Neuroplasticity: The science of redesigning your brain for the better!

By Rachel Clements

“You can’t teach an old dog new tricks” is what we have been saying for decades when referring to someone who we feel is beyond changing their habits. We believe that once people reach a certain age there is no changing their minds, however after reading this article you may find this old saying, redundant.

Psychologists & neuro-scientists, until recently, believed that changes in the brain could only take place up until a certain age and that by early adulthood the brain’s physical structure was permanent, hence the aforementioned saying. Turns out they were WRONG, which is great news for those of us who are no longer teenagers… there’s still hope! In recent years it has been discovered that the brain does in fact have the ability to change right up until our final days, thanks to something called Neuroplasticity.

This is an exciting discovery for all of us over 25 – it means that you are able to redesign your brain to be fitter, faster and stronger… who doesn’t want that?

How does Neuroplasticity work?

Whether you are 10, 26 or 96 years of age your brain has the ability to create new neurons and construct new pathways for these neurons to travel along. Every time you engage in a new experience or think of something or a situation in a new way, your brain is forging new pathways. Every time you think a specific thought, a specific path of neurons fire up, neurotransmitters are released & synapses are subtly altered. So for example, if you feel like you can be quite negative when responding to challenging situations at work and would like to become more positive you could practice the below, simple exercise from the myMind module of The Resilience Box™ program:

You are faced with a stressful situation – your boss has just told you they need a project completed by COB that same day. Your heart rate begins to increase and your thoughts begin to race.

Catch yourself before your thoughts continue down this negative spiral and for each pessimistic thought you have write down a positive thought.

The first time you do this exercise your neurons fire up and begin to forge the new pathway to feeling more positive emotions. The second time you practice this exercise your neurons find this pathway easier and experience less resistance and confusion as to which pathway they take. The 3rd, 4th and 5th time you practice this exercise the pathway becomes ingrained and you have formed a new healthy habit. This is using your brain plasticity to redesign your brain to automatically take a more positive approach to stressful situations. Brain plasticity can, however be used, intentionally or
not, to form pathways to negative emotions. Repeatedly thinking negative thoughts deeply etches these pathways making this your default and habitual response to stressful situations as they arise.

“Brain Training” – All Hype or Worth your While?

Using your brain’s plasticity to forge new healthy thought processes is just one way to utilise this tool, how would you like to increase your memory as well as boost your ability to problem solve & increase your concentration? Neuroplasticity can help you achieve all this and more, however it requires you to exercise your brain just as you go to the gym to strengthen your physical self.

How you do this exercise is, at the moment, hotly debated amongst psychologists and scientists. For example you have probably all heard of the numerous “Brain Training” apps now available which suggest that if you spend 20 minutes per day playing these “Brain Training” games, your brain will end up smarter than it once was. On the other side of the argument you have some scientists and psychologists questioning whether any improvements people make by playing these games make them more equipped to problem solve or concentrate in general, or simply become better at playing these games.

We suggest that for the best results, don’t just stick to the one set of games or puzzles, there are many games/puzzles and apps out there that all aim to forge these new pathways and make your brain fitter, stronger and more flexible in dealing with different situations. Here are a couple of some you may wish to try:

1. ABC brain-training site, www.activememory.com, developed in partnership with the Florey Institute of NeuroScience and Mental Health at the University of Melbourne.

2. Luminosity – www.luminosity.com

The discovery of neuroplasticity confirms psychological processes that have been embraced in clinical practice and in workplaces to build resilience, improve effectiveness and enhance performance.

Preventative programs that aim to build the emotional resilience of an organisation’s employees are powerful in their ability to engage (or re-engage) employees, create a collaborative, constructive culture and reduce workers’ compensation claims for psychological injury. Programs such as The Resilience Box, have been carefully structured to have a significant impact on the performance of individuals and culture of teams and the organisation as a whole.

Therapeutic interventions that are recognised as effective such as cognitive behavioural therapy, mediation, mindfulness, acceptance commitment therapy and others are effective because the human brain has the ability to continue to build new neural pathways that provide alternate ways of behaving and responding to challenging situations.

At the Centre for Corporate Health, we’re excited to learn that many of the programs, assessments, interventions and training we provide is engaging with people’s brains in a way that is likely to encourage more effective behaviour in the workplace and in people’s home lives. Neuroplasticity has provided evidence of the brain’s ability to be retrained, which provides benefits to individuals, families and organisations.

For more information, regarding Centre for Corporate Health’s assessments, training programs and interventions that are designed to enable participants to improve their personal performance and create constructive cultures please call 02 8243 1500 or email admin@cfch.com.au