



The solution-focused approach to firewalking and other extreme mental challenges

By AfSFH Fellow and Head of IT, Trevor Eddolls

We've all done it – faced some kind of challenge that seems to get bigger the closer we get to it. A challenge that has us thinking whether there might hopefully be a family commitment that stops us going, or perhaps we keep checking our health, just in case some twinge turns into an illness that prevents us taking part. Or perhaps it's just me! But that's how I know a number of people were feeling as the day of the firewalk came closer.

Firewalking is the ancient art of walking barefoot over hot embers. When I say hot, I'm talking about 600°C. The fact that people have been doing it since earliest times as a test of strength, courage, and faith, doesn't make the idea that you have to do it yourself any easier.

So, you're probably wondering why I volunteered to walk over very hot embers? The answer is that I did it for charity. Alabaré (www.alabare.co.uk) is a Salisbury-based charity supporting homeless adults, young people, veterans, and those with learning disabilities. They asked everyone who took part to pay £15 and raise £100 or more in charitable donations. The event was held at Hardenhuish School, Chippenham, on Saturday 17th September 2022.

Asking people to donate money for this worthwhile cause was easy. Telling people that I was planning to walk on red-hot embers was easy. I was looking forward to the feeling of euphoria when it was all over. It was the bit in the middle that filled me with trepidation. The bit where you walk over those frighteningly hot embers with bare feet. But how can people face a daunting challenge like that – it may not be firewalking, it may be a tandem skydive, a bungee jump, a best man's speech at a wedding, asking their boss for a pay rise, or anything else that seems intimidating to them?

Facing fear

Firstly, understanding how the brain works is a great help. Understanding that the emotional brain will try to protect you – which usually means not performing the scary activity. Your amygdala will be sending messages to your hypothalamus, which will result in the hypothalamus sending messages through autonomic nerves to the adrenal medulla (the inner part of the adrenal gland) to produce adrenalin and noradrenalin. This is known as the sympathomedullary (SAM) pathway. In addition, the hypothalamus releases Corticotrophin Releasing Factor (CRF), which is transported by the blood to the pituitary gland, which, in turn, produces adrenocorticotrophic hormone (ACTH). This hormone is transported by the blood to the cortex (the outside part) of the adrenal glands. The adrenal cortex produces corticosteroids, including cortisol. This is known as the hypothalamic-pituitary-adrenal

The physics of firewalking

Thermal effusivity (also known as thermal inertia or thermal responsivity) is a measure of an object's ability to exchange thermal energy (ie heat) with its surroundings. It is defined as the square root of the product of the material's thermal conductivity and its volumetric heat capacity.

The thermal conductivity of a material is a measure of its ability to conduct heat. Materials with low thermal conductivity, like embers, have a much lower rate of heat transfer than materials – like metal – that have a high thermal conductivity and transfer heat very quickly.

The volumetric heat capacity of a material is the heat capacity of a sample of the substance divided by the volume of the sample. It can also be expressed as the specific heat capacity (heat capacity per unit of mass) times the density of the substance. So, if the hot embers don't conduct heat very well, the foot of the firewalker won't burn.

Other factors on the side of the firewalker rather than the hot coals are:

- The blood supply to their foot carries away some of the heat
- Firewalkers keep moving, so they do not spend much time on one lot of embers before their foot moves off.

(HPA) axis. In other words, as you start to realise the enormity of what you're planning to do, you'll be in fight or flight mode and feeling stressed.

So, how can Solution Focused Hypnotherapy help individuals facing such challenges? One way that SFHs help clients is bucket emptying. Everyone has a metaphorical stress bucket sitting in their head, and every stressful event that happens to a person gets put in that bucket. Usually, during REM (rapid eye movement) sleep, these stressful events are emptied out of the bucket. However, if they're not sleeping properly, some stressful events remain in the bucket – and new stressful events get added the next day. Soon, that bucket might overflow – resulting in a panic attack or similar.

Every time the client worries about the firewalk/skydive/presentation etc, they add something more to their bucket. They increase the level of cortisol in their body. Solution Focused Hypnotherapy can help to empty their bucket – to relax and reduce their cortisol level.

A solution-focused approach can also help confidence levels – after all, a firewalk is only about eight or so steps – how bad can that be? We can help clients focus on being positive and confident about things. Useful scripts like *Confidence – the key to success* and *Confidence building* can be used to help anyone to feel more positive about things – even if those things include firewalking/bungee jumping/asking for a pay rise.

