

Calm *Body*

Looking after our physical health to
boost our wellbeing



When we feel emotional distress it can bring a lot of different physical symptoms to our attention. Many of these symptoms are not very pleasant to experience, such as racing heart, shaky hands and rapid breathing. This session aims to explain **why** we get these symptoms and **how** we can manage them in more helpful ways.

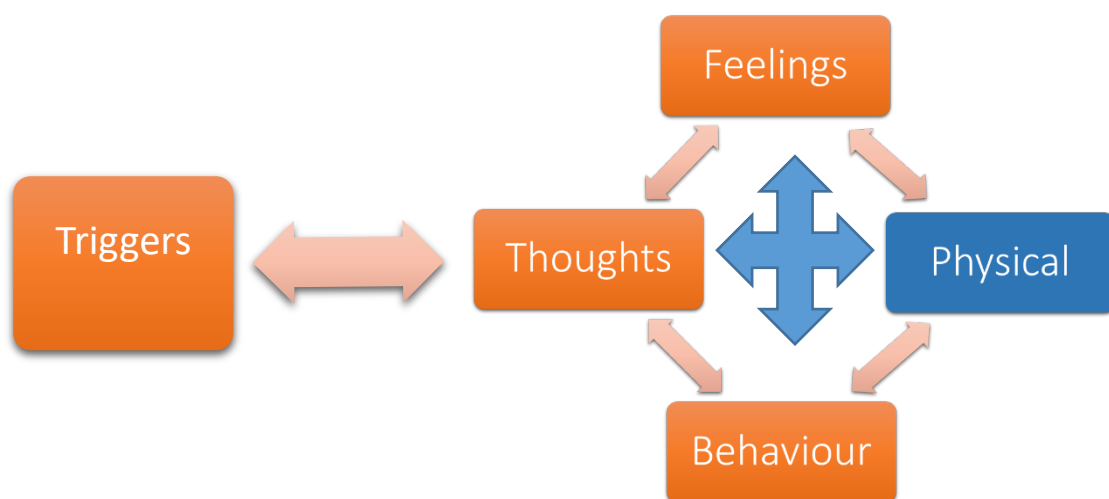
Mind and Body

Often our minds and bodies are talked about as if they are completely separate entities but they are in fact closely connected, with one affecting the other.

Physical Health  Mental Health

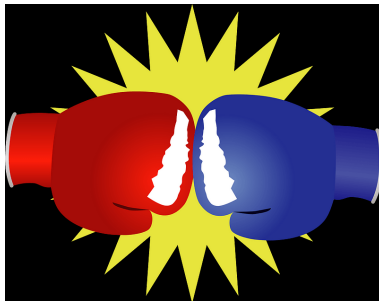
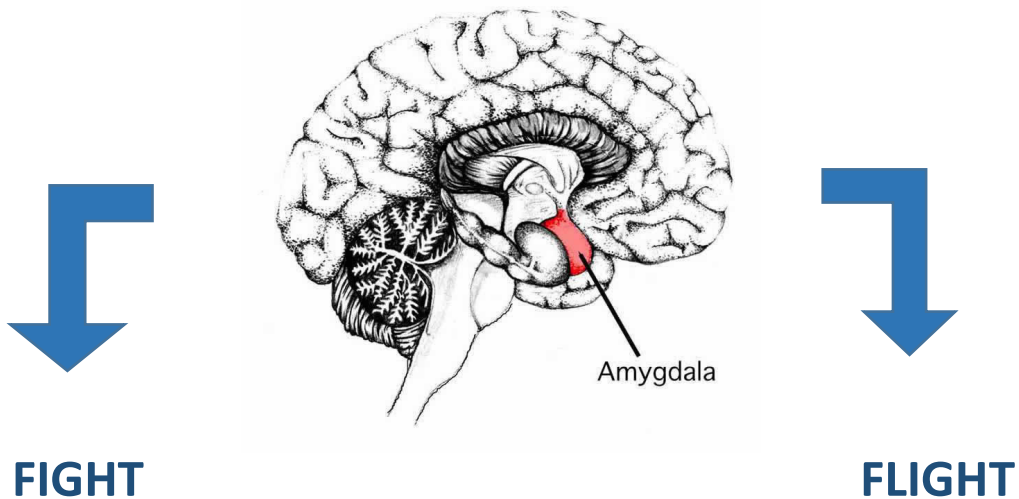
Our physical health can impact on our mental health. For example, many people living with chronic pain report difficulties with low mood. Similarly, our mental health can often affect us physically. For example, if you are feeling anxious, you might experience your chest tightening or sickly feelings in your stomach.

