



Environmental Awareness – Connecting with Your Senses

Humans stay safe by your brain interpreting impulses from various sensors located in every part of your body. Every sense in your body has a threshold that indicates danger – hot, cold, bitter, loud, bright, sharp, pressure, burning, nausea, etc. Without that immediate feedback from your senses, you could not protect yourself from whatever the danger is.

Humans have a unique characteristic in that unpleasant thoughts and emotions create the same defensive reaction, but since we can't escape them, we are often subjected to prolonged elevations of stress hormones and inflammation. Suppressing them, which is somewhat the norm, makes the situation even worse. What can you do? Instead of doing battle with these thoughts, you can switch sensory input. There are many choices. You can listen to enjoyable music, engage in a meditative practice, mindfully pay attention to the details of your day, slow deep breathing while paying attention to your breath, engaging with your passion whether it is at work or play, and deepen your relationships with your friends, family, and colleagues. In other words, by fully engaging with what is directly in front of you, your mind has gone that direction.

But it does go both ways. If you choose to remain angry, complain, be critical, and constantly discuss your problems, your body will react in kind and you will remain on high alert. Being aware of your environment, whether it is pleasant or unpleasant is the first step and then you have a choice to remain in an agitated state or to use tools to calm down. The exact tool doesn't matter as long it is effective for you.

Environmental Awareness

Being aware of your senses – known as environmental awareness — is a strategy that allows you to switch sensory input from racing thoughts to another sensation. It doesn't matter which sense you choose. I practice one that I call “active meditation” or “meditation on the run.”



During my years of performing complex spine surgery, there were occasional complications that were considered well within the scope of care. The consequences were sometimes severe and I was committed to bringing them down to zero. But no matter how hard I tried I wasn't able to eliminate them. My own thoughts were interfering with my performance.

Things changed when I decided to enlist the help of a performance coach to help me improve my consistency. I brought him into the operating room and clinic so he could better understand my world. For 18 months, he and I underwent regular debriefings and coaching. I began to use a form of abbreviated active meditation in the operating room. The most common interferences I felt during surgery were frustration, anxiety, distraction, complacency, and moving too quickly.

Active meditation in action

This meditation model is not based on suppressing interference – for instance, if you're frustrated, you don't pretend otherwise – rather, you face these frustrations and then detach from them. Using tools and approaches that have been employed for centuries in the practices of meditation and mindfulness, I learned to identify any interference either before or during surgery, and then let go of it.

This version of active meditation is fast. Normally, it takes 10-20 seconds with the phases of a) relaxation b) stabilization c) choosing a sensation. In this scenario it takes from 3-5 seconds and it is repeated frequently during the case. It is often connected with one deep breath in and one out.

Setting up the day

Each surgical morning, I woke up and assessed how I was feeling. Like everyone, my feelings ranged from calm and relaxed to tired and anxious. Then, I immediately started sensing every smell, touch and taste possible. I felt the water on my back in the shower. I smelled the coffee. I also reminded myself that although that day's surgery is "just another case" for me, it's one of the most important days of my patient's life.

I continued this process in the operating room. I carefully arranged the room, talked to each member of the surgical team, and reviewed the imaging studies. I was focused and immersed in what was right in front of me.

During surgery, awareness allowed me to perform my next move at an optimum level. I felt my grip pressure on each surgical tool; noticed the shape of the contours of the anatomy; felt my shoulder and arm muscles stay relaxed; and watched the flow of the case.

If I noticed disruptive thoughts and emotions enter my consciousness, I quickly practiced my environmental awareness techniques in order to re-focus. With practice, I learned to be fully connected to each move, so I could "program" myself into the "zone." Eventually, it all became automatic.

Surgery evolved into wonderful experience for me. I eagerly looked forward to Monday instead of Friday. I committed to getting a good night's sleep before every surgical day. If I woke up "wired" and uneasy, I slowed down until I felt relaxed, no matter how many things were on my to-do list.

Although I continue to practice active meditation daily using environmental awareness is more difficult outside the operating room with less structure. But it is still my go-to method to calm myself down.

The "to do" list

One tool I use to practice awareness is my "to do" list. I remind myself that this list is an expression of my life, and so I practice being aware as I go about each item. For instance, when I have an appointment with a patient, I listen to myself talk to him or her. I feel the pen on the paper as I jot down notes. I also practice meditative

techniques, such as watching the disruptive thoughts of “need to finish up here, I have other things to do” enter my consciousness and then leave.

I remember that my goal is to engage and enjoy every second of my “to do” list. It doesn’t always work, but it’s surprising how often it does.

Environmental awareness engages me in the present moment regardless of the circumstances. It is not positive thinking, but just switching the sensory input. With repetition, it became and remains somewhat automatic. In the presence of ongoing pain, it is not the final solution, but will help in calming you down so other tools can contribute. It is a simple strategy without a downside to it.