

# Stress- We Need Clarity and Focus, Not Relaxation

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## ABSTRACT

A sustainable stress management solution, for individuals and organisations, has nothing to do with relaxation. Research shows that a relaxed state, while seemingly desirable, may not be attainable when under the pressure of deadlines, customers, or in other high-pressure environments.

An understanding of the mechanics of stress however, will help us learn new ways of combating, and reversing the physiological and psychological effects of stress.

## JUST DO WHAT!

John turned and glared at Dave, his manager,. “What did you just say?” “Well,, I said, just relax”. *We can't print the rest of this exchange.*

John had been on the phone to the stores department, and they were out of widget #2's. He needed at least 3 widget #2's to finish this project properly. His manager, Dave, seeing John was pretty upset had suggested to John that he just relax a little and think of another way to get it done,, but do it quickly, the project has got to be finished on time. Maybe another widget would do the job; maybe nobody would notice the difference.

Secretly, Dave was pretty worried himself. Of course people would notice. This job was really important, and the stores department just should *not* have run out. He had sent them plenty of e-mails complaining about low levels of stock. He made a mental note to send them another e-mail telling them how inept they were, and how much trouble they had caused him and his team. Not to mention the customer!

Down in stores, Jim had just discovered a labelling error. Seems they had plenty of widget #2's. Apparently, Mary had not been concentrating when she labelled them. Mary had been under a lot of pressure lately, her husband was sick, again. Mary thought it was all the stress he said he was under at his work. What with the potential out-sourcing of his job, no wonder. Quietly, Mary was getting tired of it. After all, he just sat down all day at his keyboard, how can that be stressful? I stand for most of the day, moving widgets around. And I'm the one that keeps getting chest pains, aren't I?

Jim, the head of stores thought to ring John and tell him about the labelling error and that it was all ok, but then thought, forget it, I'm sick of their complaining and besides, it's Friday afternoon. It can wait until Monday. He was going to have to tell Mary though, to keep her mind on the job. She needed to try harder.

Upstairs, John and his manager Dave were trying to think of a way to get the project finished in time. This was a big customer and there had already been talk of the competition making moves to grab them. The company really needed to keep this account.

Theirs wasn't really a bad company to work for, just a few people who didn't seem care about their jobs.

They had an OHS system, a health program that told them how healthy they were,, or in Dave's case, how un-healthy he was. He had liked the idea of getting healthier, but who's got the time? "I do enough in my own time now anyway". Besides, "I think I know what the answer will be". Pamphlets looked good though. Wonder how much *that* cost.

They did give us that stress management program though... Taught us how to relax,, JOHN!

"John! Remember the stress management course they sent us to? Let's go do that technique, the one where we sit down quietly for a while, and...

"Dave, thanks, but I don't have the time!

Dave went home, he told John to call him if he needed to, but Dave hoped he wouldn't call. He had his own problems to deal with.

Jim from Stores had gone home too. Later, he thought about what he had done, or not done. He should have called that guy John from upstairs before he left. He felt bad about that for most of the weekend.

John stayed at work a while, trying to think his way through the problem. He didn't feel great. Maybe his blood pressure was up again. Eventually he went home too, for a quiet drink. His wife would be off to her gym class and he would have to look after the kids. Where does she get the energy! He felt tired a lot and John's kids knew not to bother Dad too much on 'those' nights. They also knew he would probably go into work on the weekend, again.

## **FACT OR FICTION / FIGHT OR FLIGHT**

The above may seem like an extreme example, but replace 'widget' with an item, service or deadline in *your* sector. Replace 'stores department' with, human resources, or 'management', purchasing, IT, sales, servicing, or any department in your company that has internal and external customers.

For most people, when they are anxious or upset, being told to relax is at best an unobtainable state, and at worst, may seem an avoidance of the issue. Relaxing most often implies 'slowing', and when things are busy it just doesn't sound right to people to 'slow'.

The very fact that we perceive a situation as 'bad' causes our 'fight or flight' mechanism to be triggered. Specifically, the Amygdala, one of the emotional centres of the brain goes to work.

The problem with most stress management techniques, like the one John and Dave were taught, is that they ask us to slow or be still. Since the Amygdala is our fight or '*runaway*' mechanism, being asked to sit still is in direct contradiction of at least 200,000 years of evolution.

