Experience appears seamless/undifferentiated
- How to introduce some capacity for self-regulation

Patient reports feeling powerless:
‘I feel tense/anxious/stressed/uptight all the time…’

We start life as sense-based creatures

What has happened between then and now?

Why is this learning not apparent to us?

We learned it pre-verbally and now do not recall it in the usual way

This is the water we all swim in

When you read the words…

The cow jumped over the moon

You may automatically imagine something like…

From ‘Cycling in Auckland’

Or if you are more mechanically minded…

From: 'true stories'

We did not start out with this immediate recognition…

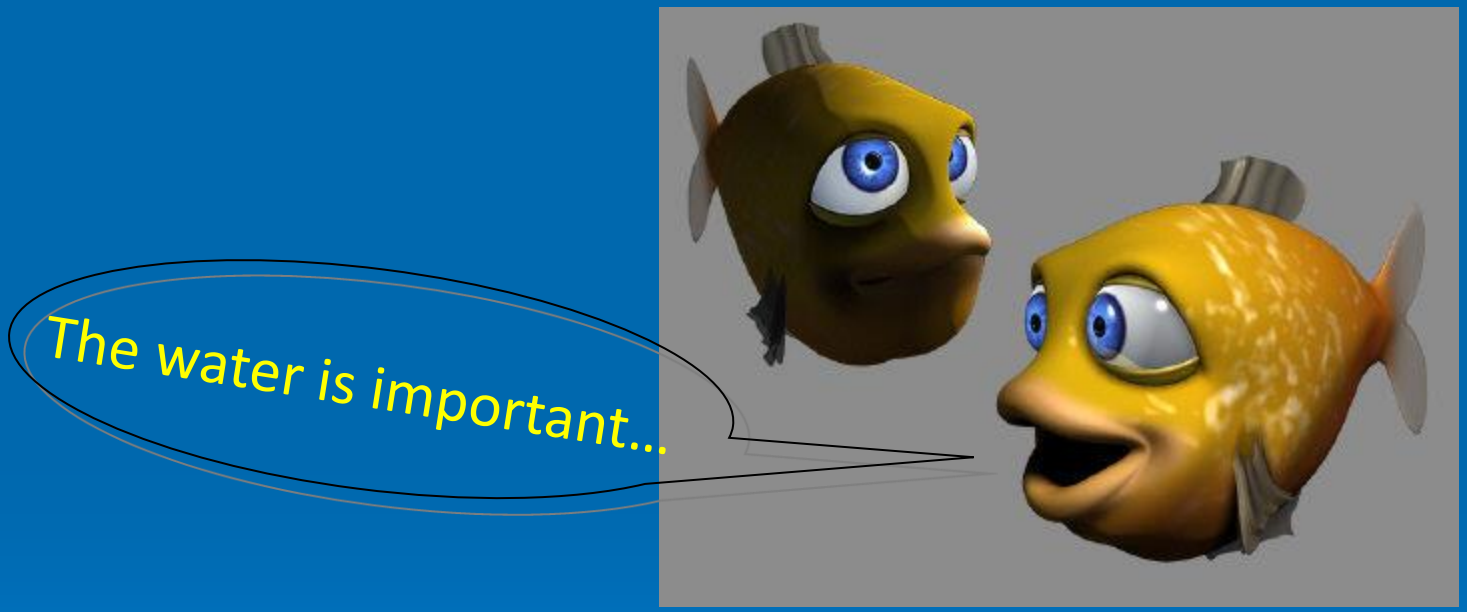
Recall that we started with learning to recognize the letters and the words they form…

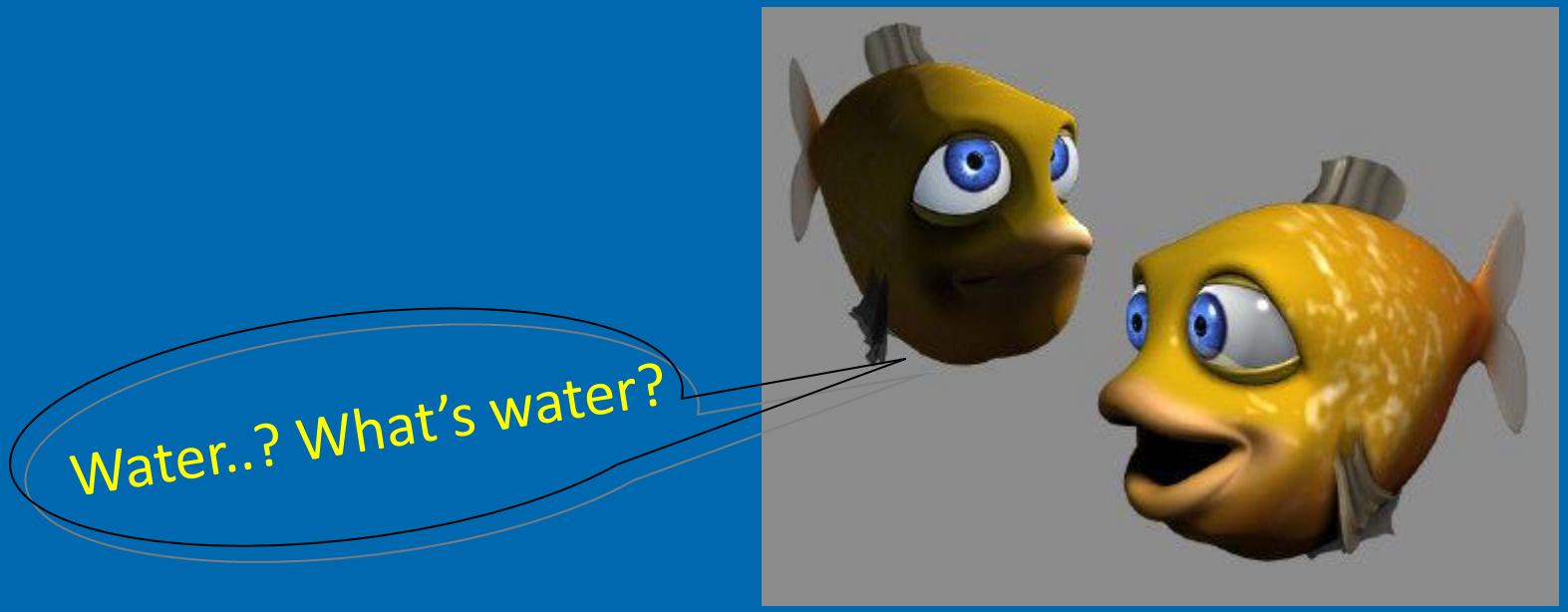
t-h-e c-o-w j-u-m-p-e-d o-v-e-r t-h-e m-o-o-n

It took learning to get to where our attention no longer went to the task of recognizing the letters and words…

And automatically perceived their meaning

In this we are like the fish...





