

Meditation

The theme of this book is that to shape the behaviour you need to manipulate the environment. Further, we have established that for children with abusive childhoods elevated stress impedes their efforts to change their behaviour, when they are stressed to access their habitual actions. So, it seems obvious that being relaxed would give them an advantage in their efforts to conduct themselves in an appropriate manner.

However, the use of meditation and relaxation not only helps these students choose a newly acquired behaviour at the time they find themselves in a threatening situation, but there is a long-term advantage for these kids who master the practice of meditation.

We have established that the children with abusive histories have altered neural organization that reflects the brain's response to the environment in which it was developed. Because that environment generated a constant state of fear, the area that best served the survival instincts of the individual, the amygdala, the part of the limbic system that initiates the 'fight/flight' response becomes enlarged and hypersensitive to threat.

Because of the dominance of the amygdala's activity at these times of threat, the prefrontal cortex and the hippocampus are not engaged. Because of this 'neglect' these parts of the limbic system are under developed, reduced in size. So, in the future, when the child experiences unrealistic heightened arousal the under-developed formation of the cognitive elements of the brain impair the ability of that child to make a considered response to any perceived threat. This is the reason cognitive interventions have no success with these children at the times of heightened stress.

The study of fear was a natural area of research in the formative years of neuroscience. A concentration on the 'fear cycle' is understandable and early inquiries were on the resulting neurological structural changes. The early studies not only focused on humans there was widespread use of animal studies, lab rats that were used extensively to examine the organization of the brain and it was easy to evoke this emotion for these studies.

In the early days of imagery research on humans it made sense to follow this focus to confirm animal studies and because the study of fear was the established field of enquiry.

Recently neuroscientists have expanded their examination of the effects emotions other than fear, have had on the brain. Amongst the most prominent is Richard Davidson and his team at the Centre for Healthy Minds at the University of Wisconsin. After his initial research into the affective neural pathways he focused on how neural networks could promote a positive, flourishing attitude in individuals.

Later he studied with Buddhist meditation practitioners and an examination of their neural arrangements showed an almost opposite structure in the areas of a brain that had been studied in subjects who experienced significant levels of fear. In these monks, the amygdala was reduced making them more resilient to stress. The increased size of the frontal lobes and hippocampus enhanced the cognitive capacity of the brain.

In a series of studies led by Davidson, it was revealed that monks, with over 40,000 hours of meditative practice developed a lasting neural arrangement that reflected a state of meditation; that is, they were always 'at rest', a characteristic of being homeostatic equilibrium.

In 2005 there was a protest against this suspected marriage of 'religious faith' and science. However, the weight of confirming evidence from research teams in first class universities such as Harvard and Stanford supported this research. In 2013 the Journal of the American Medical Association identified 47 robust studies that allowed them to uphold the connection between meditation and reduced anxiety and depression.

Further studies have shown that, unlike those monks who had a life time of meditative practices as little as 15 minutes per day for two to three weeks of meditation will result in changes to the brain structures; the connections between the frontal lobes and the limbic system becomes more robust, the frontal lobes thicken and the hippocampus is enlarged. There is also evidence that the amygdala reduces in size.

The significance of this connection between the frontal lobes and the limbic system becomes more important at the time of the onset of puberty. It seems that it is at this time the conditions for the maturity of the frontal lobes are in place; it is that 'window of opportunity' for the frontal lobes if you like.

Up until this time the impact of the emotional content of any stimulus was felt in the limbic system, in the amygdala. It was then acted on as well as being projected onto the undeveloped frontal lobes. As the frontal lobes developed the emotional content of the incoming stimulus, if it was not extremely threatening, it went to the frontal lobe for evaluation and the results of that assessment was sent back to the limbic system. That is, in most occasions you could think about the situation before you acted.

This pause for a considered response to a possible threat allows us the opportunity to make a measured approach to this situation. This underpins all cognitive approaches to behaviour management.

Even if we take a sceptical view of these findings, the usual approach for scientists, the potential advantage that comes from meditation becomes an important tool for helping those children who have an abusive background.

