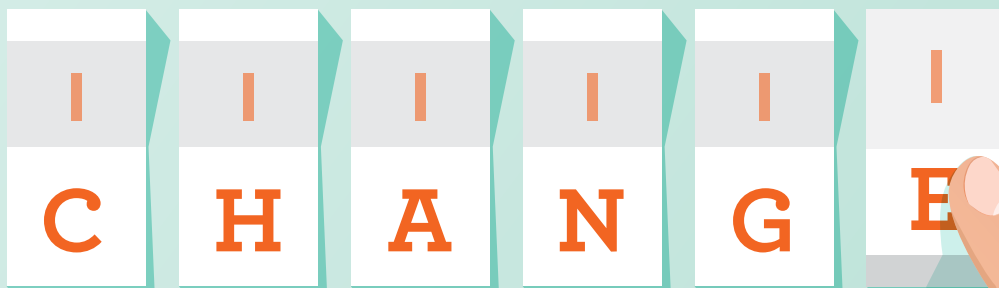


Switching on to



Fabio Sinibaldi has identified a series of mind switches that he believes can create the ideal conditions for change, so making therapy more effective

Clients often go into therapy because they want to change. But change isn't easy, which is perhaps why some clients don't succeed in moving from dysfunctional to functional states.

I decided to find out what happens in our bodies when a change takes place – and why we often encounter resistance to change. With my colleague, Sara Achilli, I identified a series of 'switches' that we can flick to create the ideal conditions for change, and so make therapy more effective.

The switches are divided into five categories (see Figure 1):

- core: neural plasticity, energy and epigenetics
- system regulation: the science of psychosomatics – inflammation and allostatic load
- adaptation: networks and hubs – emotions and behaviour management headquarters
- social: evolutionary relationships, social and primary interpersonal systems
- flows: autonomous interrelated and integrative flows of ideas, thoughts, movement, posture and language.

We often hear talk of 'boosting and supporting neural plasticity', 'developing new connections' or even 'developing

integration' (inter-hemispherical and other types). But it's important to note there are at least three different levels of neural plasticity: intracellular, intercellular and extracellular.

'Controlled breathing encourages the development of new neural networks'

At the intracellular level, we are looking for lots of mitochondria, because mitochondria represent the powerhouse of the cell. They play a key role in the development of new neural networks and in modifying or eliminating old connections. The bio-energy metabolism of the mitochondria also influences epigenetic marking processes, which enable lasting changes in the regulation of a number of physiological processes that impact the expression of emotions, mental processes and psychosomatic processes.¹ We can increase the number of mitochondria mainly through controlled breathing techniques and endurance training.

Controlled breathing techniques that activate muscular physiology, such as the Crossed Cycles Breathing technique, are especially effective. The basic concept of this technique is that there are two main alternating cycles: the first is inhalation and exhalation; the second is head movements. In addition to enhancing plasticity, controlled breathing encourages the development of new neural networks and guarantees that adequate levels of oxygen reach the brain and muscles.²

The intercellular level concerns the development of new neural networks – brain network structures that respond to sensory, motor and environmental stimuli. It is possible to improve neural plasticity at intercellular level with the correct nutritional advice. Quality fats, such as medium chain fatty acids, which are found in coconut butter and avocado, as well as omega 3, which is prevalent in fish and mussels, are the most efficient source of energy for the cells of the nervous system.³ Stimuli and multisensory activities that integrate therapy with experiential activities, such as controlled breathing and movement, can also boost neural plasticity.⁴

The third level of plasticity relates to the extracellular matrix (ECM).⁵ Direct physical contact, such as massage, as well as stretching and sport, stimulate the ECM.

Patients who are diagnosed with anxiety, stress, depression or post-traumatic stress disorder (PTSD) typically also present an inflamed immune system, similar to that of patients with common bacterial or viral infections.⁶ An important clinical discovery highlights that patients with depression who take both an anti-inflammatory drug and an antidepressant have better clinical outcomes than patients who take either one or the other.⁷ In other words, research seems to show that inflammation represents one of the possible causes of resistance to change.