We can help clients to rehearse events in a way that suits the individual, encouraging them to picture the scene exactly the way they want it to be. The more you imagine an event, the more likely neurons in the brain are to form connections together. This forms a pathway in your brain – a 'thought route' that you are more likely to take when in the situation in real life. I imagined taking eight or so steps across hot embers and stepping off the other end onto the cool ground. Simple.

Other useful techniques

Another technique that many Hypnotherapists use is Anchoring. This NLP technique works just like Pavlov's dog

experiments. With Pavlov, he rang a bell (well, actually he used a metronome), and then fed the dogs. The dogs started to associate that sound with the arrival of food. They would then start to salivate. Classical conditioning is all about stimuli and responses. With Anchoring, your client associates a stimulus (this is called the anchor), such as pressing their thumb and fingertip together or rubbing their earlobe, with a particular response, such as feeling confident and in control. Later, as you stand in front of the hot embers (substitute your scary challenge here), you can fire your anchor (technical talk for rubbing your earlobe or whatever stimulus you decided on) and you start to salivate (if you were a dog) or whatever response, eg confidence, you associated with the action. That makes stepping onto the embers less daunting.

Lastly, something as simple as breathing (if done in the right way) can have a huge effect on how calm a person feels. Useful breathing techniques include:

- Breathing out for longer than breathing in (7-11 breathing)
- Box (or square) breathing, where a person breathes in for the count of four, holds their breath for the count of four, breathes out for the count of four, and holds their breath again for the count of four before starting to breathe in again and repeating the cycle
- Completely exhaling through the mouth, making a whooshing sound. Closing the mouth and inhaling quietly through the nose for a count of four. Holding the breath for a count of seven. Finally, exhaling completely through the mouth, making a whooshing sound (4-7-8 breathing).

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How I got over the embers

I found 7-11 breathing to be very effective while I waited for my turn to firewalk.

We did have a one-hour training session before the firewalk, where we were told that it was not magical and that we were not entering a state of altered awareness. We were assured that firewalking was only made possible by the laws of physics. Even so, standing outside in the dark, feeling the radiated heat coming off the fire made us all realise just how hot the embers were. The flames looked even more frightening against the night sky. We lined up as the burning logs were spread out. Each person had their own thoughts about how really stupid they were to be putting themselves through this ordeal. And, judging by the snippets of conversation I heard, many people were thinking that now was a good time to slip away into the darkness and give the firewalk a miss after all. We waited for our turn to come.

There are also two psychological issues at this stage that every potential firewalker must overcome. Firstly, as mentioned earlier, your emotional brain is reluctant to put your body in a dangerous situation, ie putting your feet on hot coals. The solution is logically to understand why (according to the laws of physics) it's not as dangerous as it looks, and just to do it! Secondly, the prefrontal cortex of your brain will want to take control of your walking to make sure that you are not burning your feet. It will want to monitor information coming from the temperature-sensing nerve cells in your feet. These thermoreceptors can be found all over your skin. For most adults, walking is second nature and not something that needs thinking about. Once the prefrontal cortex is involved, it will be sensing what's going on to the sole of your foot, and it will slow down your walking pace – which could lead to your feet burning. The solution is to sing a catchy tune to yourself, which keeps the prefrontal cortex occupied, or repeat a mantra like 'cool wet grass' as you walk along.

Standing a couple of paces away from the fire, we shouted our names, and confirmed that we still wanted to walk on fire. Then we did. Fifty people took the eight or so steps necessary to get to the other side. Some people did it quicker than others, but everyone succeeded.

We received our certificates of achievement and we all felt like we'd attained something special. I can confirm that the embers were very hot, and the ground afterwards was very cool. My feet were fine, but I know that some people had small embers attach themselves to their feet, leaving small burn marks, but nothing too serious. People did feel a great sense of achievement that they had accomplished the firewalk. I certainly did.

Did the therapy techniques help? Yes, definitely. I used them on myself and two of the other firewalkers – the ones who boldly stepped on to the embers. Will the same techniques work for anyone facing a challenge in their life? Absolutely.



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About the writer:

Trevor was made a Fellow of the AfSFH in 2022. He is Head of IT and Social Media for the AfSFH and regularly contributes to the Journal and the website. He runs his Hypnotherapy practice in Chippenham, runs CPD sessions, and offers one-to-one Supervision sessions over Zoom.