Throughout the book I have emphasised the importance of the emotional condition of the child's environment. When we commence our work with these dysfunctional children it is the teacher's responsibility to manage the stress levels in the classroom. However, the goal is for every child to grow into a self-reliant, resilient adult and they need to take care of the stresses they face independently. Teaching them to meditate provides a skill that assists in achieving this result.

For students with backgrounds of abuse and neglect the process for relaxation is very threatening. To relax, you need to focus on your internal world, limiting your attention on the stimulus that flows in from the external world. A feature of these students is that they

are always scanning their outer zone looking for potential dangers. This hypervigilance, a trademark of PTSD has been crucial to ensure their survival. Now we are going to ask them to take the focus away from the very practice that aided that existence and to go inside their minds.

A complication is that when we get these students to focus on their internal world we are asking them to attend to their sense of self and for most it is to examine their toxic shame. As we have discussed earlier, this toxic shame reinforces their sense of being a failure. This self-reflection seems hardly a practice that will help them develop a new approach to their behaviour but it is a crucial part of their recovery.

Finally, the process of meditation becomes even more difficult when you attempt to conduct relaxation sessions in a group setting, especially if that group consists of students with similar histories. In my experience, you need to limit the opportunity for each student to communicate with others. In such an environment, all the class will be anxious to avoid the potentially dangerous conditions when they sacrifice their protective hypervigilance and they will 'support' each other's attempts to sabotage the teacher's efforts to teach them to meditate.

Before we commenced the meditation, I explained what the process involved, what happened during the process and how that would benefit them. Of course, this information was included during their lessons in how the brain works, part of their recovery curriculum.

I found a few rules help conduct the meditation lessons. I allowed them to lie on their stomachs with their face down. I also was aware that some would try to break the desired atmosphere by making a noise, coughing, sighing and even the occasional noisy 'expression of wind'. I understood the calm environment threatened them and if they replaced this with behaviour that upset the class they would feel more comfortable. This was common when students first came into the program.

The process was that I would read a script, the same every morning and if a student acted in a way that would upset the process they were quietly removed from the room. When I had completed the script, those students who participated moved on to the next activity. The students, who were removed were then returned to the class to have the script read to them again.

At this time, I would tell them that I could not make them relax, I explained that I understood they felt threatened but I insisted that they should not spoil the process for others. Eventually the students would sit through a complete 'reading' and then they could return to their class. I was surprised that after a time, students asked for the relaxation activity.

To get started students were asked to get into a comfortable position making sure there was an ample space between each other so their physical boundaries were not activated. Make sure the students get themselves into a restful position, sitting or lying they should make sure that they reduced any tension that was activated by the way they held their body. Any time you bend your body you place part of it into tension and a mirrored part

into compression. So, it is important to make sure they have a posture that is symmetrical around the spine. Making sure the spine is straight, the head straight forward and the hips/shoulders parallel.

As for the script, there are numerous relaxation programs available for free on the internet. Most of these are fine and may come with suitable mood music. However, I'm going to give you a basic script that you can read with your class.

Relaxation Script

Read the script in a slow, 'monotonous' voice, you don't want to excite them nor get them 'too interested' in what you are saying. Take time to pause between sentences to give the students time to follow the instructions.

Let's take a few minutes to relax your body and mind.

Get yourself into a comfortable position either sitting or lying on the floor. Make sure your body is comfortable with your spine straight and stress free. Either close your eyes, or if this is uncomfortable look down at the floor or at a point on the wall. Avoid looking at other students.

We start with a few slow, deep breaths. Each time you breathe in; breathe all the way down extending your stomach. Breathe in slowly through your nose, and feel your abdomen and lungs expand with air. After drawing in a long deep breath hold it for a while and then allow your breath to flow back out through your mouth.

As you let go of each breath release any tension or stress you might have been holding on to. Mentally repeat the word "relax" as you breathe out.

Repeat this, slowly draw in a deep breath. Don't rush just slowly breath in. Just gradually fill your lungs and abdomen with air, and when they are full, release that breath completely.