Allostasis, the process through which we try to re-establish stability in response to a challenge, is a widely acknowledged concept.⁸ But if we are continuously exposed to chronic stress, we can experience allostatic load, which can cause structural damage to organs, an excess of neurotoxins and resistance to neurotransmitters. Allostatic load can also affect our ability to tolerate further stress.⁹ We therefore need to establish rest and recovery processes (see Figure 2) in order to maintain the networks that manage pain, as well as the interoceptive circuits, which are critical to self-regulation, emotional regulation, developing identity and social awareness.¹⁰

We can establish rest and recovery processes by:

- sleeping enough
- regulating circadian rhythms
- terminating hypothalamic-pituitary-adrenal (HPA) axis activation quickly after a stressful event
- releasing muscular tension in psychosomatic areas (neck, shoulders, iliopsoas, calves)
- controlled breathing
- doing playful and pleasant activities daily
- balancing the different types of thoughts (blaming, analysing, problem solving, arguing, positive/negative memories, learning, and so on).

There are numerous networks and hubs in the brain that carry out various emotional and behavioural management functions.¹¹ The salience network (see Figure 3), for example, activates the default mode network and the executive network.¹² In other words, it weighs up danger and resources.

Studies of the salience network show that its evaluations depend largely on the insula, a small region of the cerebral cortex, which assesses information such as body mass,

muscular power and freedom of movement. It works in synergy with the periaqueductal grey, an area of grey matter in the mid brain, which appraises the potential physical damage. Techniques and psychophysical exercises that integrate these data will make the process of therapy more targeted and effective in recovering the basic functions of self-regulation.

‘Inflammation represents one of the possible causes of resistance to change’

Social behaviour and interpersonal relationships are largely rooted in ancestral systems, as they derive from the instinct for survival. They have, however, evolved over time, affected by power dynamics and other complex systems.¹³

Let’s say we receive an aggressive email. Our immediate reaction is to reply in the same tone, defending ourselves or returning

