

# Memory matters:

how recall can build resilience

### THE SOURCES OF RESILIENCE

Who is resilient? Nelson Mandela? Gandhi? Malala Yousafzai? What makes people resilient? Viktor Frankl survived the Nazi concentration camps, and felt that a sense of purpose helped the inmates survive.

In your practice you may come across many patients who display resilience. General practice may be less exciting in terms of medical breakthroughs but it does allow us a uniquely close observation of the long-term response to stressful life events. Research in the US around the time of 9/11 showed that what drives resilience is access to positive emotions that, under stress, mediate psychological growth and protection from depression.<sup>1</sup> But where do such emotions come from? The answer may change our ideas on resilience and recovery.

### THE EFFECT OF MEMORY ON WELLBEING

Freud recognised that, if people were allowed to free-associate specific autobiographical memories around negative/traumatic life events, they sometimes came up with a variety of relevant memories, some of which generated negative emotions on his couch. Sometimes this process of catharsis appeared to be healing. But we are only now beginning to untangle the influence of memories on our wellbeing and adjustment. It has been shown that certain core negative (here meaning specific and autobiographical) memories can exert ongoing long-term negative effects, 1 year later, on our wellbeing, as they are often repeatedly triggered implicitly (that is, outwith conscious awareness) by negative situational cues.<sup>2</sup> Let us suppose you were picked on, bullied, by a teacher at primary school. It could be that as an adult an accent, a turn of phrase, a stance, or a situation of powerlessness could implicitly activate this core memory, threatening your wellbeing. Whether you become withdrawn and suspicious or remain cheerful and outgoing has been found to depend on your access to positive emotions in this activation.

An extensive and innovative programme of memory research in recent years has shown that access to positive emotions, when a core negative memory is activated, depends on the nature of thematically associated networks of spontaneously

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accessed, specific autobiographical memories.<sup>3</sup> Each core negative memory has its own unique associated *memory network* that will be accessed implicitly each time the core memory is evoked by a situational resonance. Each memory in that network can either satisfy or thwart our needs in that situation, specifically the needs for autonomy, competence, and relatedness. These factors universally underpin wellbeing<sup>4</sup> and are associated with growth, purpose, and meaning. Each memory in that network (and it is the first three memories in the network that impact on wellbeing)<sup>3</sup> can be measured as either 'needs satisfying' or 'needs thwarting'. The overall result is a simple sum: if, out of the first three networked memories, needs-satisfying memories exceed needs-thwarting memories, the result = happiness (good positive mood); if needs-thwarting memories exceed needs-satisfying memories, the result = misery (lowered positive mood)<sup>2</sup> (with apologies to C. Dickens). An overall needs-satisfying memory network will *integrate* the core negative memory into a balanced, helpful self-image, whereas an overall needs-thwarting memory network will result in a continual implicit re-traumatisation of that person every time they are exposed to a cue relating to the core memory.

### BUILDING RESILIENCE WITH POSITIVE MENTAL TRAINING

The good news is that it seems that the memory networks linked to core negative memories *can* be changed to be more needs satisfying, hence less needs

thwarting, *integrating* these core negative memories into a fulfilling, supportive overall network. This has been demonstrated recently by a double-blind randomised controlled trial in students assigned to either a 10-minute resilience audio track, part of a resilience building programme, Positive Mental Training (PosMT), or to a relaxation control. After reactivating (reading through) an earlier personal description of their core negative memory, those listening to the resilience track showed significant increases in negative memory integration, driving a significant rise in their positive emotions. Indeed, all the students in the resilience arm attained the same high levels of positive emotions as those with good psychological adjustment. The unresilient became resilient.<sup>5</sup>

This resilience programme has previously shown good clinical and cost-efficacy in recovery from depression<sup>6</sup> and from burnout.<sup>7</sup> With this latest study we now understand the mechanism of action, the theoretical basis of the programme.

PosMT is used mostly in primary care (but also increasingly in psychiatric services) and is very popular with GPs and other staff, for themselves as well as for their patients (80 000 to date). It starts with psycho-physiological relaxation training, using slow diaphragmatic breathing and Jacobson relaxation (tightening and relaxing specific muscle groups in sequence) to rapidly increase parasympathetic activity and simultaneously diminish sympathetic activity. Thus patients develop, at their own pace, a beneficial state of deep meditative relaxation. This imparts a sense of mastery

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and autonomy ('I can control the way I feel' [personal communication with patient, February 2006]). Perhaps this also acts as a barrier, almost like an anaesthetic, to feeling unpleasant memories, providing a necessary safety net for those with clinical distress from re-experiencing emotional trauma while the core memory is being implicitly integrated. There have certainly been no incidences of traumatic flooding by memories in 12 years of use.

Our observations on listening to those patients recovering from depression and reflecting on their use of the programme, are that they sometimes describe a shift in their relationship to core negative memories. This serendipitous observation is what led to the research programme with McGill University. The PosMT programme originated as an Olympic sports psychology programme and is thus engaging and non-stigmatising. As *everyone* in the resilience intervention increased their needs satisfaction in their memory network,<sup>5</sup> this may explain why even those who are well adjusted (that is, have an optimal level of positive emotions) may improve their performance across personal and professional domains. Many doctors and primary care staff, and indeed most

people working in the health service, start their careers with a sense of purpose and meaning in their work, and this programme may allow them to reconnect with this.<sup>8</sup>

PosMT is now available as the Feeling Good App.

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**Provenance**

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**Competing interests**

Alastair Dobbin and Sheila Ross are shareholders in Positive Rewards Limited, a company that produces materials related to the therapeutic programme, Positive Mental Training. They are also directors of the Foundation for Positive Mental Health, a charity dedicated to doing research into increasing resilience using positive psychology and promotion of the use of positive mental training in the UK health and social services.

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