We've lost sight of how our experience is being constructed from moment to moment…

It's now just who we are... Our life…

So how does a fish learn about water?

Mind-Body Training Facilitates Mindfuless and Recognition of Three Features of Mental Activity

Emotions and cognitions are linked in a two-way network.

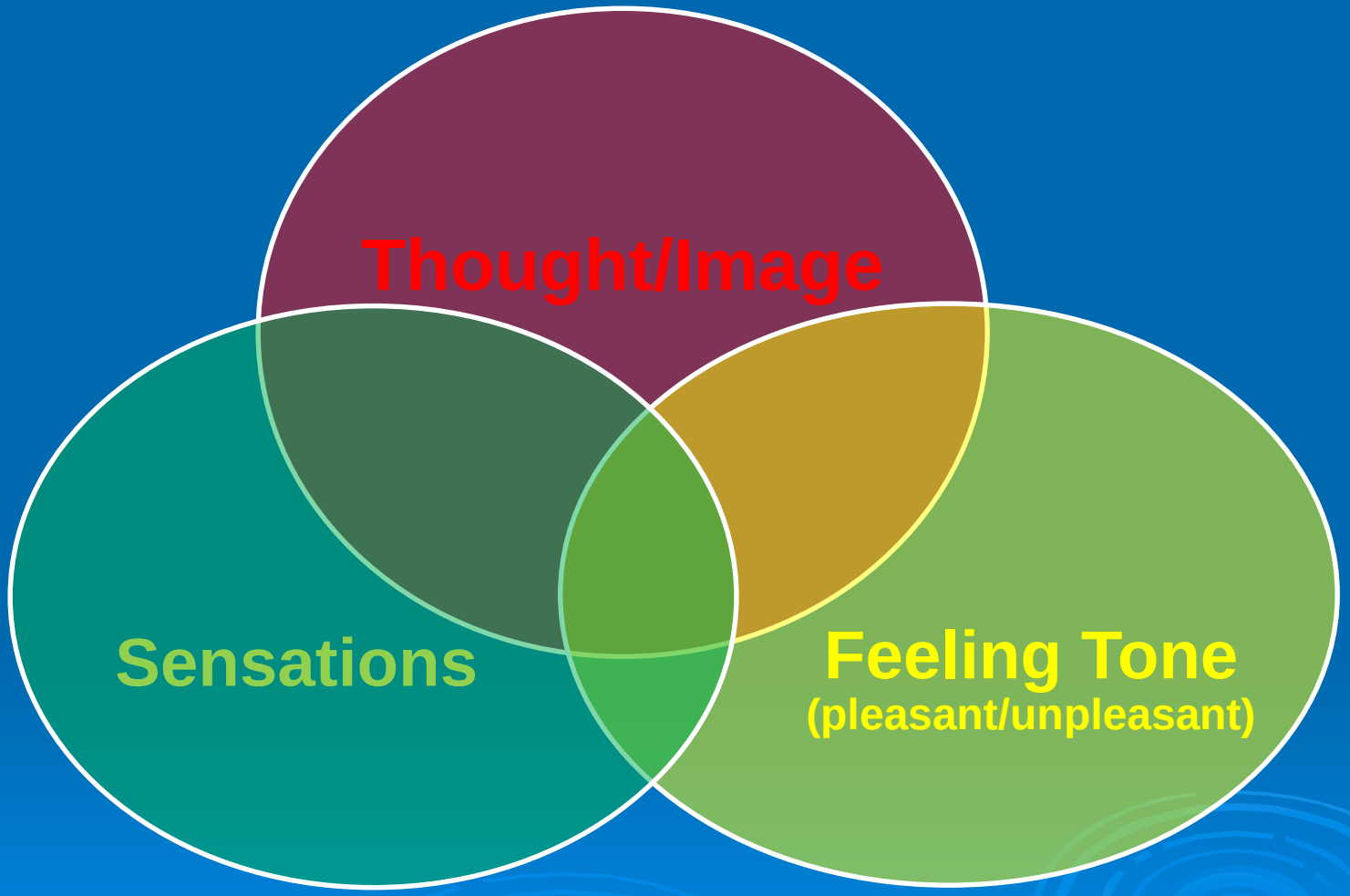
A thought gives rise to the emotion which through associative patterns of memory gives rise to more thoughts related to the emotion...

Example – making a facial expression in the absence of the feeling for that expression leads to reporting feelings associated with the expression.

This cycle can begin with any of the components.

