

DO WE REALLY ONLY USE 10% OF OUR BRAIN?

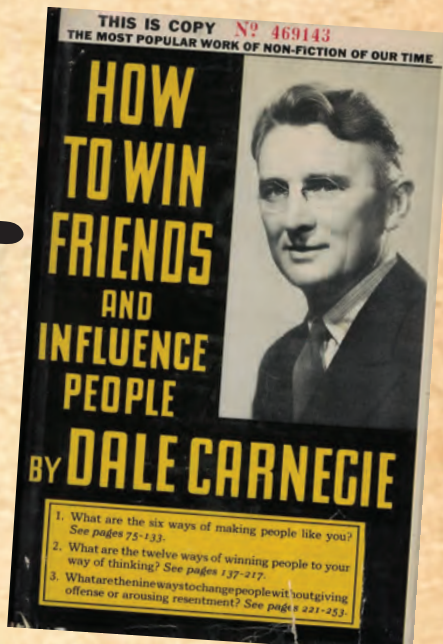


1. Human beings only use 10% of their brains! Think of the possibilities!

People who believe this myth will often try to defend their position by stating, "It's true! Scientists say it is so!", - without, unfortunately, being able to say exactly who these "scientists" are.



2. Dale Carnegie's 1936 self-help book, *How to Win Friends and Influence People*, includes a forward that makes reference to the theory that "the average man develops only ten percent of his latent mental ability".



The origins of the 10% myth are elusive. There are many early scientists (eg. Einstein & Pierre Flourens), philosophers (eg. William James), writers (eg. Dale Carnegie), and psychologists (eg. Karl Lashley) who inadvertently contributed to the evolution and popularization of this myth. The 10% myth is attractive to us for many reasons; it opens up a world of unknown possibilities that are both mysterious and exciting and gives up hope in improving our quality of life.

WHAT IS PERPETUATING THIS MYTH?



3. **NEW AGE MOVEMENT**
Originally a counterculture movement that had its origins in the 1960's, this movement encompasses various schools of thought with central themes being the idea of self-actualization and an extreme skepticism of modern science. Other popular themes include transcendental meditation, levitation, psychokinesis, clairvoyance, precognition, telepathy, accelerated IQ's, & psychic healing. The 10% myth opens up many appealing possibilities and offers "new-agers" hope.



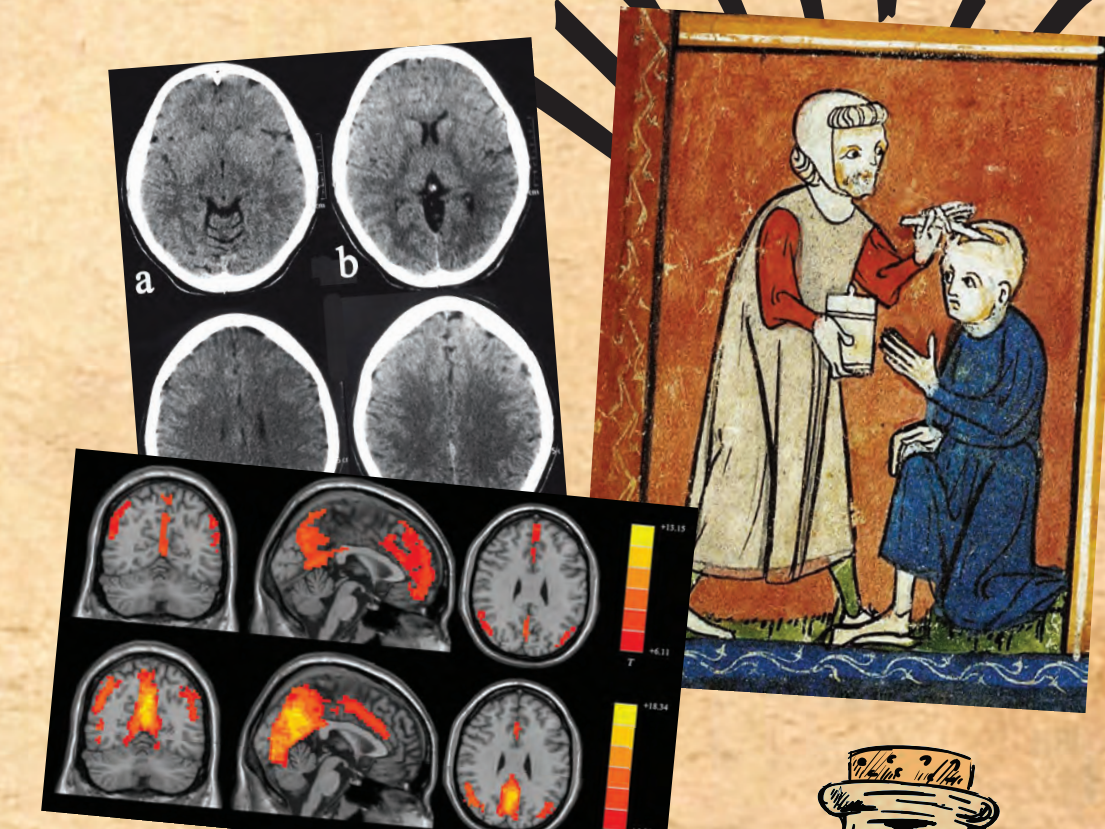
4. **POPULAR MEDIA**
Recent mainstream films and TV shows like *Lucy*, *Limitless*, and *Black Mirror* elude to the idea that our human brains have failed to reach peak processing speeds or even maximal neural connectivity. Their protagonists are somewhat underachieving beings who, after being exposed to intense synthetic drugs or procedures, achieve paranormal powers of their mind. They have unlocked their brain's full potential, and they make it look empowering and sexy.



5. **SELF-HELP CULTURE**
The self-improvement industry, undeniably, has the most to gain from perpetuating this myth. We live in a culture that glorifies commercialized motivational speakers and consumes self-help literature on the daily - both preaching the possibilities of opening yourself up to transcendence to higher planes of knowledge and experience. Often suggesting that, as humans, we have yet to reach our full neurophysiological potential and endlessly referencing the "latent powers of the mind". Unfortunately, this also promotes a culture of dissatisfaction with ourselves and perpetuates the need for "self-help".

WHAT DOES MODERN SCIENCE SAY?

Modern neuroimaging technology like EEG, CTscans, and fMRI's allow scientists to see areas of neural activation. The fact that we can see neural activity throughout the entire brain refutes the notion that there are any fallow areas of the brain. Alongside these techniques, sophisticated cognitive psychological evaluative measures enable researchers to gain insight into the behavioural and cognitive deficits following brain damage. We now have the ability to pinpoint damaged areas and then link it to the associated cognitive & behavioural consequences. Microelectrodes, using the single-unit recording method, are now being used to map out the human brain in terms of its functional characteristics. This method isolates the electrical responses of single neurons, giving researchers the opportunity to study information processing in individual cells. This technique alone, would give clear evidence if 90% of the brain was dormant. The saying "use it, or lose it" is especially pertinent in brain health. Neural circuits that are underused or neglected in early development deteriorate permanently. If 90% of our neural circuitry is not being used there would be significant areas of neural cellular degeneration.



FACT: WE USE 100% OF OUR BRAIN

If any part of the brain was removed or inactive, there would be noticeable and lasting behavioural and cognitive effects. Our brains are super complex machines that require all parts to be in working order for typical healthy functioning. Another interesting fact - even during sleep, our brains are active. There are brains that have less interconnectivity than others, however, that does not imply substantive dormancy.