You are beginning to feel yourself relaxing. Your breath will dissolve tension imagine your muscles are like rubber bands that have been stretched and now you are releasing that tension.

Breathe in once again. Feel your body fill with air...and when you are ready, release the breath, let it flood out naturally. Breathe all the way out until your lungs are empty.

Now let's draw in a third and final breath. Nice and deep. Feel yourself relaxing as you gradually release the breath.

Let your breathing return to a normal rhythm as we begin to scan over your entire body, looking for areas of tension to release. As I mention each body part I will say a number, I want you to bring your awareness to it and relax that part of your body as deeply as you can. You don't need to concentrate intensely on this task, just feel or imagine a sensation of relaxation and relief moving through each part of your body.

Five - I want you to concentrate on your head. It's quite common for people to store a lot of tension in their jaw muscles, so let's begin there. Focus on your jaw for a moment. There are a number of very strong muscles in that area. Just mentally connect with this part of your body, and relax it. Allow your jaw muscles to loosen and let go.

Now let your attention wander to the muscles in your face. Allow your eye muscles to release and let your cheeks and forehead relax. Let this peaceful feeling flow slowly down your neck. Feel it sooth your throat and dissolve any tension as it slowly glides down to your shoulders.

Every time you hear the number five you will relax the muscles in your head.

Four - now it's time to let the area around your shoulders go. Give them a moment of your attention, and just mentally repeat the word "relax" as you let them soften, let go, and release all tension. Relax the muscles at the bottom of your neck, those at the front of your chest and the big muscles at the top of your back. When you think they are relaxed just let them go again. You will be please how much you can relieve this tension.

Every time you hear the number four you will feel the big muscles around your chest relax, your shoulders relaxing, letting go.

Three - Now bring your awareness to your arms. Feel and imagine them becoming loose and limp. They are relaxed and at peace, all the way from your shoulders, through your wrists, to the tips of your fingers. Imagine your fingers are so loose they are like bits of spaghetti just hanging there with no tension at all.

Relax you forearms, let all the tension dissolve, feel them become more and more relaxed. Let the tension melt away from the upper arms and shoulder, feel them give way to all the tension and relax.

Every time you hear the number three you will feel the muscles in your arms and hand relaxing, your fingers are completely free of tension.

Two - Focus on the muscles in your lower back...all those muscles surrounding your spine. Just let those muscles relax and let go. Now bring your awareness to your pelvis and all the muscles that surround your buttocks, let the tension just dissolve, you are becoming more and more relaxed. As you breathe in and out, remind yourself to let go of all the tension in this area of your body...relax.

As you breathe in and out feel your stomach gently rise and fall. Let all your body soften and relax with each breath. Feel it releasing tension as each moment passes. You can feel yourself slowly slipping into a state of deep relaxation.

Every time you hear the number two you will feel the muscles around your buttocks, lower back and lower stomach relaxed.

One - Now bring your attention to your thighs. Imagine all those strong supporting muscles

beginning to relax and unwind. Let them go. Now focus on your knees, feel them loosen their grip on the lower part of your legs, letting go. Now move to your calf muscles, feel the tension drain away as you become more and more relaxed. Finally concentrate on your feet, let the tension in the soles of your feet relax, the toes becoming like limp spaghetti as you become more and more relaxed. Let them all relax.

Every time you hear the number one you will feel the muscles around your legs and feet letting go, relaxing.

As you breathe in and out feel your stomach gently rise and fall. Let all your body soften and relax with each breath. Feel it releasing tension as each moment passes. You can feel yourself slowly slipping into a state of deep relaxation.

You are now totally relaxed, lying still, relaxed and as I count down you will feel yourself relaxing – Five your head more relaxed – 4 – your neck and shoulders letting go even more – three – your arms, forearm hand fingers letting go even more - two – your hips, buttocks and stomach muscles becoming more and more limp, more and more relaxed – 1 – your thighs, calves and feet complete the relaxation. You are completely relaxed, completely calm and at peace with yourself.

Every time you want to return to this state of calm you just have to count down from five – four - three – two – one - and you will be relaxed.