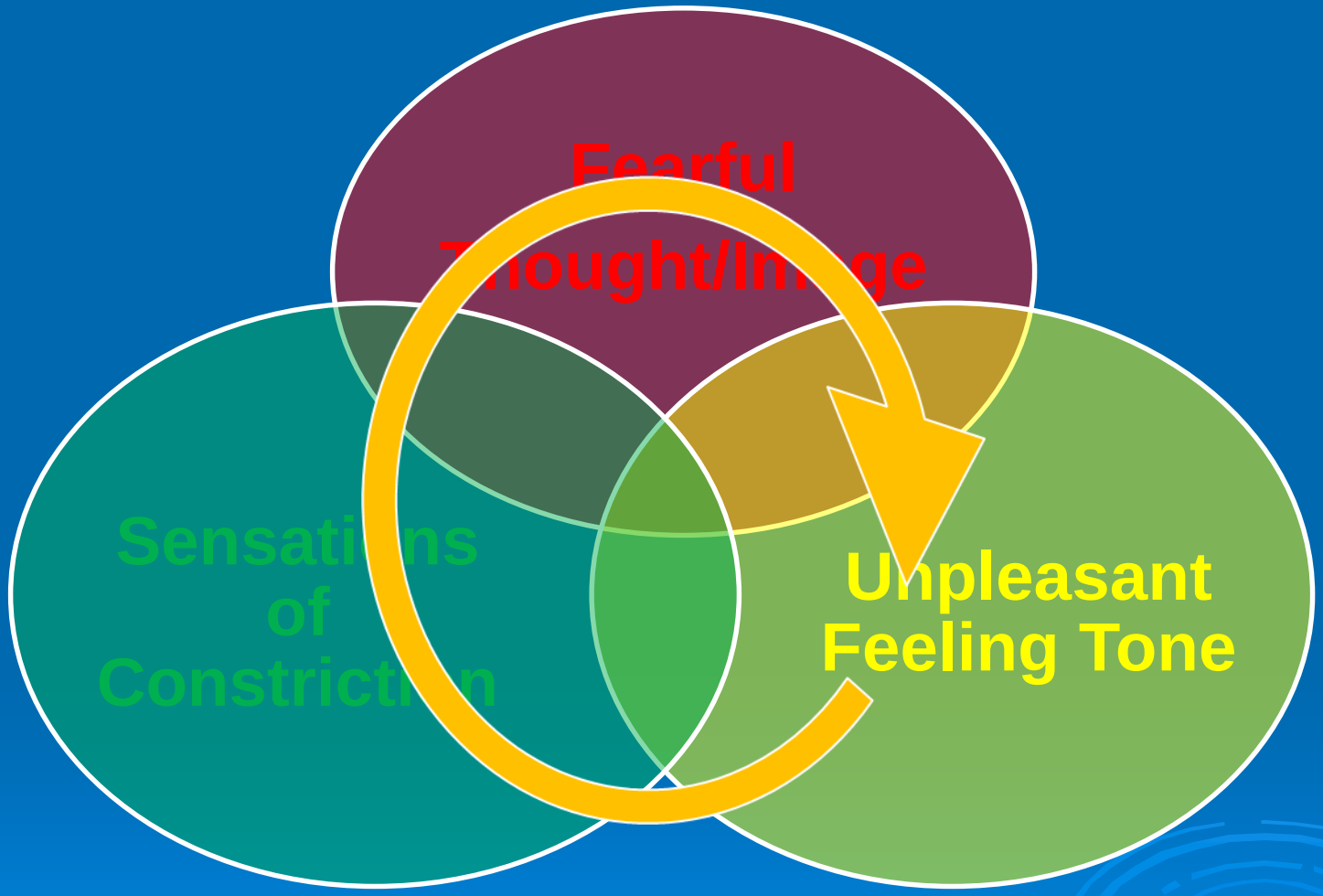
(Damasio, 2003)

The richness of emotions is a symphony of three interwoven elements.



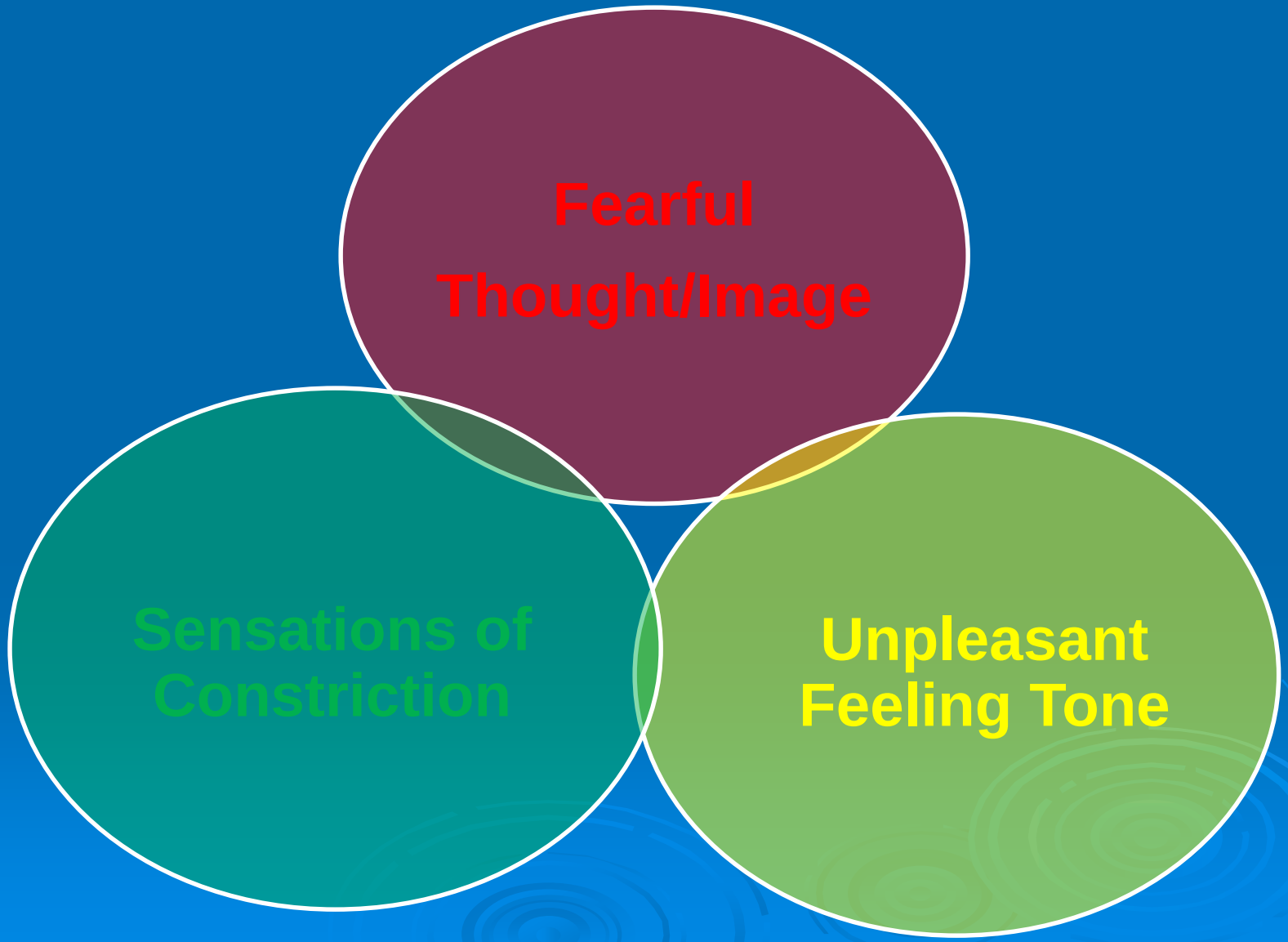
When the components are undifferentiated experience appears seamless