In the context of the CBT model (which was introduced in 'Calm before the Storm') it is important to consider our physical responses. This session is going to show that there is a very good reason why our body responds the way it does when we are emotionally triggered. It will also explain the importance of looking after our physical health to support our mental health.



Fight/Flight system

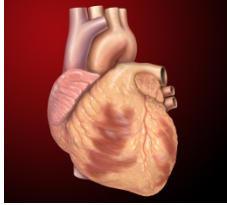
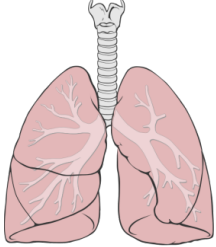





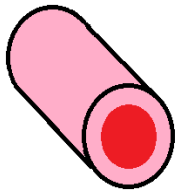
Let's consider how stress affects our bodies, and why. Stress is not all in our minds, and the physical symptoms we can experience because of it are very real. These physical symptoms are caused by our **Fight/Flight system**. As humans we are all wired for protection, and throughout human history this system has played an important role in keeping us safe and motivating us to behave in ways that ensure our survival.



Our fight or flight system is triggered in our brain's emotion control centre – key to which is a part of the brain called the **amygdala**. When the amygdala detects a sense of threat (e.g. us feeling stressed), it sends out signals to our nervous system. These signals kick our fight/flight system into action and prepare our bodies to protect us by running away from danger (flight) or defending ourselves (fight).

What happens to the body during fight/flight?

When our fight/flight system is triggered, lots of changes occur in our body.

<p>Our heart rate increases to pump blood around our body faster</p> 	<p>Our breathing rate increases as we get ready to exert a lot of energy in either fighting or running away</p> 
<p>Digestion slows as this isn't considered essential to survival so our energy is diverted to the more important bodily functions required to help our survival</p> 	<p>The changes in our digestion also result in saliva production slowing down, leading to a dry mouth</p> 
<p>Our pupils dilate with the aim of letting more light in to help us see better</p> 	<p>Temporary loss of hearing/muted hearing can be a side effect of an increased heart rate</p> 
<p>Sweating/perspiration rate increases to keep us cool and stop us overheating so that we can continue to run or fight</p> 	<p>Many blood vessels in the body constrict to allow more blood flow to essential parts of the body such as the legs – which can cause us to experience tingling sensations</p> 

Long ago, this automatic reaction to threat was vitally important for our survival and kept us alert to dangers such as attacks from wild animals. Today, we are not likely to be under threat from wild animals but our fight/flight system still helps keep us safe and is the system that automatically makes us pull our hand away when we touch something hot, or jump out the way of a speeding car.

As we have learned already in 'Calm before the Storm', feeling stress is normal and it can be very helpful in communicating to us that we need to act in order to keep ourselves safe and away from life-threatening danger. However, the part of our brain responsible for triggering our fight/flight system isn't good at telling the difference between emotional threats (anxiety about a job interview) and physical threats (a speeding car).



The fight/flight system is good at keeping us safe from physical danger but can lead to chronic physical health symptoms if it is continuously triggered by higher levels of emotional distress. Chronic physical stress can be caused by everyday pressures such as family or work.



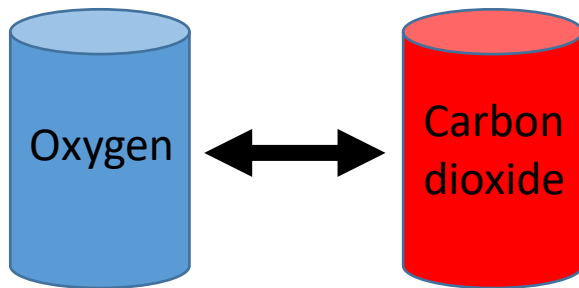
Common signs of chronic physical stress that are felt in the body

- Sleep problems
- Gastrointestinal problems
- Sexual problems
- Aches and pains
- Headaches
- Changes in menstrual cycle
- Shortness of breath, choking sensation
- Flushing & sweating or freezing & chills
- Palpitations

