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# Qualifying Energy

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Despite the huge energy demands of modern business few executives ever consider their own energy levels and how to manage them appropriately. It's difficult to feel younger when you're exhausted all the time. In fact, it's pretty much impossible.

Most senior executives and business leaders that have made it to the C-suite have done so as a result of developing a specific expertise in a specific field or industry. They have put in hours of work and this effort has produced results, giving them qualifications, sellable knowledge and exploitable capabilities. It is therefore natural that they would assume that if they want to go further and perform to an even higher standard, they must continue to apply the same recipe that got them to the C-suite in the first place. This idea is incorrect for several reasons. What gets a leader to the C-suite is not the same as what makes them a great leader. Being a good leader is less about technical capability, in the IT domain, and more about developing leadership capability in the I and WE domain. When you are promoted (and this principle applies not just to a promotion to the C-suite) it is necessary to start letting go of your expertise and broadening your abilities so you can handle the increased level of complexity at the new level you are operating it. This means you need more thinking time and you need to be less hands on. Such a notion is encapsulated in the old adage of 'working smarter not harder'.

So many leaders are susceptible to a double whammy as far as energy reduction is concerned.

Not only are they losing 3 per cent every year from their mid-twenties onwards but, under the relentless pressure to constantly improve performance and deliver shareholder value, means they often work harder the more senior they become.

With age they have less fuel in the tank each year, particularly if they are not managing their energy levels well, and the much greater energy demands that comes with increased complexity and responsibility as they are promoted. No wonder then that we witness accelerated aging in leaders and high levels of exhaustion <sup>[1]</sup>.

In the early stages of exhaustion there is often an excessive increase in adrenaline levels and an increased activation of the sympathetic nervous system (SNS). This can go hand in hand with agitation and hyper vigilance, a picture often seen in individuals with chronic fatigue (Boneva et al, 2007). This type of excessive arousal can ultimately lead to sympathetic exhaustion. Senior executives and leaders who are under excessive pressure are constantly pumping adrenaline into their system and will often exhaust their adrenal glands' ability to produce sufficient adrenaline to cope with the demand.



The amount of adrenaline produced by the sympathetic nervous system and the adrenal gland can also be quantified using HRV analysis. Thus, HRV can be used as a marker of excessive SNS activation and ultimately the degree of physiological exhaustion <sup>[2]</sup> and inability to think clearly <sup>[3]</sup>.

Furthermore, HRV analysis can be used to determine whether a low level of energy in the SNS is matched by a similarly low level of energy or vitality in the counterbalancing parasympathetic nervous system (PNS). Exhaustion of the PNS as well as the SNS/adrenals is more concerning than just SNS exhaustion because it depletes our ability to make effort (SNS) and our ability to recover (PNS). The good news is that both can be improved, and we can restore our energy levels to a level we had ten years ago.

## Crocodiles and Wildebeests

One of the most poignant examples of the importance of HRV for energy levels and dynamism is seen when we compare mammals and reptiles and their ability to respond to a threat or rise to a challenge. Reptiles, because they are cold-blooded, do not have much HRV. They can alter their heart rate, but they can't do it quickly. In comparison, all warm-blooded mammals, including humans, have a lot of heart rate variability and burn 5–10 times more energy than reptiles (Coates, 2013). In fact, it is the high variability that makes mammals responsive and dynamic.

Imagine a situation where the world of mammals and reptiles collide – a watering hole in Africa. At the waterside is a warm-blooded wildebeest quenching its thirst. It's cautious because there are cold-blooded crocodiles in the water waiting for dinner.

The wildebeest does however have a significant advantage – high heart rate variability, which means that should a crocodile attack it can increase its heart rate very quickly, generate power and rapidly get out the way. A crocodile can also vary its heart rate but it can't do it quickly. So the crocodile only has one shot at its prey because it uses all its energy reserves making the initial attack and doesn't have the ability to change its heart rate quickly enough to chase the wildebeest.