When undifferentiated experience appears seamless maintaining a cycle of distress

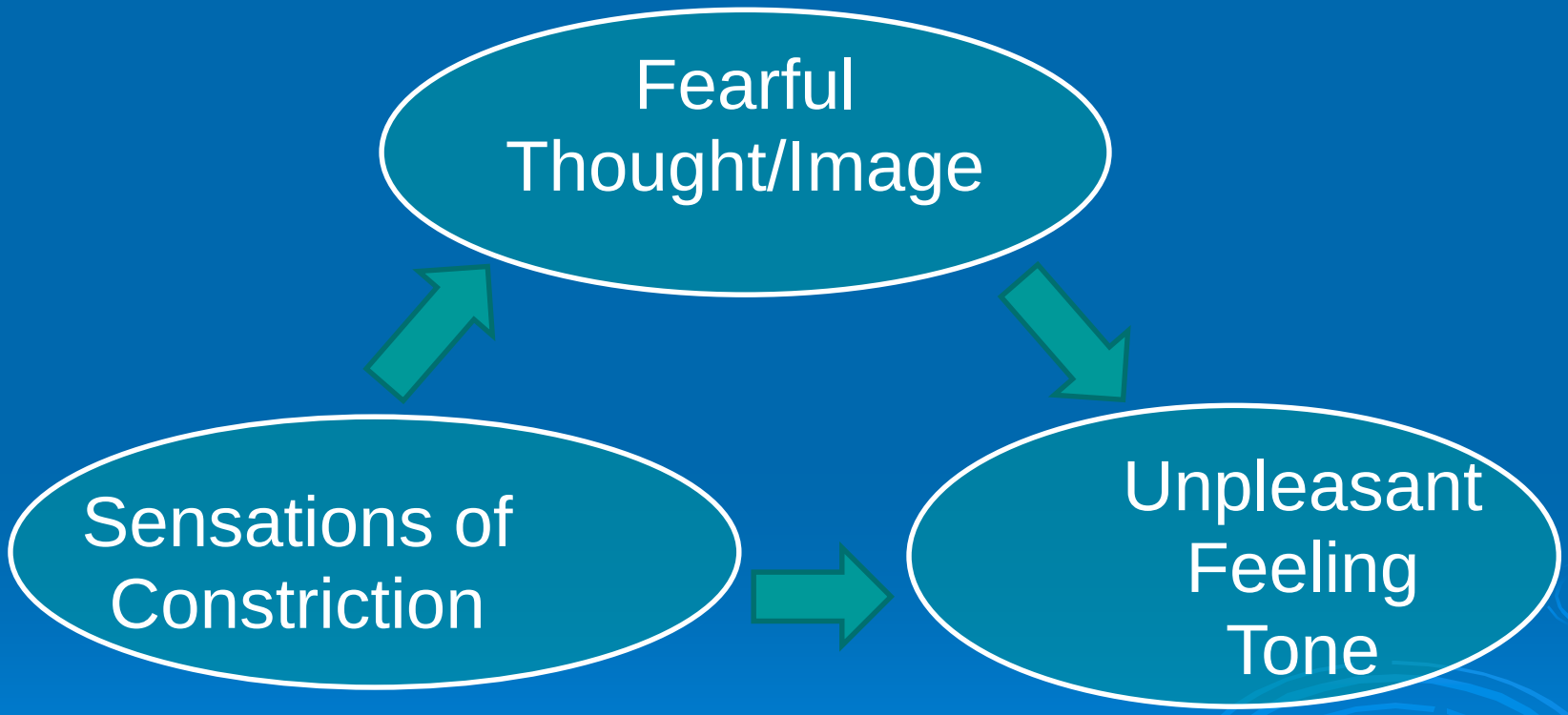


Patient reports:
‘I feel tense/stressed/anxious all the time’

Distress reduces as components of experience are differentiated



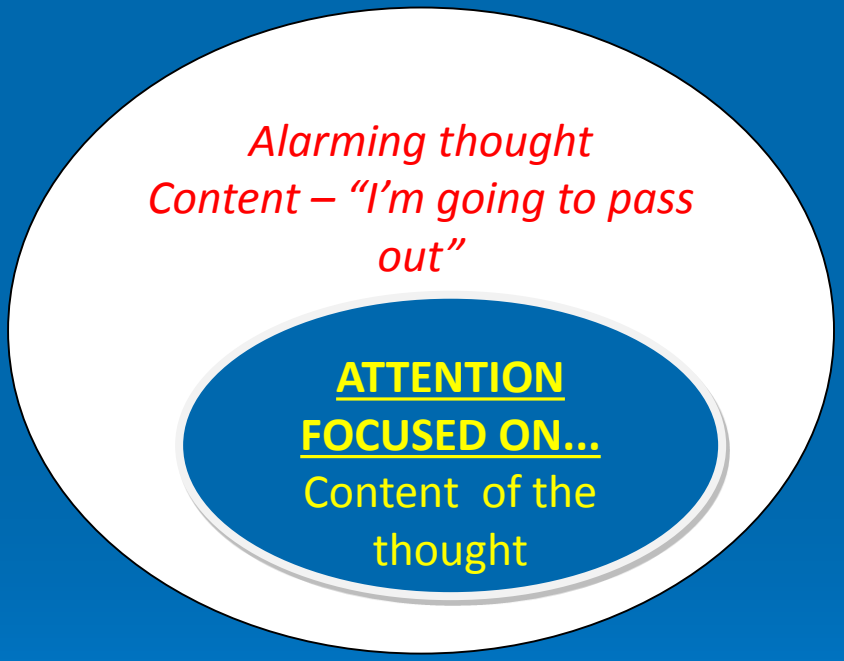
These Components of experience can be recognized as differentiated and connected…



