

Cycling to health & happiness

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You need only look at the physique of Bradley Wiggins to appreciate the potential effects of cycling on the body. But what about the mind? For as long as man has pushed a pedal, it's a question that has challenged psychologists, neurologists and anyone who has wondered how, sometimes, riding a bike can induce what feels close to a state of meditation.

I'm incapable of emptying my mind but there have been occasions on my bike when I realise I have no recollection of the preceding miles. Whether during solo pursuits along country lanes in spring, or noisy, dirty commutes, time can pass unnoticed in a blissful blur of rhythm and rolling.

It's not a new sensation. In 1896 at the height of the first cycling boom, a feature in the *The New York Times* said this about the activity: "It has the unique virtue of yielding a rate of speed as great as that of the horse, nearly as great as that attained by steam power, and yet it imposes upon the consciousness the fact that it is entirely self-propulsion."

The writer, credited only as "ANJ", continues: "In the nature of the motion is another unique combination. With the great speed there are the subtle glide and sway of skating, something of the yacht's rocking, a touch of the equestrian bounce, and a suggestion of flying. The effect of all this upon the mind is as wholesomely stimulating as is the exercise to the body."

Almost 120 years after these observations, and in the middle of a new cycling boom, what have we learnt about the nature and effects



of this stimulation? Cycling can of course be miserable, but beyond its ability to more often make me feel emotionally as well as physically enriched, what could be happening inside my head?

Several studies have shown that exercises, including cycling make us smarter. Danish scientists who set out to measure the benefits of breakfast and lunch among children found diet helped but that the way pupils travelled to school was far more significant. Those who cycled or walked performed better in tests than those who had travelled by car

Scientists are confirming what most cyclists instinctively know — that riding a bike has extraordinary effects on our brain chemistry

or public transport, the scientists reported last month. Another study by the University of California in Los Angeles showed that old people who were most active had 5 per cent more grey matter than those who were least active, reducing their risk of developing Alzheimer's.

But what is about cycling

that leads me to believe it has a peculiar effect? John Ratey is a Professor of Psychiatry at Harvard Medical School and the author of *Spark: The Revolutionary New Science of Exercise and the Brain*. He can't point to a specific reason but says he has seen patients whose severe depression has all but disappeared after they

started to cycle.

Rhythm may explain some of the effects. "Think about it evolutionarily for a minute," he says. "When we had to perform physically, those who could find an altered state and not experience the pain or a drag on endurance would have been at an advantage. Cycling is also increasing a lot of the chemistry in your brain that make you feel peaceful and calm."

At the same time, the focus required to operate a bicycle, and for example, to negotiate a junction or jostle for space in a race, can be a powerful medicine. Dr Ratey cites a study his department is currently conducting. More than 20 pupils with attention deficit hyperactivity disorder (ADHD) are expected to show improved symptoms after a course of cycling.

The link between cycling and ADHD is well established. It's "like taking a little bit of Prozac and a little bit of Ritalin," Dr Ratey says. Ritalin is a stimulant commonly used to treat ADHD in children by boosting levels of neural transmitters. Exercise can achieve the same effect, but not all exercise is equal.

The apparent mindlessness of pedalling can not only make us happier ("Melancholy," the writer James E Starrs has said, "is incompatible with bicycling") but also leave room for other thoughts, from the banal to the profound.

On the seat of my bike, I've made life's decisions, "written" passages of articles, and reflected usefully on emotional troubles. Of his theory of relativity, meanwhile, Albert Einstein is supposed to have said: "I thought of it while riding my bicycle."

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