

Longevity and the Cultivation of Mental Health and Resilience

What are the behaviors, attitudes, and lifestyle habits that contribute to resilience in the highest concentrations of centenarians in the world? The Blue Zone populations show much less incidence of degenerative diseases and what are now called “lifestyle” diseases such as heart disease, cancer, and diabetes to name a few. How can we learn from them and reduce the impact of these diseases in our own cities and towns.

Experiential Wisdom Meets Science

We can draw upon the obvious behavior patterns documented from studying these cultures and from the social science research being done in our own country.

Let’s start with a wisdom of one of the main pillars of health... relaxation!

As a Doctor of Oriental medicine, in practice for more than 40 years, I have appreciated the wisdom of Traditional Chinese Medicine and its focus on the importance on gaining balance in life, and how this helps to create health. In TCM energetic terms, we talk about the need to balance “Yin” and “Yang” (two opposing energetic expressions), in the body and, subsequently the mind. I appreciate how this explanation can be transposed onto our present scientific understanding of autonomic nervous system (ANS) and its function. The ANS is continuously interpreting the environment in which we find ourselves, looking for cues of safety or danger, and translates these cues to guide our behavior by preparing us to respond, all in the effort to maintain balance.

There are two separate systems at work within our ANS known as our Sympathetic nervous system (SNS) and our Parasympathetic nervous system (PNS). The Sympathetic (SNS) is responsible for our “fight or flight” or action response, and the Parasympathetic (PNS) governs our “rest and digest” or relaxation response. It is typical in our culture to be over-revved, and thus, we over-use the fight-or-flight resources in our body. In a way, we are in a constant “stress response” and, whether mild or severe, it produces the same response in the body, and thus, our natural breaker switch doesn’t get the chance to turn off. If our rest-and-digest switch doesn’t get the chance to turn on and create its relaxation or recovery response, we encounter the over-production of adrenaline, nor-adrenaline and cortisol, creating a state of imbalance. When our ability to “switch off” is compromised, this affects all the systems of the body. Often this is experienced as anxiety, inability to sleep, overeating, and exhaustion. If repeated daily, over decades, this depletes us, and leads to chronic inflammation, heart disease, cancers, and other degenerative diseases.

Our bodies, our family unit, our workplaces, and our country as a whole, all have the same dynamic, behaviors associated with balance or lack of balance.

From an evolutionary view point, a million years ago on the savannahs of Africa, ancient humans might activate their fight-or-flight , (yang) resources, to hunt prey, fight tigers then return to the village, having a good meal and a laugh with family and friends, retire to a safe cave for a good night’s sleep (yin) and awake with the fight-or-flight down-regulated and relaxed and rebalanced ready to go fight tigers again.

Now let’s fast forward to today in our culture: we face daily stresses including corporate deadlines, long work hours, long commutes, family obligations to kids and parents, too much stimulation from news and television, fast foods, and the list goes on. We are not good at “switching-off”, or finding the yin nourishment and balance or the safe cave we need, and our bodies and minds are not calmed and renewed as they need to be.

We can see the price we pay for this imbalance in the expressions of hyper-alertness, ADD, anxiety, lack of focus, depression, and chronic inflammation. Some cultures still maintain the wisdom of having a built-in day of rest, a day for down regulation, and spiritual renewal.

Most things in the West are open 7 days a week, 24 hours a day. Growing up in England, all the shops were closed on Sundays, nobody worked on their day of rest, whether religious or not. There has been an erosion of the rhythms of family relaxation time. People are not eating meals together, and there has been a lack of bonding with friends. There has been a trend towards lack of friend time, which went from three decades ago where only 3 percent of Americans said they had no close friends, to up to 12 percent in 2021.

In the same time frame corporate cultures became much more cut-throat with the erosion of job security, retirement security, etc.

A further dimension to SNS and PSNS is the Poly Vagal theory, developed by Dr. Stephen Porges. The vagus nerve is the major constituent of the parasympathetic nervous system and 80 percent of its nerve fibers are sensory, which means the feedback is critical for the body's homeostasis.

Our "fight and flight" when activated can manifest as anger, rage, irritation, and frustration. If we are having a flight response, we can have anxiety, worry, fear, and panic. Physiologically, our blood pressure, heart rate, and adrenaline increase, and we show a decrease in healthy digestion, pain threshold, and immune responses.

Secondly, we have a "freeze" state, our *dorsal vagal state*, which is our most primitive pattern, (also referred to as our emergency state). This means that we are completely shut down, we can feel hopeless and feel like there's no way out. We tend to feel depressed, conserve energy, dissociate, feel overwhelmed, and feel like we can't move forward. Physiologically, our fuel storage and insulin activity increases and our pain thresholds increase.

Lastly, our ability to "rest and digest" is a response of the parasympathetic system, also known as a ventral vagal state. It is our state of safety, social engagement, and homeostasis. If we are in our *ventral vagal state*, we are grounded, mindful, joyful, curious, empathetic, and compassionate. This is the state of social engagement, where we are connected to ourselves and the world. Physiologically, digestion, resistance to infection, circulation, immune responses, and our ability to connect are improved.

To me the interesting aspect of this is that under great *shared* stress, many people have an ability to move on without being deeply or irreparably damaged by the stressful circumstances. These are great human examples of amazing true resilience.

There are soldiers fighting in the trenches of war that experience the activation of the PNS down regulation immediately after life-threatening stress, allowing great balance without freezing into incapacitating shellshock or freezing terrifying sensations deep into the unconscious.

This demonstrates the ability of PNS (yin) resilience, when paired with the safety of social connection, and close friendships. Strong ties of close friends and shared experiences can help protect and down regulate our SNS. Even the weak ties of other unknown soldiers in a shared cause also lubricated this off switch.

There are many resilient "heroes" in many fields: emergency room doctors and nurses, healthcare workers, athletes, business leaders, firefighters, mothers, fathers, teachers, politicians, etc.