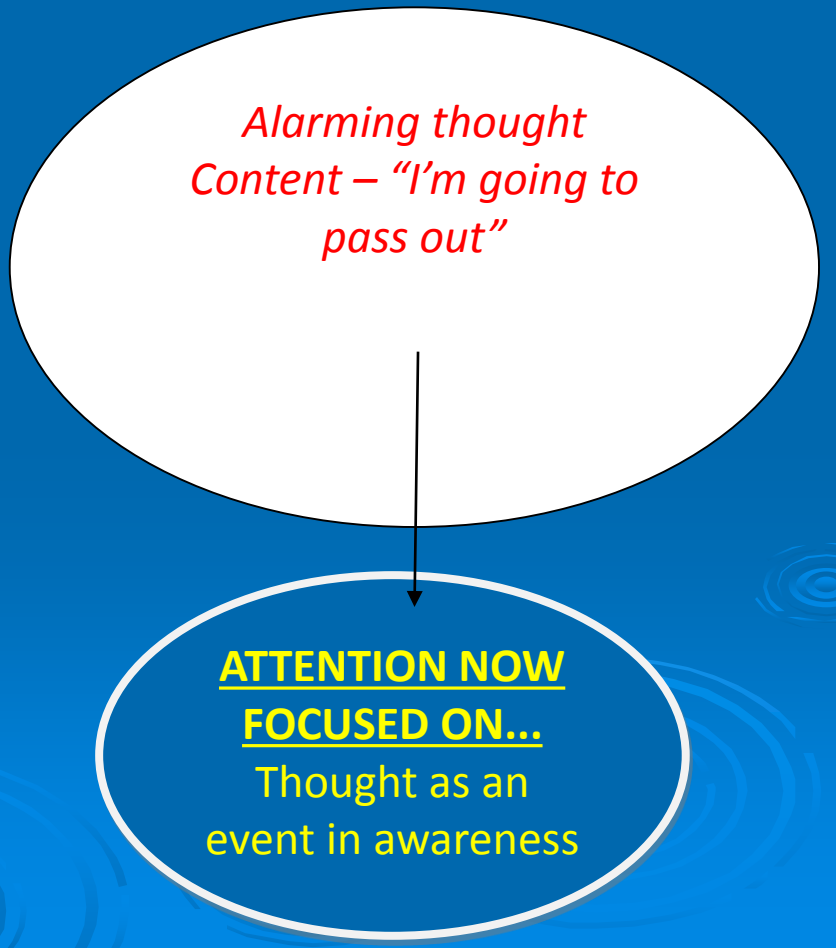
The thin end of the wedge for self-regulation

Effect of Perceptual/Attentional shift from content of the thought...
To the thought as an event in the mind/awareness…

Focus A: Arousal/Distress is Maintained



Focus B: Arousal/Distress is Reduced



Attention

Attention highlights features of the internal and external environment in awareness

It highlights novelty and possibilities/threats to fulfillment of needs (including safety)

It has evolved default movements that serve these needs

The movement of attention itself is not normally noticed; rather we notice the content of the object in attention

Arousal levels and affect follow the degree of threat/delight represented by the object of attention...

Attention (cont)

It is these default processes that mind-body/meditation practices are up against

When attention is on something fearful, the body's arousal level follows leading to feelings of distress

Left to its default state (when attention is not actively directed) attention can fixate on this cycle

Since we know that physiological processes follow attention...

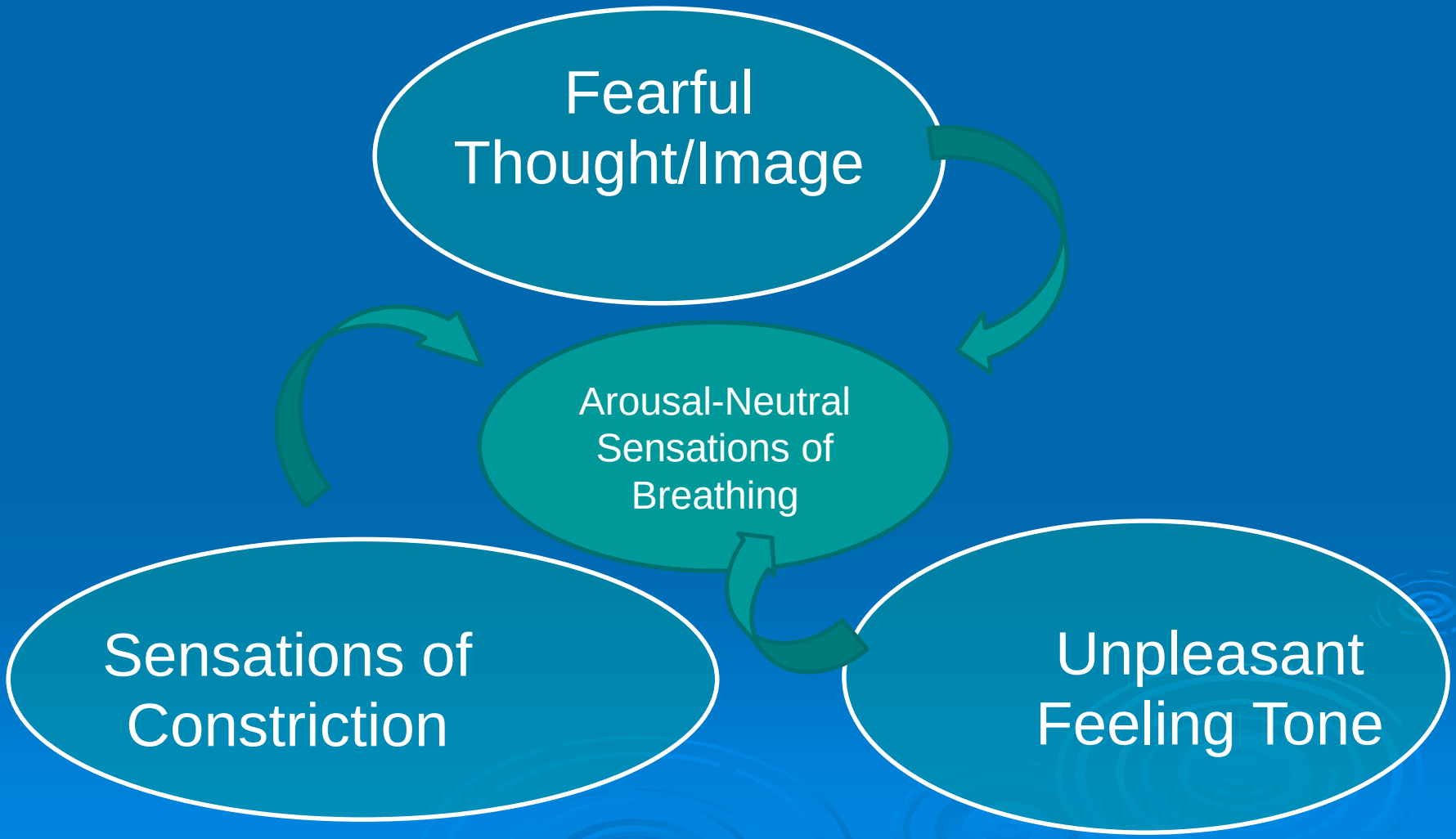
Attention has a tendency to become fixated on sequences of these components of experience (thoughts, feelings, sensations)...