That we have risen to the top of the 'pecking order' has had a lot to do with the fact that we knew when to be aggressive, or to run like our life depended on it! Probably, for at least the last 195 or so thousand years, this strategy has worked well for us.

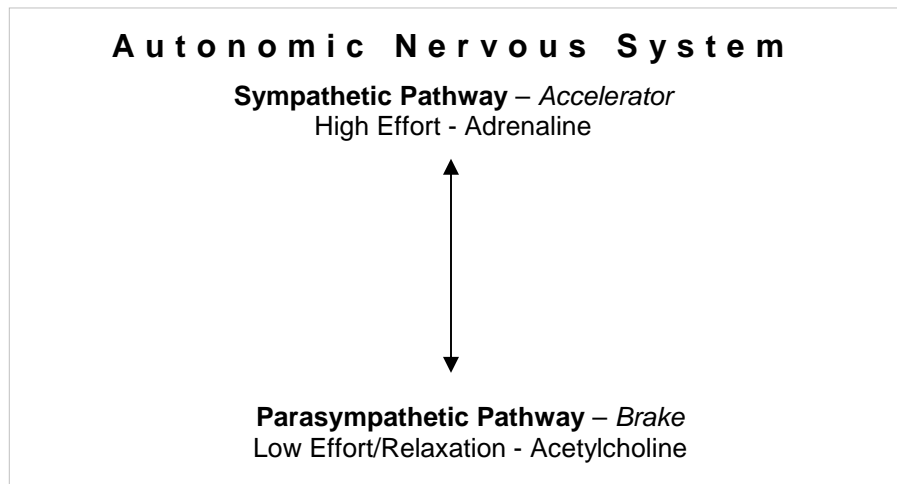
Oh yes, the opposable thumb helped our even earlier ancestors, but unless we knew, *quickly*, if we should use it to pick up a spear or a club or some other weapon, it wasn't a complete solution to our survival and eventual evolution.

The ones who *did not* have a good sense of fight or flight, may have said "oh, is that sabre tooth tiger looking at us? Hmm, is it an old one, is it big, do you think we can outrun it?" This guy then looked over his shoulder to get a response from his tribe mates, only to see them running off in the distance in a cloud of dust. He turned back around, and by then his time to make the right decision had abruptly ended. Luckily for us, the process of natural selection did not select *him*, or his ill-formed Amygdala.

## WHAT HAPPENS NEXT?

For the rest of the tribe, the anxiety of seeing the tiger caused a response in the brain, (Amygdala), set of the appropriate behaviour, physiology and even immunology. A massive surge of Adrenaline, an increase in blood pressure, blood is pumped away from areas like the stomach and into the muscles. The stress hormone Cortisol is released as well as the energy source glucose, which will help you, fight, or flee. The Amygdala decides whether you should run or fight based on its recollection of previous encounters with this threat. It remembers these significant things to protect us. Mainly it's just a record of 'bad' or 'good'. Tiger- bad. Your heart begins to beat very fast and in an irregular rhythm & your breathing rate increases.

**And John has only just put down the phone!**



## WHAT HAPPENS THEN, OR 'WHY SMART PEOPLE CAN DO DUMB THINGS'

This reaction in the body, heart and brain has an immediate effect on higher brain function, specifically, the cortex. Sometimes called 'brain 3', the smart of the brain, the part of the brain the company hired to squeeze. This is where our fine perception, differentiation of thoughts & feelings, discrimination of appropriate behaviour, self-reflection, self-awareness, problem-resolution, and goal satisfaction occurs.

That leaves us with 'brain 1' and 'brain 2'. Brain 1 looks after functions such as hormonal control, temperature control, respiration & heart rate, blood pressure control, reproduction drive, hunger and thirst control.

'Brain 2' looks after things like, territoriality, fear, anger, attack, anxiety, hate, and jealousy.

Guess where the Amygdala lives?                      Brain 2!

So, when we, even subconsciously, perceive 'danger', Brain 3, the smart part is inhibited, it doesn't work as well as it does when we are calmer. A scientific term for this inhibiting of cortical function is '*cortical inhibition*'. The opposite of this is called '*cortical facilitation*'.

