

### Why does hypnotherapy work?

1. Believing a treatment will work = better physiological response to that treatment.
2. Improve your attitude towards others and you will see a big positive effect on your health – immune system will improve, stress will be reduced and you also simply look after yourself better when you are thinking positively.
3. Positive beliefs = helps the body to maintain and repair itself. Positive beliefs also reduce stress-related inflammation and reduce the amount of cortisol the body produces.
4. Hypnotherapy directly influences the parts of the body it is targeting, improving function and reducing pain.
5. Regular practice of self-hypnosis/trance can have a major effect on the stress response pathways and you may well live longer as you increase the levels of the enzyme that builds up the telomeres at the end of your chromosome strands (this enzyme naturally reduces over time and is considered a core element in the ageing of the body)<sup>4</sup>.

### What can EEG tell us about the brain and what does this mean for SF hypnotherapy?

John Kounios, a neuroscientist at Drexel University, Philadelphia has shown that some brains are better set up for creativity than others. Using EEG, he detected higher levels of right hemisphere activity in people who solve problems using insight rather than logic (true or false). This higher level of right hemisphere activity can be inherited but as we can see using EEG during trance, it can be encouraged:

- Focus on the details of the problem (the miracle question)
- Relax and be happy (What's been good about your week? Relaxation element of trance)
- Stimulate the right hemisphere of the brain (note the increase in right hemisphere activity during the second part of the language pattern – Game Player's Planet/Trees/Confidence etc.)<sup>3</sup>.

### Am I normal or different to the people you see in clinic?

James McGaugh, University of California, Irvine says that we have selectively strong memories for events that are emotionally arousing. Women have stronger emotional memories but essentially people remember the things that are important to them.

Jonathan Schooler, University of California, Santa Barbara says that somewhere between 15 and 50% of our time is spent daydreaming but this isn't time wasted, the brain is allowing us to think about and prepare for the future.

Michael Pluess, Queen Mary University of London says there are genetic variants to the regulation of serotonin, dopamine and oxytocin meaning that some people are more 'sensitive' to emotional events BUT these sensitive people respond well to new environments, are deep thinkers and more creative. Reasoned thought can lead to better emotional regulation ie the use of the miracle question during SF hypnotherapy can lead to better emotional regulation for people whose feelings are 'out of control'<sup>5</sup>.

### Is there a part of the brain that 'is' consciousness?

EEG studies show that P3 is the neural correlate of consciousness and is one of the key areas where we process stimuli<sup>6</sup>.

### Why use music during your trance sessions?

Music you like stimulates the production of dopamine (feel good) and natural opioids (pain relief). Levitin & Chanda (2013) demonstrated that slow tempo music reduces your heart rate, blood pressure and body temperature (link to your biofeedback machine/GSR meter). Peter Sleight at the University of Oxford found that music played in a 10 second repetitive cycle makes you feel calm.

David Felten at the University of California, Irvine found that music reduces stress by reducing the level of cortisol produced in the body.

What type of music? Ian Cook at the University of California, Los Angeles found that 111 hertz music can induce trance and appears to act on worry and anxiety by interrupting rumination<sup>7</sup>.

If I fall asleep during the CD, will I still get the benefit?

Sid Kouider (École Normale Supérieure, Paris, France)

EEG demonstrates that during sleep, the brain does not switch off, it reviews and stores memories. The part of the brain that processes auditory information is active during sleep and preferentially responds to meaningful information.

EEG demonstrates that the brain continues to engage with verbal information even after you have fallen asleep. The brain can not only extract meaning from acoustically presented information but can also prepare a response and come to a decision. The brain processes new information therefore even when asleep, the brain is active and ready and able to learn<sup>8</sup>.

Why is sleep so important?

Giulio Tononi at the University of Wisconsin-Madison has demonstrated that the purpose of sleep may be to weaken the connections in the brain formed during the day and to make space to form new memories when we wake up. Some synapses are protected and these appear to relate to long term memory. Thus your brain will only “keep what matters” with effective sleep, unnecessary memories are whittled away<sup>2</sup>.

Why can't I remember why I was so upset with that person when I wake?

80% of our dreams involve a sense of anxiety and researchers believe that this is because the brain is helping you to cope with everyday concerns and worries. The negative events of the day lose their emotional trauma during dream sleep (as we know from the IC!). Rosalind Cartwright at Rush University Medical Centre, Chicago has demonstrated in her research that as night wears on, dreams lose their emotional impact and become calmer. People experiencing depression often have long, frequent and negative dreams BUT if they are encouraged to experience positive dreams (using our CD for example!), then they are more likely to have recovered from that depression a year later<sup>1</sup>.

Did you know that during a full moon we experience 20 minutes less sleep than normal and it takes us up to 5 minutes longer to fall asleep on average? Christian Cajochen at the University of Basel in Switzerland monitored the EEG readings of people sleeping throughout the lunar month and in addition, found that we experience 30% less deep sleep during the night of a full moon<sup>1</sup>. Better listen to the CD then!

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Sources (chosen for ease of access and comprehension, original source papers cited in these articles):

1. Wilson, R. (2014). *New Scientist, Features; No.11831*
2. Wilson, C. (2016). Solving the mystery of sleep. *New Scientist, News; No.1313*
3. Williams, C. (2014). A user's guide to the mind. *New Scientist, Features; No.1212*.
4. Marchant, J. (2011). Heal thyself. *New Scientist, Features; No.840*.
5. Various. (2015). Am I normal? *New Scientist, Features; No.1268*.
6. Ananthaswamy, A. (2015). Consciousness theory rocked. *New Scientist, News; No.1275*.
7. Young, E. (2015). Healing Rhythms. *New Scientist, Features; No.1265*.
8. Scudellari, M. (2015). Smart Slumber. *New Scientist, Features; No.1251*.

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