Either from their perceived connection to needs, or habit, or the present intensity of that experiential component (pain).

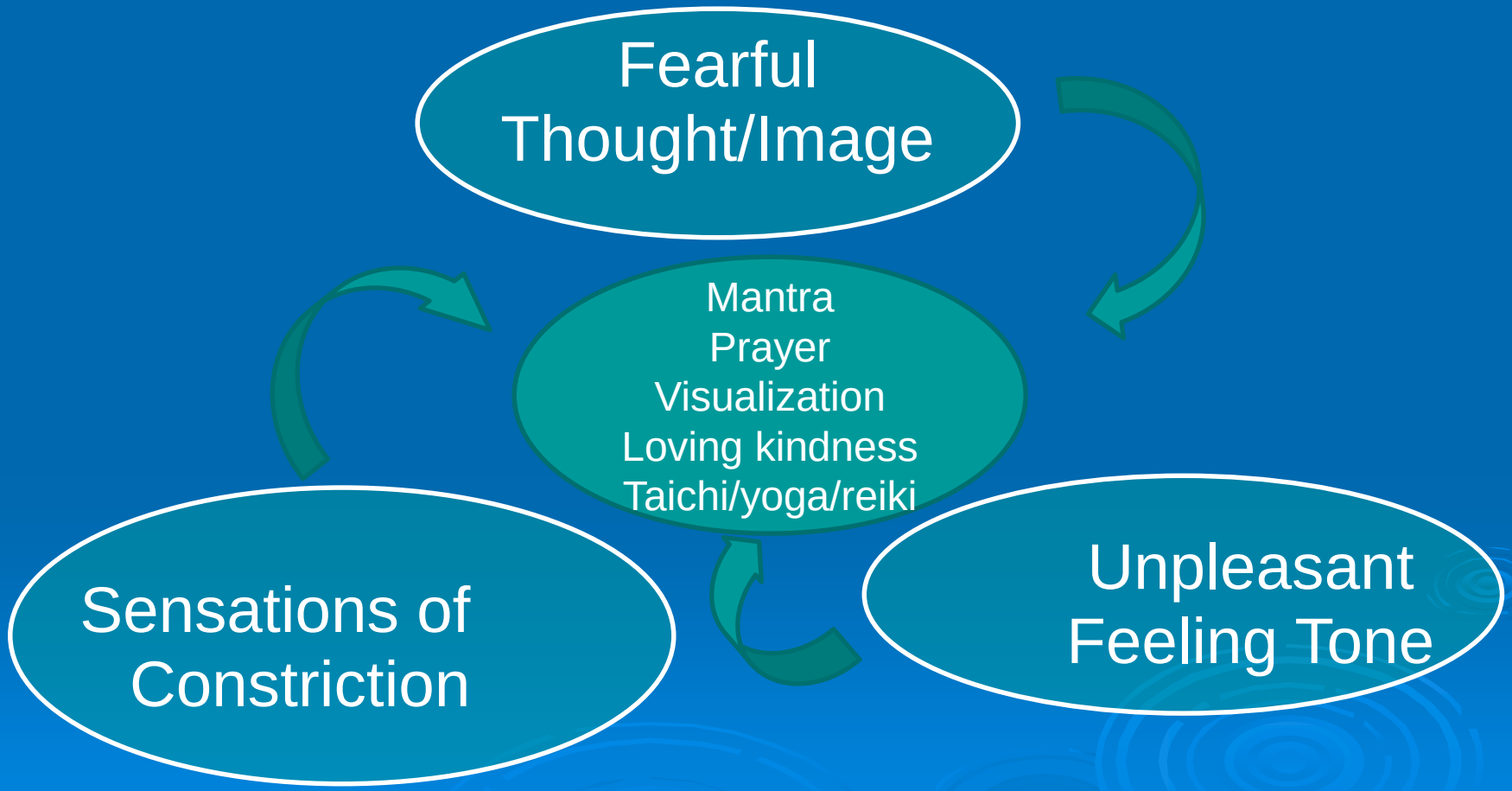
Or it wanders without intentional direction (daydreaming)

Change the object of attention to something affect neutral – the body's arousal again follows.

Self-regulation of attention from differentiated components to arousal-neutral sensations of breathing
Cycle of distress interrupted