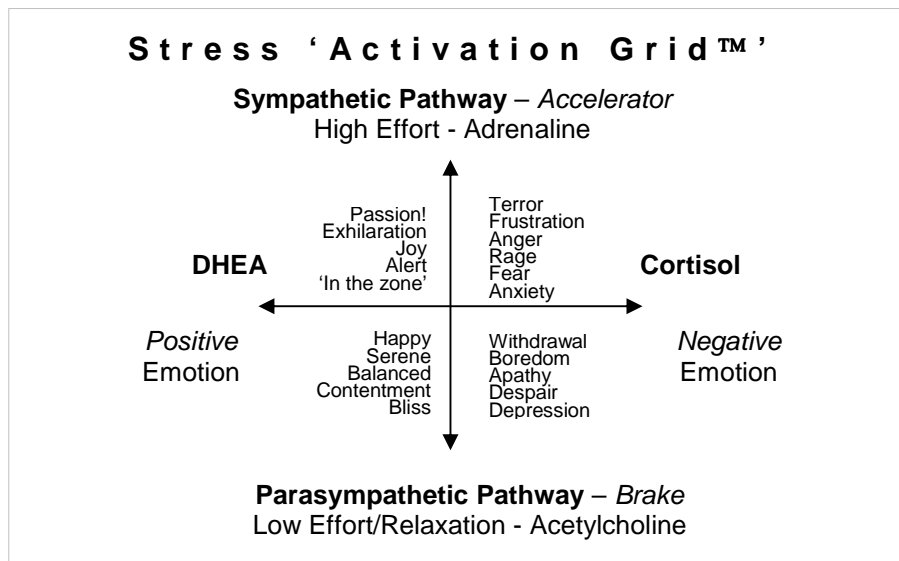
Without Brain 3, we are not going to think our way out of trouble, be very creative or, even be very friendly.

These days, those 'tigers' are disguised as deadlines, tough customers or irritating colleagues.

It is thought that some of us are in constant states of 'fight or flight', or even 'freeze' where we are unable to do anything remotely 'Brain 3-like'. We are stimulated by 'in-put' from the moment we wake until the moment we fall off to sleep. I think the fax machine has a lot to answer for. 1980 seems to be when cycle times for problem resolution, customer response, etc, reduced markedly. Information flow, 'input', started to speed up. And is it going to slow down anytime soon? I don't think so.



The Activation Grid™ describes how the brain signals the body via the Autonomic and Hormonal System to respond to perceived danger. Those ‘tigers’ we spoke about earlier.



We can move through all four quadrants in any given day, or hour, or even minute it often seems. To a point, that’s OK, emotions are the texture of life, but obviously we might prefer that texture to be tissue like, not sand paper!

RELAXATION only moves you from top to bottom. You can still be physiologically relaxed, and be making Cortisol. Put another way, we can be relaxed, but still be ‘stewing in our own juices’. Eg, boredom, apathy, despair, depressed.

Obviously, we would want to spend more time on the left side of the grid, which reflects the physiology of high performance and optimal health. It’s the stress free zone.

To do that we need ways to move from right to left, from negative emotion to positive emotion. But, with that Amygdala watching everything we do, what hope is there?

## THE ROLE OF THE HEART IN AUTONOMIC, AND HORMONAL BALANCE

(or- the forgotten player in the stress game)

I have already stated that ‘relaxation’ is often, when most needed, not a viable approach to stress management, especially over the longer term of our working and social lives.

It can be achieved quickly by simply sitting still. Trouble is, we can also be quickly moved out of this relaxed state.

A more viable, longer lasting option, which does not necessarily involve slowing down, is to **modulate our heart rhythms**.

A lot of people don’t realise it, but the heart sends more information to the brain than the brain sends to the heart. The heart actually communicates with the brain in four ways.

**We can use this information flow** to ‘over-ride’ the Cortical Inhibition that stops us from accessing Brain 3, the smart brain. And what could we do when we have our *smart brain*, back in gear. How about; solve problems, think clearly, get some clarity and focus on issues, large and small. AND, this can be done right *in the moment* we need to. Not later. Now!