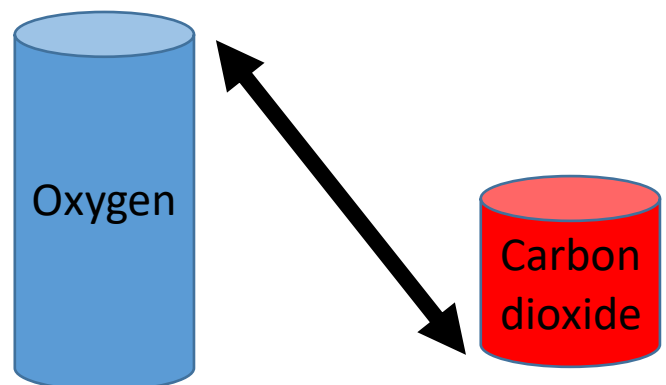
Hyperventilation

When our fight/flight system is activated, our breathing rate increases as our bodies prepare to fight or flee. This is useful when we are under physical threat. But when the threat is emotional, we are unlikely to be fighting or running away (even though we might feel like it). Breathing in more oxygen than we need is often referred to as **hyperventilation** or over-breathing.

When we are breathing normally, we are breathing in oxygen. Our cells are using that oxygen as energy and then they are converting it into waste (carbon dioxide) and we breathe this out in equal measure.



When we are over-breathing, we end up with more oxygen than our body needs and too little carbon dioxide. When this happens over a period of time, we start to experience unpleasant symptoms in our bodies, including light-headedness, tingling and sickness – many of which feel like the fight/flight system in overdrive.



Breathing in a calm and regulated way is key to achieving balance again and reducing unpleasant physical symptoms related to emotional distress and the fight/flight response.
We will come back to how you can do this below.

Maintaining a healthy body to maintain a healthy mind

Now that we know what can happen to our bodies as a result of emotional distress, and where this can build up into more chronic physical symptoms, we are going to consider ways to look after our bodies to help us manage and reduce psychological distress.

We will use Sarah's story to demonstrate the benefits of using more helpful strategies:

“Money has been tight, and I have been working two jobs to make ends meet. On top of that my car is now off the road because I can't afford to pay for the repairs it needs.

My mum has breathing difficulties and other health problems, and was relying on me to go for her shopping and medication. I can't go to her as regularly now, as she's 45 minutes away on the bus.

I have started to eat on the go between jobs, and relying on caffeine to keep my energy up. I am struggling to get to sleep at night because I work late – and when I do fall asleep I've started to wake up during the night feeling like I can't breathe, and having to run to the window to get some fresh air.”

➤ Importance of breathing

Sarah mentioned that she had been waking up in the middle of the night finding it difficult to breathe. It is likely that Sarah might be suffering from the effects of hyperventilation, or over-breathing, resulting in what feels like “out of the blue” symptoms. However, these symptoms are not out of the blue, but a build-up of the chemical effects in the body of over-breathing. It is a very common and understandable reaction to want to open a window and/or take a big breath in as you feel like you are choking and cannot breathe. Unfortunately, this is one of the worst things you can do as this will result in the body being further out of balance, with too much oxygen and too little carbon dioxide in your blood stream.

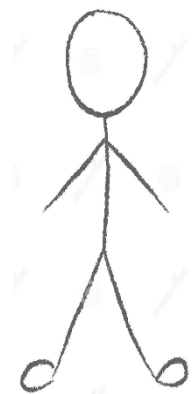


The key is to restore this balance by pacing your breathing. Controlling your breathing is often the simplest, gentlest, and fastest way to calm your body. Keep reading to find out more about how you can do this.

➤ Letting go of muscle tension

Muscle tension is another commonly associated symptom of stress as part of the fight/flight system. Therefore, we want to learn how to ease off these feelings and relax our muscles. Sometimes we don't even notice our muscles becoming tense, but perhaps you clench your teeth slightly or you are tensing your shoulders to the point that you can feel quite stiff or sore. Muscle tension can also be associated with backaches and tension headaches.

One method of reducing muscle tension that people have found helpful is through a technique called Progressive Muscle Relaxation (PMR). In PMR exercises, you tense up particular muscles and then relax them, starting from the head and working your way down the body.



Breathing and PMR exercises can be found at the end of this workbook. We would encourage practising these exercises regularly as it can take time to get the hang of them and experience the full benefit.