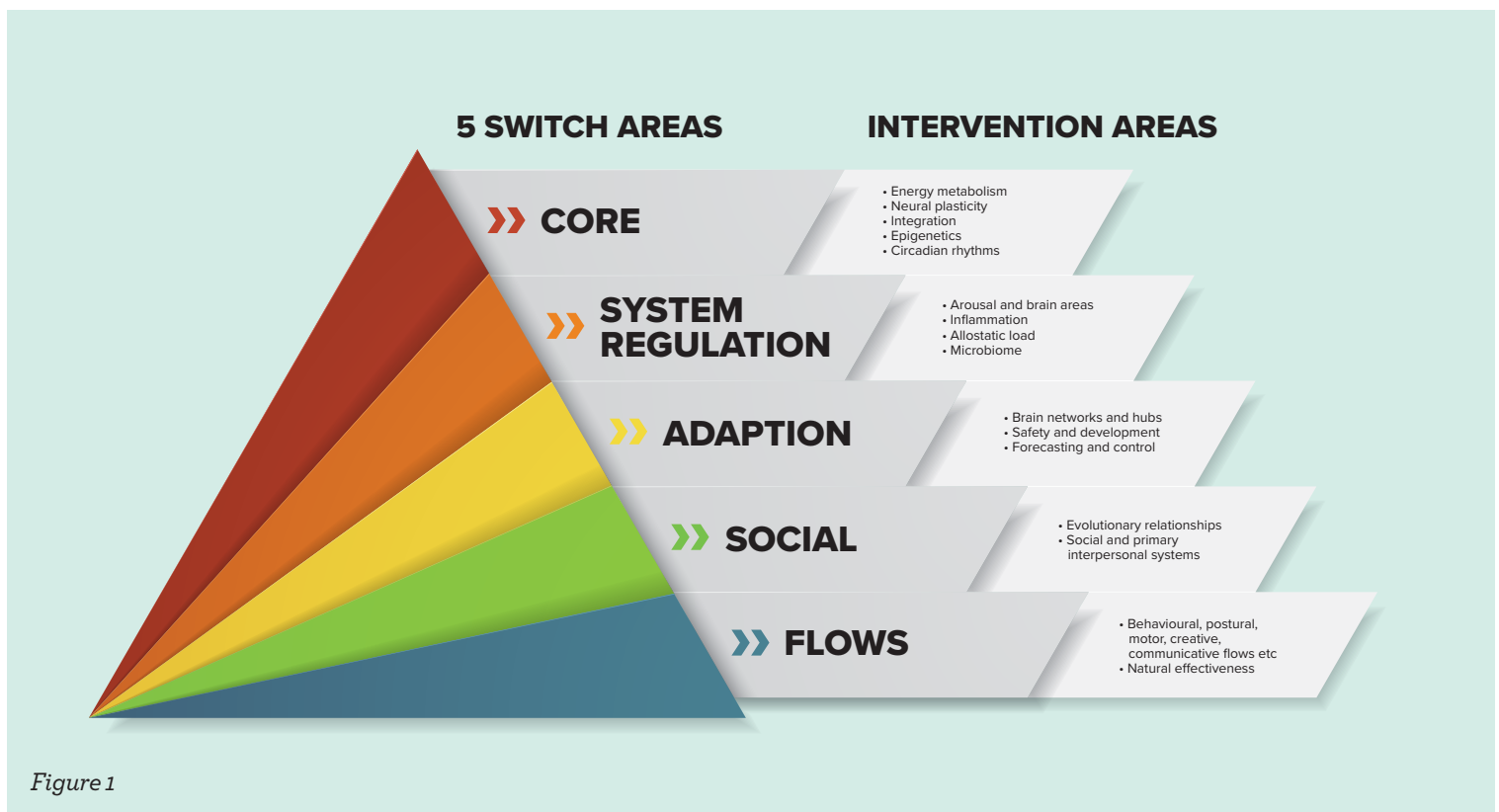


Figure 1

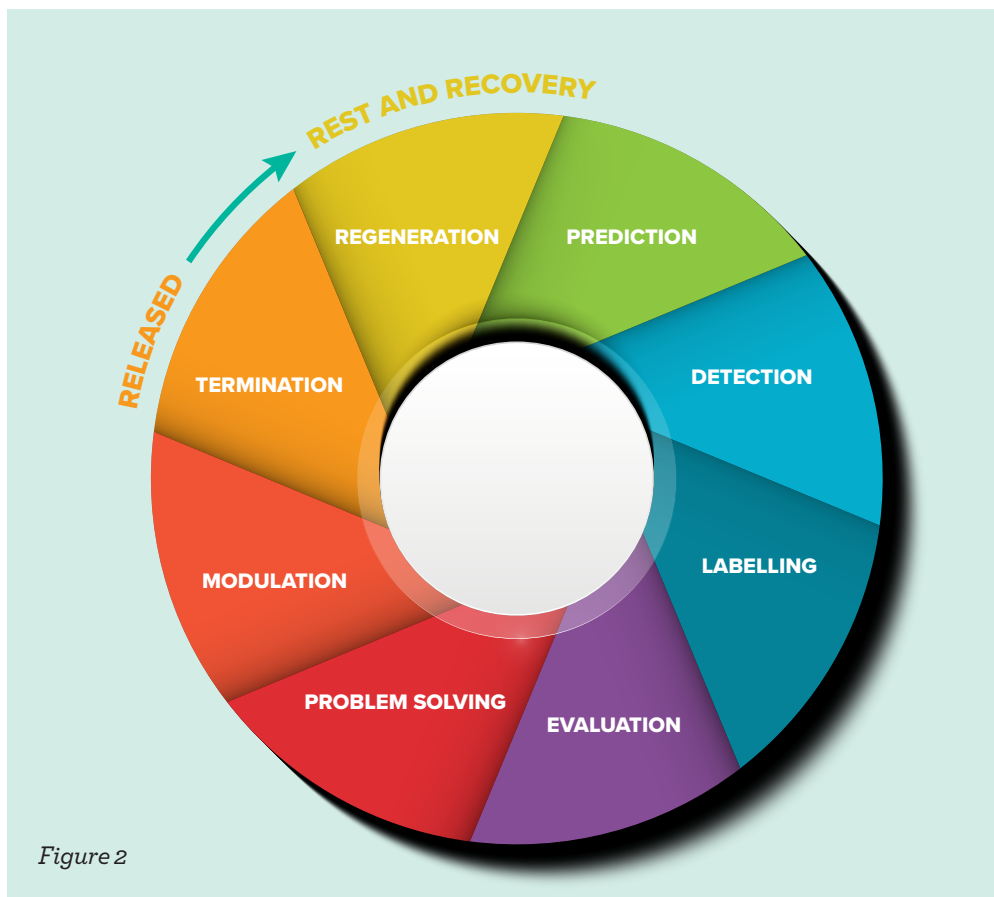


Figure 2

We can establish rest and recovery processes by:

- sleeping enough
- regulated circadian rhythms
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- releasing muscular tension in psychosomatic areas (neck, shoulders, iliopsoas, calves)
- controlled breathing
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the aggression. If we give in to this instinct, it's common to feel a momentary sense of relief and then to remain suspended as we await a signal of victory or a counter-move. If, instead, we don't respond, it is likely that we will ponder a reply to the email, trying to provide a release for the anger and aggression.

The dysfunctional aspect of this process is that our system for the management of invasions, conflicts and challenges has evolved over centuries to deal with a real, physically present adversary, instead of a virtual enemy, such as an email. We are wired to regulate social emotions in real time, adjusting our behaviours to interpersonal cues, such as facial and postural hints from our interlocutor, signalling fatigue, submission and pride, or contextual cues, including available resources and ways out.

In other words, we take part in a dual interaction, whose objective is not just to win or lose a single argument, but to transform our status in the social group, perhaps by becoming a leader, gaining trust or influencing others. These are deeply rooted processes that humans have in common with all mammals.¹⁴

Practical, structured tools, such as the Emotion Modulation technique, can help

to highlight a client's adaptation responses. With this technique, we invite people to define eight to 12 levels of intensity of adaptation response, to try to establish the effectiveness of each one in a variety of contexts and situations.

'We need to establish rest and recovery processes in order to maintain the networks that manage pain'

For example, we might ask a client to think about their response if a colleague criticised their work, or if someone pushed in front of them in a queue. We would then consider whether they could adapt the strategy to be more helpful.

The employment of high-concentration and intentionally slow micromovements, such as lifting the shoulder 1cm for 20 seconds, is another way of increasing awareness of our own unconscious adaptation systems within interpersonal dynamics.¹⁵ The targeted use of micromovements in combination with a therapist who suggests different types of

interactions, for example, arguing with or embracing someone, allows the patient not only to develop greater awareness, but also mastery over these processes. It can therefore strengthen the ability to focus and improve self-control in stressful interpersonal relationships.

The fifth-stage switches enable us to intervene in the behavioural, mental, postural, motor, interpersonal and communication flows that we put in place in order to adapt to our environment, develop new skills or recover energy and maintain a condition of balance.

For example, if we can increase our metacognitive ability, we can also boost our capacity to change. So, we might ask a client to video themselves during an everyday situation, such as arguing with a partner or during a meeting with colleagues. We can then analyse the videos together to observe the efficacy of their behaviour, the congruence with their original goal and the reactions of others. We can then identify more efficient variants and so suggest alternative strategies.