## Here's how the heart communicates with the brain:

- **Neurologically** (via the nervous system)
  - *Did you know the heart has a nervous system? (About 40,000 thousand neurones worth)*
  - *More neural traffic is sent to the brain, than travels to the heart from the brain*
- **Biochemically** (hormones and neuro-chemicals produced within the heart)
  - *The heart was reclassified as part of the hormonal system in 1984 when it was found to produce several hormones.*
- **Mechanically** (the 'pulse' which is a pressure wave flowing through our bloodstream)
  - *The pressure wave created from the heart pulse travels far faster than the blood it pushes, and the brain is sensitive to changes in these pressure waves.*
- **Electromagnetically** (electrical signals generated when the heart contracts).
  - *The heart's electromagnetic field can be detected up to 2 meters from the body (with current technology). So it easily reaches the brain, and because of its greater amplitude, can effect or inhibit or alter the electrical activity in our brain.*

There are many methods of stress management. From my experience, most often, not always, they first require you to 'slow down', then reach a state of focus and clarity and may take time to do so.

Here's one, developed by the Institute of HeartMath, which does not involve slowing down. In fact, many people report that their mind 'opens up' to help them gain some much-needed perspective. Often needed when trying to see a different point of view or to solve problems. Appropriately, its called 'Quick Coherence™'

Step 1. Heart Focus

Step 2. Heart Breathing

Step 3. Heart Feeling

If you attended the presentation of this paper, you will have had the 'blanks' filled for the above steps.

## Here's how it works:

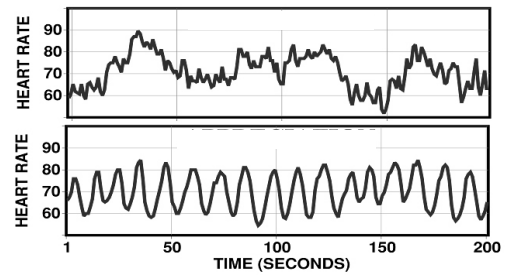
The Institute of HeartMath research in neurocardiology shows that when we consciously shift into a positive emotional state, our heart rhythms shift too. This response in the heart triggers a response in the brain, creating a *favourable* (as opposed to the events set off by the Amygdala) cascade of neural, hormonal and biochemical events, that actually improves perceptual clarity and reverses the physiological effects of stress.

Put more simply: The brain is sensitive to signals from the heart. We can 'over-ride' a non-beneficial reaction with a more beneficial reaction.

Remember the Activation Grid above, where we plotted positive and negative emotions on the autonomic and hormonal axis? Below are two heart rhythm traces taken from the one individual. The subject used a technique like the one above to change their heart rhythm.

In one frame the subject is feeling *frustration*, and in the other the same subject is feeling *appreciation*. Can you tell which is which?

The top one is frustration. It looks a lot like some of us feel when frustrated, doesn't it?.



For further information see the Harvard Business Review article "No More Stress". It provides a full review of the HeartMath technique. Ref: R0703i. June 2003

## CONCLUSION

Relaxation is great. I personally enjoy relaxing very much. But life these days can be very hectic. The time we allocate for relaxation, time with family, friends or just time for enjoying our own company is often the first to be *re-allocated* when things get busy.

Organisations spend a lot of time, money and effort developing our technical abilities, and our cognitive abilities. But, it has been proven that unless we develop our ability to manage our emotions, in real time, we will continue to suffer from pressure, anxiety and stress. We will continue to make poor business decisions, poor personal decisions, and suffer from an increasing number of stress related diseases.

On the other hand, shifting emotional gears, being aware of where we sit on our emotional landscape, can help us react in a more beneficial way to stressful situations, not driven by our well meaning Amygdala, but moving with the speed of, *balance*.

We could also start 'programs' with much fanfare, put up posters, and tell our people how good things could be, (if only they would try it!). Or, we could just begin right now by providing our people with much needed competencies that, as stated in this paper, have been proven to improve our wellbeing. A smart man once said to me, "It's pointless *telling* people how much you care; you just need to *show* them". If you need proof, see the data section.

## DATA

The technique listed in this paper is one of many available that can teach emotional management skills. Emotional management skills have been shown to boost levels of emotional intelligence, organisational climate and staff wellbeing.

The data presented has been taken from programs whose origins are founded in emotional intelligence and related concepts. As well as Australian and International conferences, the concepts presented here, have been published in many peer-reviewed journals.

