

Building a psychological toolbox

Actively using neuroplastic methods to develop lasting inner strengths

Social-emotional learning (SEL) makes use of the brain's neuroplasticity to convert passing experiences into durable psychological resources embedded in altered neural structure or function. But most SEL is passive and inefficient, with limited gains for many people, in part due to the brain's ingrained negativity bias. Dr Rick Hanson is a leading clinician in the field of emotional intelligence. He and his colleagues focus on how individuals can actively engage their experiences with evidence-based methods that foster positive neuroplastic change to accelerate the development of durable inner strengths.

Life presents us with challenges and obstacles that can burden us if we don't have the psychological resources to meet them. The brain is inefficient at acquiring these psychological resources, limiting the benefits of both formal and informal efforts to develop them. We all would like to increase inner strengths such as grit, gratitude, compassion, interpersonal skills, and self-worth. This would allow us to better cope with the various situations we face throughout life while experiencing more wellbeing along the way.

Moment to moment, we have an ongoing stream of experiences – including thoughts, feelings, sensations, and desires – some of which are more useful than others. If we could access beneficial states of being at home, at work, and in life in general, then we could cope better while sustaining a resilient wellbeing. But how can we build up a psychological toolbox containing powerful inner strengths that are readily accessible when we need them?

Research from Dr Rick Hanson, clinical psychologist and Senior Fellow of UC Berkeley's Greater Good Science Center in the US, focuses on how people can be active agents in the durable acquisition of psychological strengths. Most psychotherapy, coaching, human resources

programmes, and mindfulness and compassion training operates in a Growth 1.0 model in which people are treated as passive vessels into which experiences and information are poured in the hopes that something will stick. Indeed it does – for perhaps half the people who go through these interventions. Hanson and his colleagues have developed a Growth 2.0 model in which people actively engage their experiences with neurologically informed methods that heighten the conversion of passing states of mind into lasting beneficial traits embedded in the brain, such as resilience, secure attachment, self-regulation, self-worth, and positive emotions.

THE HEAL FRAMEWORK

Hanson developed a programme, the Taking in the Good Course (recently renamed to the Positive Neuroplasticity Training), that has already yielded promising results. This course integrates methods in Hanson's HEAL framework for developing important psychological resources by enhancing neuroplastic transformation (Hanson, 2016).

Lasting increases in any psychological resource, such as emotional intelligence, must involve a two-stage process in which an 'activated' experience is 'installed' in the brain. The second stage is crucial; experiencing alone does not produce learning. In the HEAL framework, the first stage is summarised as 'Having' a beneficial experience by either noticing one that is already occurring or deliberately creating it (eg, reminding oneself to be patient). The second stage



involves 'Enriching' the experience in various ways (eg, extending its duration for a breath or longer) and 'Absorbing' it by increasing the sensitivity of the brain (eg, focusing on what is enjoyable or meaningful about the experience). The final 'Linking' step is optional, in which positive material is experienced alongside negative material to soothe and eventually replace it. The Enriching and Absorbing steps incorporate eight evidence-based methods that have been shown to heighten neuroplastic change, and the Linking step involves related methods that disrupt the reconsolidation of negative material in implicit memory.

CULTIVATING LONG-LASTING PSYCHOLOGICAL STRENGTHS

In Hanson's recent study, published in 2021, a trial with 46 people was undertaken to investigate the effectiveness of the techniques taught in the course. In six, three-hour classes over seven weeks, participants were trained in the methods in the HEAL framework, and then applied them to developing key inner strengths for better meeting our three fundamental needs, for (broadly speaking) safety, satisfaction, and connection.

Even with a small sample in this exploratory study, the results were quite dramatic, with individuals reporting

noticeable improvements in inner strengths such as self-compassion, positive mood, self-esteem, resilience, and general contentment with life, along with a reduction of anxiety and depressed mood.

What's impressive about the results of this research is that these changes persisted for several months after the course, indicating that this strategy appears to be effective in fostering long-term improvements in

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psychological resources, presumably based in lasting alterations of neural structure or function. In addition to the development of specific psychological resources – including those that are well-matched to particular issues, such as increasing the sense of calm strength as an antidote to anxiety – the Positive Neuroplasticity Training may have other benefits as well, such as implicitly training greater mindfulness and even perhaps sensitising the brain to beneficial experiences so that in the future it learns from them more quickly.

REWIRING THE BRAIN

Hanson's research is grounded in studies of neuroplasticity: the brain's ability to 'rewire' neural connections

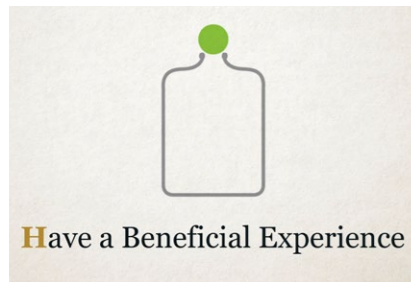
and their functions. This means that the brain can adapt and evolve as a result of its experiences, suggesting that we actually have significant power over our psychological healing and growth. Breath by breath, synapse by synapse, we can influence who we are becoming as we grow more of the good inside ourselves.