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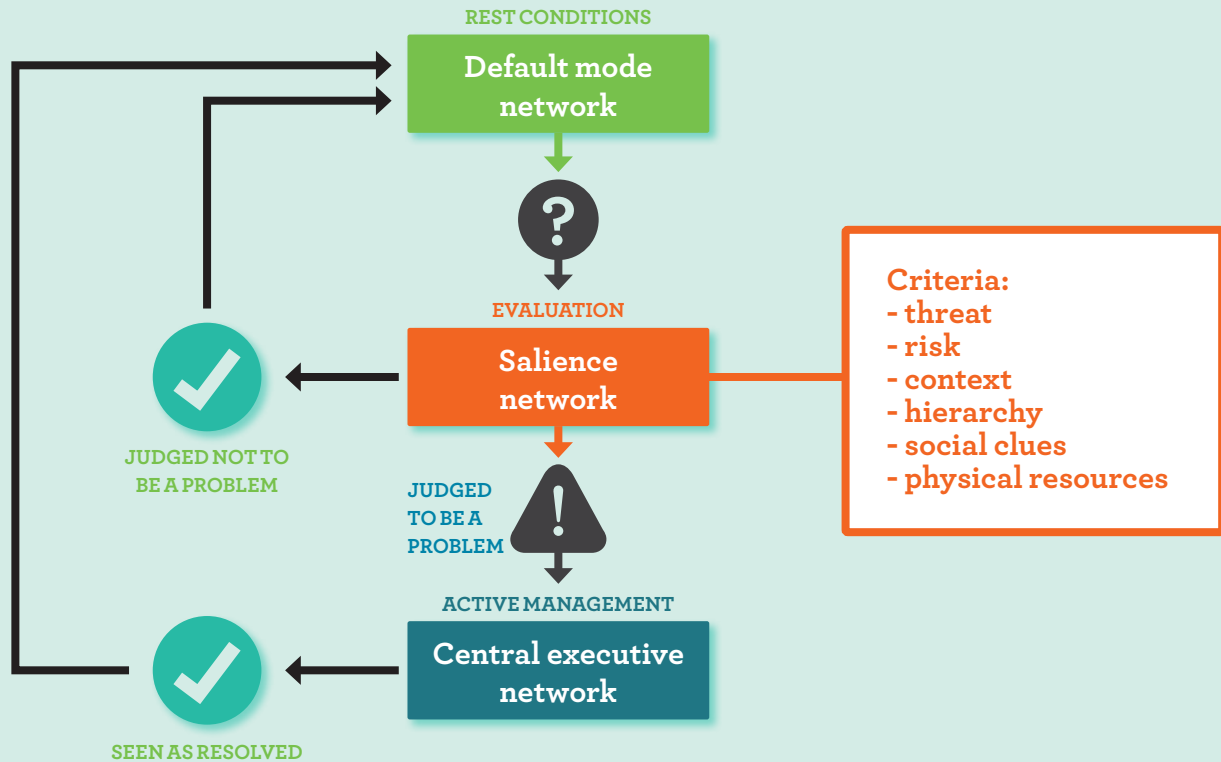


Figure 3

Isometric contractions

An isometric muscle contraction is a type of static exercise. The muscle is activated, but it doesn't lengthen or shorten and the limbs don't move. A good example is pushing hard against a wall.

Chronic stress or trauma can cause muscles to excessively contract, creating tension in the body and potentially inhibiting our fight or flight responses.

Isometric muscle contractions, alternated with muscle release, which elongates the muscles, such as the lowering of a dumbbell in a biceps curl, can improve muscle tone as well as responsiveness in depressed patients.¹⁶

The client can complete three or four repetitions, exhaling in contraction for about five to eight seconds and inhaling in the recovery phase for seven to 10 seconds.

The contractions can increase physical awareness, leading to greater control over our stress responses and the ability to distinguish between postural and emotional schemas.

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