Taking care of our physical health to support our mental health

Research tells us over and over again about the benefits of looking after our physical health. Rather than overwhelm you or repeat information that is readily available elsewhere on the benefits of looking after your physical health, we are going to be more specific: this section will explore diet, activity levels, sleep and substance use, with the emphasis being on their link with mental health.

If you want further information on improving physical health, we would encourage you to speak with your GP practice. The Lanarkshire Mind Matters website has some pointers too, in the 'Other Resources' section.

Diet/Fluid intake

We all know that eating a balanced diet and getting our five a day of fruit/veg has important physical and mental wellbeing benefits.

Here are a few things to watch out for:

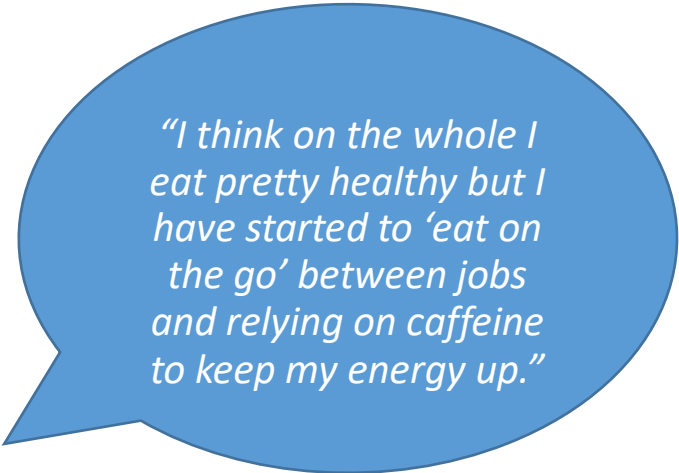
- **Sugar cycle**

It's not uncommon when we are feeling stressed to be drawn into eating lots of sugary foods and drinks. This can give us a short-term 'sugar high' followed by the crash afterwards. It can then be tempting to consume more sugar to give us a boost, and so the cycle continues.

- **Caffeine rush**

Caffeine is a stimulant and will make us feel more awake but can also speed up our systems and add to some of the unpleasant symptoms we are already experiencing when stressed, such as palpitations.

To maintain a balanced mood (and avoid a crash in energy) it can be helpful to eat more 'slow release energy' foods such as bananas, oatmeal, eggs and nuts. Increasing your water intake is also a very helpful strategy in avoiding an energy dip.



"I think on the whole I eat pretty healthy but I have started to 'eat on the go' between jobs and relying on caffeine to keep my energy up."

Possible strategies in improving diet and fluid intake

- Create a meal plan for the week
- Have chopped-up fruit ready in the fridge to eat
- Rather than focusing on reducing your caffeine intake, instead focus on increasing your water, e.g. for every cup of tea or coffee, drink a glass of water also.
- Look at NHS Inform (www.nhsinform.scot)

Activity/Exercise

Increasing activity and exercise levels has lots of physical health benefits. It can also have a range of positive effects on our mental health and wellbeing through the release of endorphins.

Did you know?

Endorphins are neurochemicals in the body that are known to be natural pain relievers. In other words they can reduce pain and boost pleasure!

Benefits of increasing activity and exercise for mental health include:

- **Improves mood**
Research suggests that exercise can be a very effective treatment for mild to moderate depression.
- **Relieves muscle tension**
Intense exercise of any kind for 20 minutes can be very effective in calming our fight/flight reaction by releasing the stored-up physical energy and stress hormones in our bodies. This results in more relaxed muscles.
- **Improves memory and concentration**
Exercise can increase oxygen to the brain which improves brain functions such as memory and concentration.
- **Improves sleep**
Regular exercise has been found to improve the quality and quantity of the sleep cycle.
- **Increases energy**
Regular physical activity can help your heart and lungs work more efficiently and this results in giving you more energy.
- **Improves self-esteem**
Increasing physical activity can strengthen and tone your body which can positively influence how you feel about yourself.

The NHS recommends that to stay healthy, adults should aim for around 150 minutes of moderate-intensity activity every week. That's a little over 20 minutes each day.

As Sarah points out, it can be difficult when we are feeling stressed or low to motivate ourselves to exercise as we just don't feel like it. If this is a difficulty for you just now then you're not alone. Our 'Calm Behaviours' and 'Stay Calm' sessions will give you some helpful tips on breaking activity down and planning ahead to support you in getting started.

