

# Emotional Intelligence and the Brain

---

## Emotional Intelligence

Emotional intelligence (EI) concerns self and other. EI refers to the emotional components of self-awareness, self-management, awareness of others (social awareness) and relationship management. Being aware of and responding appropriately to feelings, both our own and others' is the nub of EI.

Most humans develop these skills to some degree by interacting with family and friends, growing up in a civil society and learning social mores. Why then, do we still do or say things we'd rather not?

## Brain Development

Research into brain evolution provides some answers. As humans evolved, so did the brain and its functions. At the top of the spinal cord is the brainstem or root brain, which regulates basic life functions, such as breathing.

Aeons went by as the emotional centres evolved, initially primitive, later forming the limbic system. This system produces feelings such as fear, love, or joy.

Further development brought the ability for learning and memory. Over time, the neocortex evolved, and with it, self-awareness, analytic ability, maternal affection, long-term planning, imagination, art and more.

An experience occurs when one or more of our senses is impacted.

I hear music, see a car, or feel the rain. Interpretation occurs in the neocortex and the appropriate emotional reaction follows. I like the music so I feel joy. My friend is in the car so I feel happy. The rain prevents my washing from drying so I'm disappointed ... and so on. Recent brain research shows, however, that in highly-charged situations, the process is different.

## Emotional High-Jacking

When things go wrong, emotional reactions can be sudden and violent. Goleman refers to this as 'emotional high jacking.' Your boss yells at you for next to nothing, your teenager throws a tantrum, you find it all too much and lose your usual cool.

## Reason is Bypassed

The normal emotional response route is bypassed. The emotional brain responds *before* the event reaches the neocortex for analysis! A small part of the brain known as the 'amygdala' picks up the 'emergency' signal. Connected to the amygdala are key memory centres. These influence our emotional responses.

## Over-reactivity

Memories pervaded with fear imbue similar experiences with fear. In life-threatening situations, this helps us to act quickly. But in others, we may react out of proportion with the event.

Without the override of the neocortex, the amygdala fails to discriminate. Strong reactions occur when there's no danger. We respond before we think – literally.

Amygdala high-jacking, however, is not inevitable. EI teaches us that we too, can do some high-jacking. Knowing that memory is involved in highly-charged situations, we can learn self-management techniques.

## Developing New Habits

These new habits register in our learning memory, to be called on in times of crisis. We can learn to recognise our emotional triggers, and practice dealing with them *before* they get out of control.

While the mind and the brain are connected, they are not the same thing. The mind can 'override' the brain with practice. We can change how we react and what we do. Over time, we become calmer, more compassionate human beings.

When we reflect on our actions, instead of feeling we have sold ourselves short, we will know that we did the best we could.

If you would like help to better manage your emotions and reactions, check out the online course *Mastering Emotions*. It is ever too late or too early to learn new habits and change your brain for the better.

Dr Pauline Enright Mobile: 0409 191 342  
Email: pauline@radiancehobart.com.au

PO Box 907, Sandy Bay, TAS 7006  
Website: www.radiancehobart.com.au