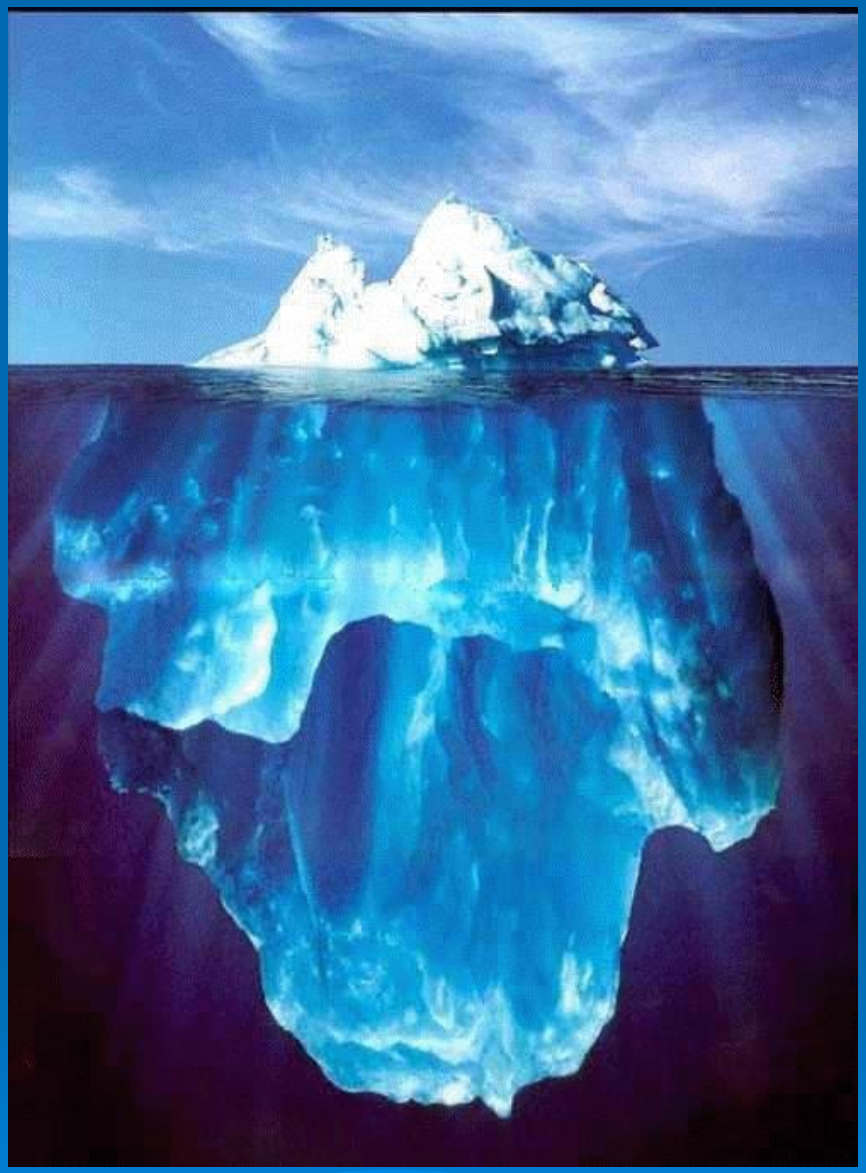
The cycle of distress can be interrupted by any affect-neutral/positive object of attention



When attention is fixated we lose sight of the broader landscape of available experience

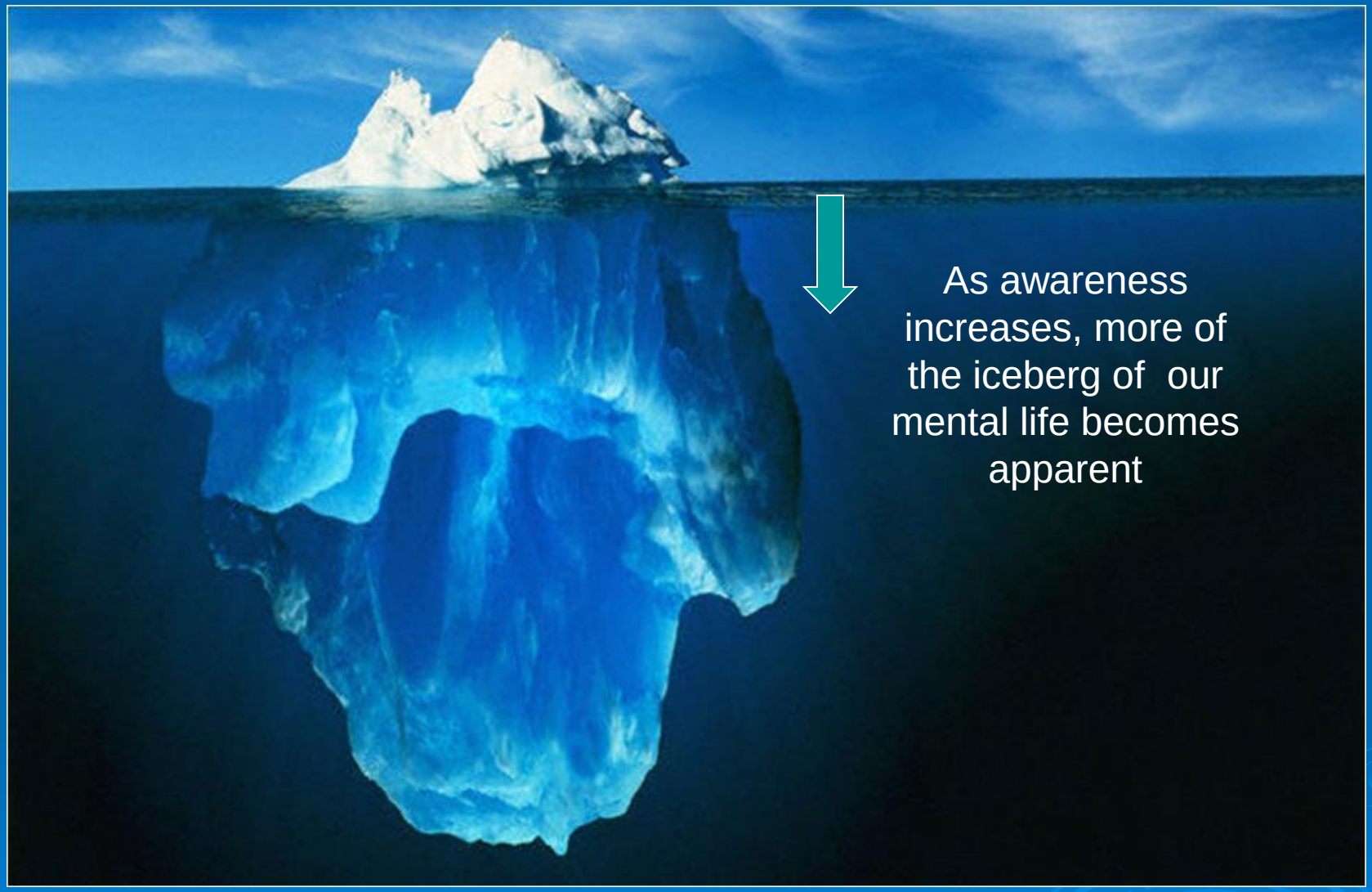
Mindfulness may expand awareness of that which is available to consciousness by enhanced recognition of when and where attention is caught up.