"I enjoy going for a run but I'm struggling to do it as much as I should right now because I feel so stressed and fed up, plus I really don't have time"

Sleep

Alongside eating and drinking, sleep is one of the most important factors in helping us function on a daily basis. Sleep difficulties are very common and can include getting to sleep, waking up throughout the night or turning night into day (staying up late and sleeping during the day). Sleep deprivation can lead to issues with concentration, problem solving, mood and many other areas.

Benefits of good-quality sleep:

- Improves mood
- Improves attention and concentration
- Helps process information and memories
- Helps to maintain a healthy weight
- Helps to maintain a healthy heart
- Keeps your immune system strong



Tips for a good night's sleep

- Make sure your sleeping environment is comfortable, e.g. not too hot, cold, noisy or bright.
- No bright lights straight before bed, e.g. phone, tablets, TV.
- Wind down before bedtime, e.g. warm bath, relaxing, reading a book.
- Before going to bed avoid eating, drinking alcohol or smoking as these can stimulate the body and cause you to remain awake, or wake you up during the night.
- Avoid caffeine after 3pm.

Smoking

Sarah feels that smoking helps to reduce her stress. Strong feelings are often a trigger for smoking. Initially, when you smoke, the nicotine levels in your body increase and nicotine withdrawal symptoms such as irritability, anxiety, and restlessness reduce. However, nicotine levels start to fall again soon after, leading to increased anxiety, irritability and restlessness. The craving for another cigarette also increases, and so the cycle continues. Research suggests that quitting smoking can actually reduce your stress levels.

"I'm not a big drinker and I had cut down my smoking to four or five a day ... but recently I've seen myself back at 20 a day sometimes. The trouble is, I feel it helps me manage my stress"

Are you aware of how you feel when you want to smoke?



Does smoking help when you are anxious? Angry? Sad?

If you can pinpoint the emotions that trigger your urge to smoke, and do something else when that emotion strikes, it can help you resist the urge to smoke.

Substance use

Most of us will already know that drugs and alcohol can have a direct effect on our mood. However, a lot of people aren't aware that alcohol is a depressant. Initially alcohol often has a disinhibiting effect for most of us and we might experience a cheerier mood, particularly if we are drinking socially and interacting with others. However, this doesn't last. If you are feeling depressed and drink alcohol to excess, this will further depress the mind, body and nervous system, as well as disrupt sleep.

Drugs like cannabis also have effects on your mood. It's not uncommon for many people to report that it helps them relax. However, research has shown that whilst this might be a short-term benefit, long-term use of cannabis can lead to reduced attention, concentration, motivation, energy and memory. It can also worsen anxiety symptoms for some people and increase levels of paranoia.

As mentioned above, if you are wanting support to improve your physical health or you are keen to give up smoking or reduce your substance misuse, speak with your GP in the first instance. NHS Lanarkshire offer further advice about stopping smoking online at

www.nhslanarkshire.scot.nhs.uk/services/quit-your-way

Summary

We have learned that our physical and mental health affect each other. In helping to manage our distress it is therefore important to look after our bodies. Slow, regular breathing and progressive muscle relaxation can help combat the effects of the fight/ flight system when this is triggered unhelpfully for us. Looking after our diet, building in some exercise to our schedule, reducing substance misuse and looking at ways to improve sleep can benefit both our physical and mental wellbeing.



Calm Distress Worksheets

We invite you to try the following worksheets which may assist in improving your mood and wellbeing.



Worksheet 1

Breathing exercise

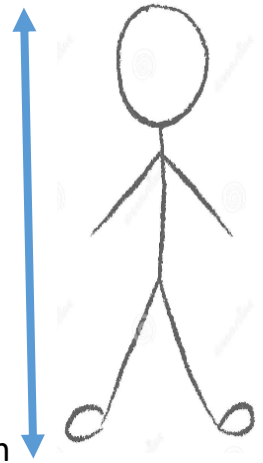
1. Sit or lie down in a comfortable position
2. Take a breath in through your nose for a count of four seconds
3. Hold the breath for two seconds
4. Release your breath slowly through your mouth for a count of six seconds
5. Pause slightly before repeating
6. Practice for a few minutes regularly throughout the day



