

# Balancing the brain

**David Hughes** explains how a child's brain benefits from the practice of Transcendental Meditation

very child is born a billionaire. In neural terms, that is. The human brain has 100 billion individual cells - that's 15 times the number of people on earth - and ideally, bringing up children would involve every strategy we can find to allow the full use of all those billions of neurons - so that every child may grow to live their complete mental, physical, emotional and spiritual potential.

The brain is a very flexible organ, and every experience changes it. Repeated experience strengthens the connections in the part of the brain involved, and conversely, if neural connections are not used, they simply disappear. It's a matter of use it or lose it. Using full potential, in brain terms, would involve enlivening connections throughout the brain; and that's why interest is growing in a simple mental technique which seems to do exactly that.

Transcendental Meditation, introduced fifty years ago by Maharishi Mahesh Yogi, has been the subject of hundreds of scientific studies, and is currently being taught to hundreds of thousands of children worldwide. Evidence supports the claim that the technique promotes a balanced brain and thus a stable, adaptable child, well prepared to deal with the challenges of a rapidly changing world without picking up stress.

Adults experience the world in a very different way to children. For a young

child, every experience is immediate and concrete, very much a product of the five senses, primarily involving the rear part of the brain. Only with time and the development of the brain do more abstract evaluations come into play. As we all know, impulsive behaviour is natural for children the neural circuits to see the bigger picture only begin to grow around the age of 12, and continue until 25 or so.

A key factor is the development of connections to and in the frontal part of the brain, the part which evaluates the concrete experience of the senses, brings emotions into play, and makes judgments and decisions. It's the most significant part of the brain in expressing who we are. Tiredness reduces the use of the frontal regions, as does stress. Overload effectively takes the frontal regions "offline," leaving us prey to more primitive, less mature "fight or flight" tendencies and excessive reactions to even simple challenges. Even the amount of brain cells we have is affected by strain. Up until a decade or so ago it was thought we were born with all the brain cells we would have for life, but it is now known that the hippocampus produces new cells every day. Yet it takes 4-6 weeks for these cells to mature, and under stress, they will not do so. But in a nourishing environment. these cells do mature, and become part of the ongoing memory system. Free of tiredness and stress, a child will simply develop a better brain, and use it in a more effective way.



# **Foundational state**

How can TM assist with this? Meditation practices are usually thought of in terms of either concentration - focused attention - or of contemplation - open monitoring of thoughts or breathing. Transcendental Meditation is neither of these, but rather involves a process which transcends its own activity, taking the mind to a state of restful alertness. Recent research suggests this is the experience of a foundational state of the brain, underlying the changing states of waking, dreaming and sleeping.

# The transcending process

If we imagine the mind having a vertical dimension, rather like a pond of water, a thought might be illustrated as a bubble of air rising from the bed of the pond - just a faint idea at first, then gathering emotions and memories as it rises, and bursting on the surface as a conscious thought. TM reverses this process, allowing the attention to follow a specific thought from the surface level of thinking to progressively finer levels, until it reaches a

# Wellbeing



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silent level of restful alertness at the source of the thinking process. This process of transcending a thought allows wakefulness, which is the background to all thinking, to become more lively in the mind.

In brain terms, the whole attentional system is awake and quiet, and because all experience changes the brain, repeated experience of this restful alertness - TM is recommended for a few minutes twice a day - means that being restfully alert becomes part of how the brain naturally functions. That in turn means that every experience during the day is dealt with from a more balanced and integrated state of the brain, and so less stress is experienced even from very challenging circumstances. Experiencing silence in the mind is deeply restful for the body, so TM also helps by removing tiredness and boosting energy.

# Easy to learn

TM is extremely easy to learn, and produces brain integration within about 30 seconds - there is no difference during the meditation between someone who has been doing TM for a few months and someone who has been practising for 20 years. The technique is effortless, using only the natural tendency of the mind to go in the direction of a more enjoyable experience - restful alertness, not surprisingly, is pleasant - and no attitude, belief or change of lifestyle is required.

Although easy to practise, TM does have to be learned on a one-to-one basis from a properly trained teacher as the technique is tailored to the individual. And, like learning to talk - another natural ability - feedback is essential during instruction to ensure that practise is correct. Following a couple of talks which describe what TM is and

the principles by which it works, learning the technique involves a personal one-to-one instruction followed by three classes on consecutive days. Instructions given in each class are practised at home, so that each session focuses on the learner's growing experience of the meditation. A follow-up session is recommended after about ten days, and a few further checkings in the first six months - but after that, one is self-sufficient for life.

Older children, from about the top junior level onwards, can learn the adult version of TM practised sitting comfortably with eyes closed. Younger ones, from age four or five, learn a more appropriate version (taught in two short sessions) with components of TM, which children carry out for a few minutes silently but with eyes open, while walking or playing.

### TM in school

TM is taught in hundreds of schools worldwide. Pioneer in this country is the Maharishi School (maharishischool.com) in Lancashire, which has been adding a few minutes of TM for pupils and teachers at the beginning and end of the school day since 1986. The head teacher, Derek Cassells is full of praise for the effects. and increased creativity and intelligence is certainly reflected by examination results. While proud of the academic achievements, Cassells is reluctant to be judged on examination results alone, preferring the overall personal development of pupils as a measure of success. "The brain they grow as a child is the brain they have as an adult," he says. "So by practising meditation as a child, teenage years are easier, and they're a more balanced adult."

Elsewhere TM has been used at innercity schools in the US and South Africa with dramatic results in reducing violence and improving pupil behaviour, and has been found effective in helping with ADHD.

To read more about this method and to discover learning opportunities in your area, visit, t-m.org.uk.