3 The Science of Trust and Challenge

When building trust and increasing challenge, to lead or to coach, there is a pecking order - Trust comes before Challenge. There is no short-cut. Neuroscience helps us to evidence and ultimately understand that people do their best thinking in the presence of people they trust. Critical thinking (solving problems, creating ideas, following new instructions) takes place in the pre-frontal cortex. These complex processes make this part of the brain exceptionally energy hungry. It was the last part of the brain to evolve and so with limited skull room, there is little space for energy storage. All this means we have a finite capacity for thinking in any given day and need to re-charge our brains to perform well.

Taking these combined factors into account means that multi-tasking on more than one critical thinking task doesn't work because we are asking a small and energy hungry part of the brain to do two things at once, when it only has the physical capacity to do one. When we give the appearance of multi-tasking, we are in fact switching between tasks at high speed and the activity of switching between one task and another uses up more energy at every switch. Whenever psychologists do multi-tasking studies under controlled conditions, they can always evidence a drop in quality or speed. They have also identified that IQ drops when we switch between tasks. One study at UCL suggested a 5% drop in female IQ and 15% drop in male IQ when a phone was left on a table during work. This illustrates that even accidentally multitasking can lower performance.

Back to trust and challenge. When we are challenged by someone whose motives we do not entirely trust, we might stop to ask ourselves questions like, "What did they really mean by that?" Or "I know they have said they have my back, but do they really?" Those musings are processed in the pre-frontal cortex and represent a "task". Because we can't multi-task, the capacity someone has for their best thinking is reduced when they feel threatened.

There is also a physiological implication. Where we don't entirely trust someone, our brain is likely to process a challenge from them as a threat – even if that challenge was well-intentioned and not delivered aggressively. Our brains move us into high alert or threat state, often without us realising it, to 'protect' ourselves from any **'harm'** this challenger may intend us. Two of our automatic threat responses **'fight or flight'** are well known. We might also '**freeze'** (and do or say nothing) or '**appease'** (say yes when we mean no or go along with the crowd, so we don't stand out). Our ancestors developed these responses in relation to physical threats. David Rock explains how our ancestral threat response has evolved in response to modern threats with his SCARF model. When we perceive that a challenge, or feedback, or even a question threatens our Status, Certainty, Autonomy, Relatedness or Fairness, we are likely to experience a fight/flight/freeze/appease response.

Threat responses release chemicals that create bodily activity and this is regardless of our seniority, experience or whether we are old enough to know better. The fight/flight/freeze and appease responses require a temporary blood and oxygen increase. Given we don't carry round a blood transfusion machine or oxygen tank, an alternative part of our body must be temporarily depleted of blood and oxygen reserves, to power a fast-beating heart or clenched fists.

Ironically, it is the pre-frontal cortex that is most depleted given it was the last part of the brain to evolve and our capacity to think can be up to 80% reduced when we feel threatened. Just when we need our wits about us to respond well to a piece of feedback or a tough question, we simply don't have the blood and oxygen to power the bit of our brain that provides our most balanced response. It is no wonder we think of our best comebacks later and berate ourselves after a difficult conversation about "why did/didn't I say that". It's also why sometimes when we are under pressure, either we freeze and say nothing, get emotional or angry saying the first thing that comes into our heads to defend ourselves – quite often an ill-thought-out excuse which helps no one.

We can learn to control our reactions (taking a breath or a break for example). We can develop tactics to speed up how quickly it takes our brains and those of the people around us to get back from wanting to fight/flight/freeze or appease when we first understand that this process is normal and not necessarily evidence that we or someone else isn't up to the challenge.

Click here to watch David Rock talk about the SCARF model.