Progressive Muscular Relaxation exercise

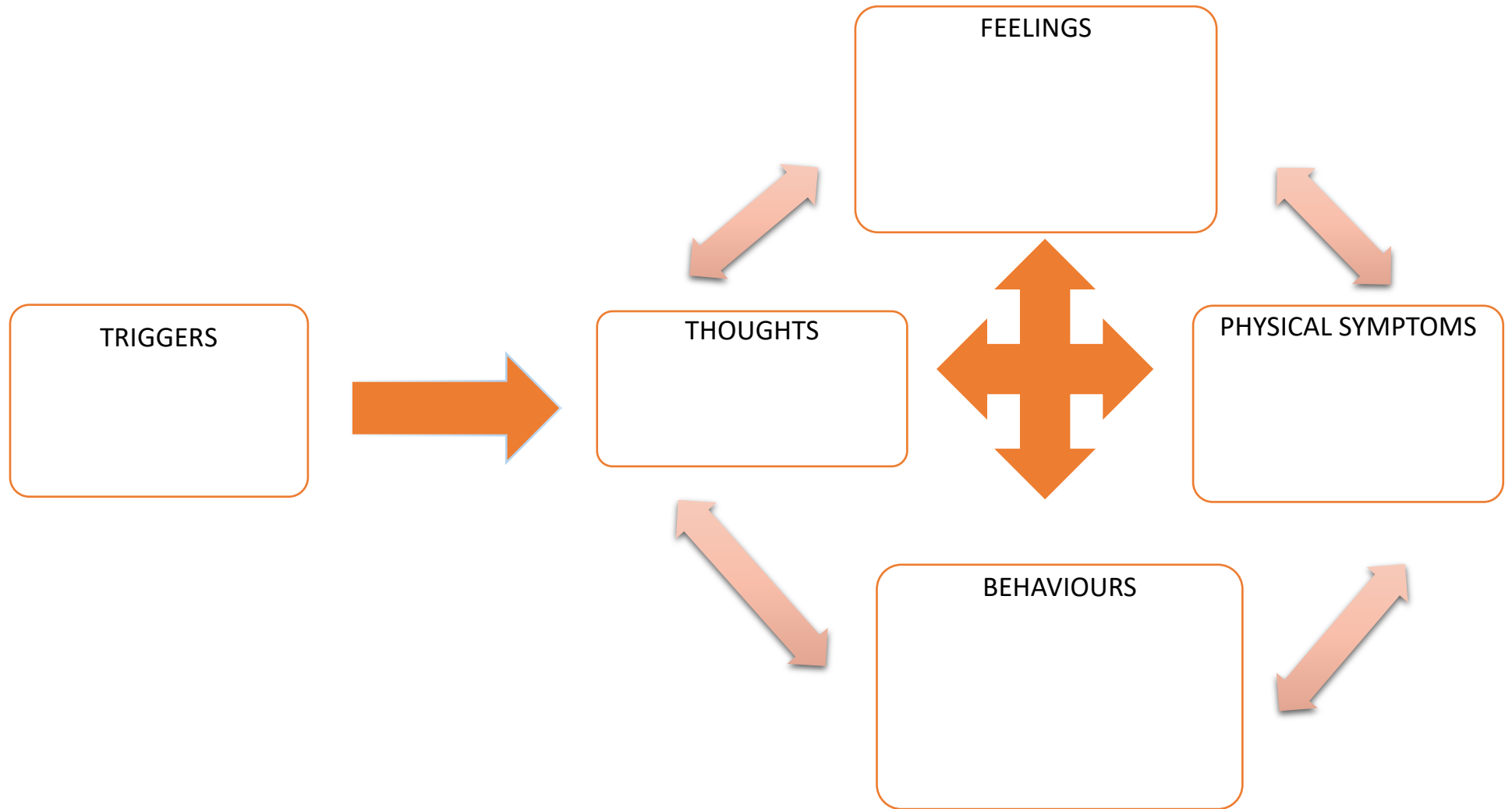
At a steady pace:

- Raise your eyebrows as far as they can go then release
- Clench your eyes tightly shut then slowly relax and open them
- Open your mouth wide enough to feel the stretch in your jaw then gently close
- Raise your shoulders up as far as you can towards your ears then lower them slowly
- Tense your chest by taking a deep breath in then slowly breathe out
- Tighten your biceps by pulling your forearms up towards your shoulders and clench both fists then release
- Tighten your thigh muscles then relax
- Curl your toes downwards then slowly straighten them



Worksheet 2

My CBT cycle



Notes



Please use this page to note down any thoughts or information that you would like to remember