This is how we usually think of an iceberg



This is the reality

Much of our mental life goes on below the level of awareness
Even as it is affecting our wellbeing…

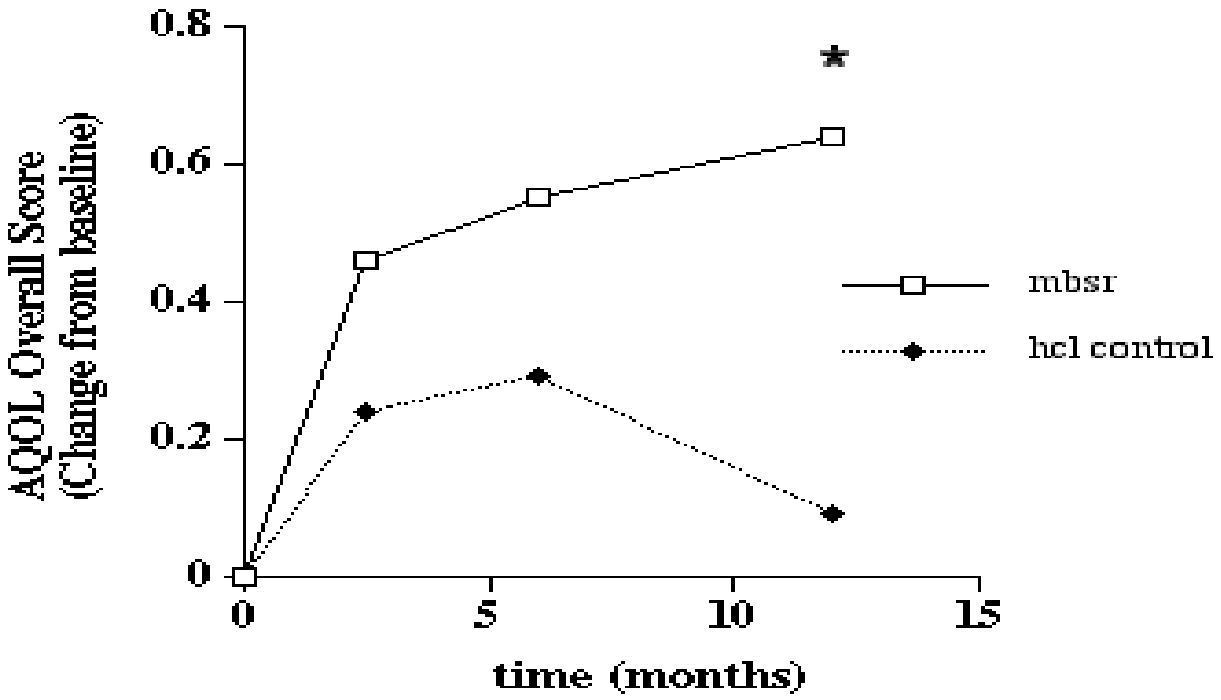


With practice we become more aware of these mind-body processes

‘Oh now I see!’

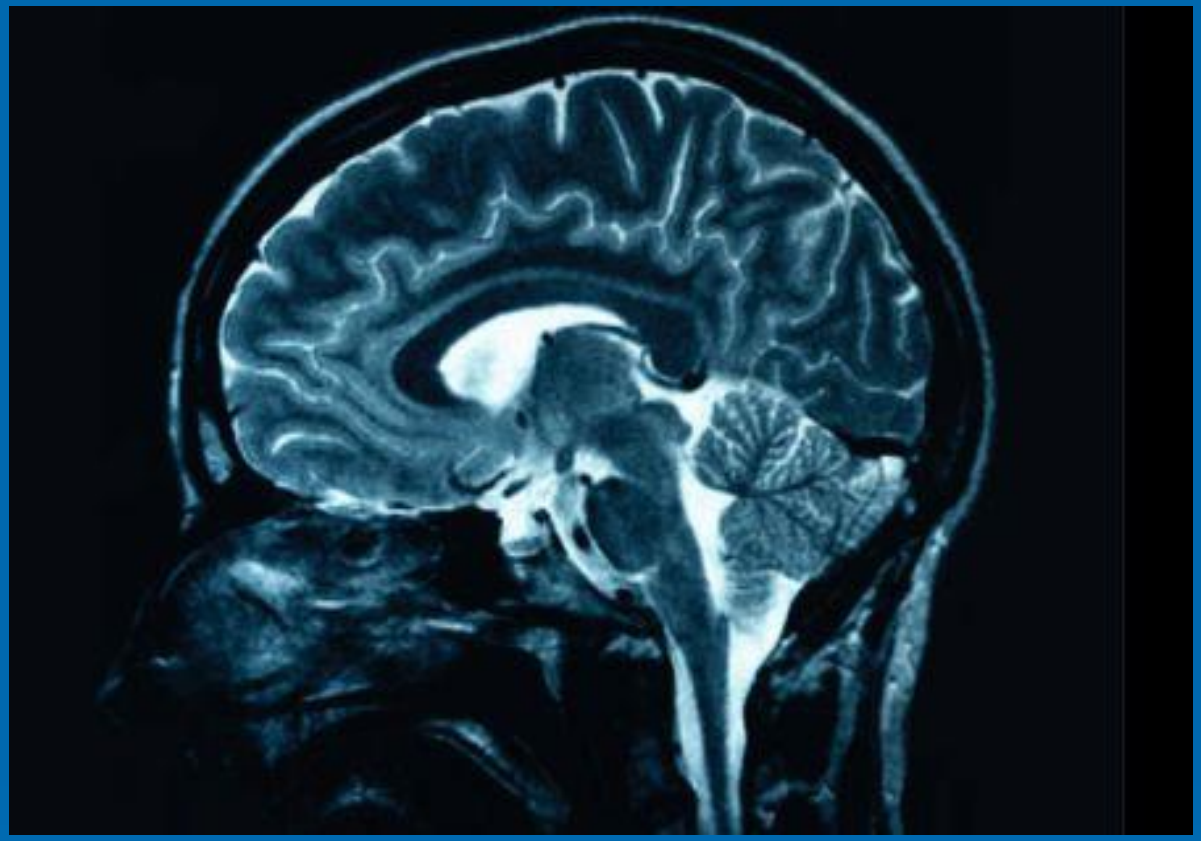
Things will never be quite the same for this fish

Asthma-related Quality of Life



- p=.0001
- Clinically significant difference

What happens in the brain more generally with mindfulness?



New activities (e.g. driving) activate pre-frontal regions, as they become automatic more posterior pre-motor areas take over

Mindfulness activates pre-frontal regions and enriches connections with limbic structures increasing emotion regulation

Hölzel, Carmody, Evans, Hoge, Dusek, Morgan, Pitman, Lazar, S (2010). Stress reduction correlates with structural changes in the amygdala. Social Cognitive and Affective Neuroscience, 5, 11-17.