Such as *The Journal of Advancement in Medicine, Stress Medicine, The American Journal of Cardiology, Harvard Business Review, and Integrative Physiological and Behavioural Science*. Please contact the author for additional references or copies of papers.

## PSYCHOMETRIC RESULTS

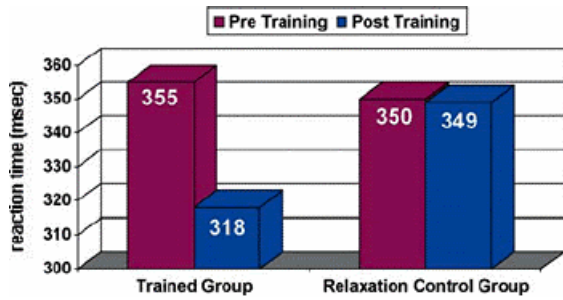
### 190 staff in 4 organisations across Sydney, Canberra and Newcastle.

Reporting they '*often*' or '*always*' felt:

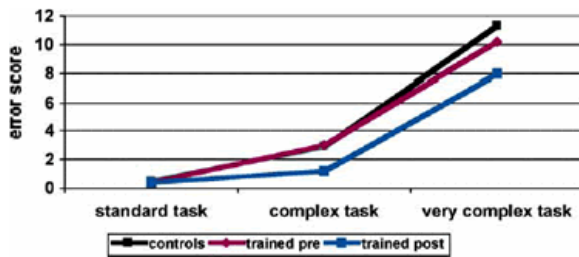
Indicator	Pre-training	6 weeks post	12 months post*
Anxiety	18%	5%	3%
Depression	12%	1%	1%
Anger	11%	5%	3%
Like quitting	17%	7%	6%

\*one organisation only

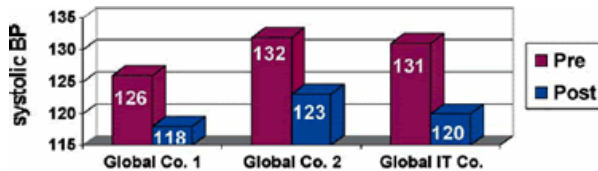
## PHYSIOLOGICAL RESULTS



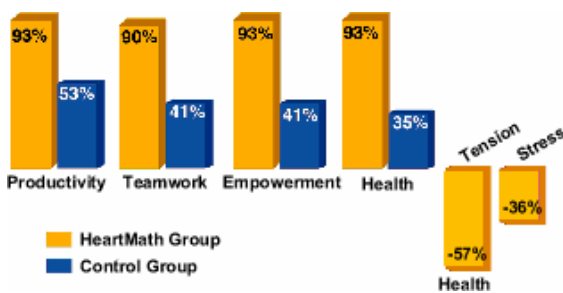
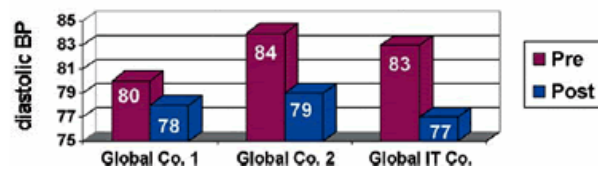
Improvements in **reaction times** when compared to a group taught relaxation techniques. (Sample size 30)



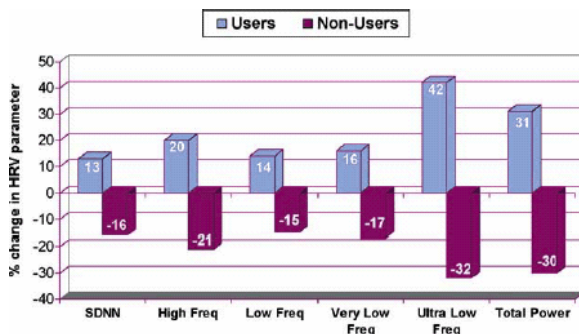
Improved **Spatial Working Memory** before and after training (sample size 25)



**Blood pressure** data before and 3 months after training (sample size 78)



Percent change in **workplace and health indicators** compared to a control group (sample size 1,000)



Percentage change in **Heart Rate Variability (HRV)** of executives, measured at 8 weeks post training. (sample size 59)

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