Neuroplasticity theory is often summarised in a famous expression from the work of the Canadian

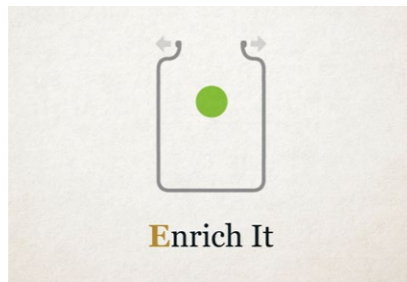
psychologist Donald Hebb (1950): 'neurons that fire together, wire together'. This refers to one major mechanism of neuroplasticity, in which neurons that

are repeatedly stimulated at the same time will develop a stronger connection with each other. The cells undergo certain biological changes so that the next time one of the cells fires, its information is passed on more readily, consolidating that brain pathway. Other neuroplastic mechanisms include alterations in neurochemical activity, in gene expression, and in the coordination of various regions in the brain.

Hanson's work on social-emotional learning takes advantage of the innate tools already present in the brain. He has figured out methods of drawing on this natural technology and using it in skilful ways to create beneficial traits.



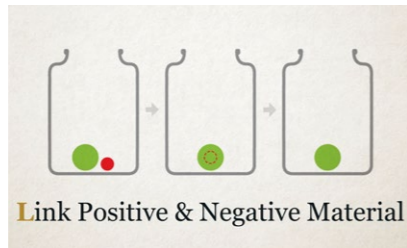
Have a Beneficial Experience



Enrich It



Absorb It



Link Positive & Negative Material

Cornerstones of Hanson's HEAL framework.

People can be active agents in their own social-emotional learning, rather than merely passive recipients of externally sourced experiences.

WHY DO WE NEED PSYCHOLOGICAL TOOLS OF STRENGTH AND RESILIENCE?

Psychological resources are necessary to help us deal with the difficulties presented to us throughout life. Examples of beneficial traits include resilience, self-compassion, gratitude, joy, contentment, love, pride, and satisfaction with life. For some people, the build-up of negative attitudes, thoughts, and emotions can lead to psychological distress and dysfunction. On the other hand, having beneficial traits leads to better coping mechanisms, especially if we can consistently call on them to handle particular situations.

Of course, the real challenge lies not in accessing our inner resources in the moment but growing them in the first place – based on lasting changes in the living brain. The fundamental question is what percentage of our enjoyable or useful experiences actually result in long-term beneficial changes in neuronal structure and function. Hanson's research holds great promise in showing us practical ways, mainly in the flow of everyday life and taking just a handful of seconds at a time, to increase the

conversion of these experiences into stable positive traits. The results include improved resilience, reduced stress, and greater happiness.

THE SHORTCOMINGS OF TRADITIONAL THERAPIES

Many people seek specialist help to acquire psychological resources for dealing with the stresses and challenges of life.

Unfortunately, much of what is experienced during treatment is short-lived, since clients or patients have rarely been taught how to actively engage those experiences in ways that foster lasting positive changes in their brains (ie, the Growth 1.0 model). It is relatively easy to promote beneficial experiences; the challenge is to help people learn from them. A shift in therapeutic approaches is needed to recognise that people can be active agents in their own social-emotional learning (ie, Growth 2.0). By employing evidence-based methods grounded in recent neuroscience, individuals can deliberately internalise beneficial thoughts, feelings, sensations, and intentions to improve the inner atmosphere of their own minds

as well as their functioning and effectiveness in the world.

This approach could improve the results of both formal interventions such as psychotherapy and informal efforts at 'self-help' and personal growth. Having greater personal success in treatment could increase commitment and cooperation with it, including in medical settings. Lately, the fields of mental health have had a growing appreciation for what could be called as 'loving' (eg, compassion) and 'knowing' (eg, mindfulness), and it is now time to add the third leg of the stool: 'growing' (ie, the deliberate and skilful internalisation of beneficial experiences).

Hanson's research has found that people can learn to internalise experiences more effectively, which could boost treatment responses and the building of psychological tools. When beneficial mental states pass through the brain like water through a sieve, therapies and other interventions for self-development, mental health, and emotional wellbeing are much less effective. Many people could benefit from the promising methods developed by Hanson and colleagues to help them convert beneficial mental states into valuable stable traits.

THE TAKE-HOME MESSAGE

We do indeed possess an internal power to influence who we are gradually becoming. No one can stop us from using this power. Yet no one but us can actually tap into it. The methods developed by Hanson demonstrate how we can effectively use the mind to change the brain to change our minds for the better. We can increase the internalisation of everyday experiences, presumably via robust modifications of neural structure and function. Ultimately, this contributes to the development of lasting inner strengths. These methods can be easily incorporated into existing therapies, trainings, classrooms, business, and healthcare settings, and personal-growth programmes. At a time when many people feel understandably buffeted by large-scale economic, political, cultural, and biological forces beyond their control, it is hopeful that we have real power inside our own minds to heal from the past and build strengths for the future.



Behind the Research

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Research Objectives

This research demonstrated that actively engaging key experiences with neurologically informed methods can promote the rapid development of important psychological resources.

Detail

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Bio

Rick Hanson, PhD is a clinical psychologist, Senior Fellow of UC Berkeley's Greater Good Science Center, and New York Times bestselling author.

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Personal Response

What inspired you to conduct this research?

“ I came to see that the brain is good at learning from bad experiences, but bad at learning from good experiences – even though learning from experiences of good psychological resources is how we develop them. So I set out to develop simple and quick methods that everyone can use in daily life to grow the inner strengths that foster resilient well-being in a challenging world. ”