Mammals have access to more energy because they have a much greater capacity to change their heart rate (HRV). Specifically, mammals can change their adrenaline levels (the accelerator hormone) and their acetylcholine levels (the brake hormone) more quickly than reptiles. This enables the wildebeest to rapidly mobilize the energy needed to escape a crocodile attack by releasing the brakes and applying the accelerator. Mammals can move from low energy to high energy repeatedly, but reptiles can't because they don't have the HRV.

Think of it like a drag race. At the start of a race the driver has his feet on the accelerator and the brake. When the starting light turns green, he removes the brake and the car bursts forward and then he applies the accelerator. In the same way that taking your foot off the brake in your car will make the car surge forward, the body can remove acetylcholine to achieve the same result.

Luckily for the wildebeest and all other mammals, including us, the heart muscles metabolize acetylcholine much faster than adrenaline, and this can provide life-saving energy until adrenaline can kick in and provide a more sustained surge in energy.



These hormonal brakes and accelerators are crucial to energy re-serves and efficiency. How much energy we create is one thing; how appropriately we utilize that energy is something else.

HRV determines our ability to respond to the challenges life throws at us. This flexibility to adapt to our environment is part of what it means to be alive and dynamic. It is therefore possible to use the 'variability' of the heart's electrical signal to quantify the 'vitality' of the human system. HRV could be considered a way to measure 'aliveness'.

It is clearly imperative that business leaders learn how to effectively manage their energy so that they can deal with the increasing demands of modern business and maintain flexibility, yet most leaders never question why they are energetic one day and exhaust-ed the next. Very few leaders know where their energy comes from, where it goes and why they feel utterly drained at the end of the week. Often the pressure is relentless, and unless we can harness our most critical resource it's impossible to sustain the kind of high in-tensity effort for very long that most leaders think is required to de-liver results.

The good news is that we can learn to increase our HRV, which will in turn improve our energy levels and effectively 'turn back time'. With tailored coaching we've been able to demonstrate an average 30 per cent increase in all HRV parameters within six months for executives in multinational corporations (Watkins et al, 2013).

## HRV Alters Brain Function

In addition to predicting death and ill health, quantifying biological age, defining energy levels (both amount and dynamism), HRV also influences brain function <sup>[4]</sup>.

HRV can have a profound influence on your ability to think clearly, and therefore plays a critical role in business. For example, it has been shown that resting HRV is linked to emotional sensitivity and the ability to map others' facial expressions <sup>[5]</sup>. In addition, HRV has been shown to increase when cognitive demands increase <sup>[6]</sup>, correlate with the cognitive adaptability <sup>[7]</sup> and predict the ability to deliver <sup>[8]</sup> results.



## How to Be Younger

In order to sustain performance at the very highest levels it is necessary to balance intense effort with appropriate recuperation. It's simply not possible to keep going indefinitely.

Ironically most people accept the need for recovery time when it comes to sport, yet business executives are simply expected to keep going, day after day, year after year. Clearly business is different from sport but learning how to manage our energy levels for maximum efficiency and recuperation can revolutionize performance in both business and sport. The first step toward consistently brilliant performance is developing physiological coherence, and that means mastering the physical skills of Enlightened Leadership.

In order to turn back time, have more energy and feel 10 years younger, we must become aware of and control our own physiological signals, especially our HRV. First, this is achieved through developing greater awareness of our physiological state, which is called 'interoception' in scientific circles. You can do this using the bio-feedback module on our Complete App. The Complete App enables you to see your HRV live in any meeting. It can help you improve your awareness of your physiology through the heart-beat detection task and the E-bank skill (see below). The E-bank skill can give you a much greater appreciation of what is currently boosting or draining your energy levels. Once you have cultivated a greater level of physical awareness, you can develop greater control of your physiology using the BREATHE skill (see below).

You can then quantify the overall development of your physical intelligence (PQ) using the Complete App. Specifically you can track the improvement in your physiological awareness using Dr Wolf Mehling's Multidimensional Assessment of Interoceptive Awareness (MAIA)<sup>[9]</sup> and the improvement in your physiological control by tracking the step change in your HRV parameters.



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