Gamma High Performance Program

THE POWER OF YOUR MIND ON YOUR HEALTH

Chris Walton MSc
Can the Mind Really Affect Matter?

What you believe to be true is true within certain limits which itself is a belief. In the province of the mind there are no real limits.

Dr John Lilly

Towards the end of the nineteenth century, William James, the father of modern psychology, said, 'No mental modification ever occurs which is not accompanied or followed by a bodily change.' More recently, Dr Norman Cousins summarised the modern view of the mind–body interaction as 'belief becomes biology'. One powerful way to explore how your beliefs affect your biology is through conventional medical studies, which must always take into account a phenomenon called the placebo effect. Most of us have heard of the placebo effect, although most of us also misunderstand what it is really all about. 'A placebo, as used in research, is an inactive substance or procedure used as a control in an experiment. The placebo effect is the measurable, observable, or felt improvement in health not attributable to an actual treatment.'

During the research for this book, one of the most amazing examples I came across of the power of beliefs and perceptions to affect the physical body came from Stewart Wolf. Dr Wolf did a double-blind study with pregnant women who were suffering from nausea and vomiting. He divided the group in two and gave one group an anti-sickness medicine and the other group a placebo, a substance that had no known therapeutic effect on nausea. The women in the anti-sickness medicine group improved—their nausea was gone. However, many of the women in the placebo group also found relief. This is the placebo effect at work—in this case, women who believed the treatment would relieve their nausea were cured of their symptoms, even though, unbeknown to them, the treatment they were taking was medically useless for nausea.

There are literally thousands of such studies that demonstrate the power of belief to affect the physical body, and we will look at many of the most impressive in this chapter. But let’s go back to the study of the pregnant women suffering from nausea. There’s more to this story!

The study has a second part—the really stunning aspect of it. To explore the placebo effect even further, Dr Wolf gave the placebo group another medication, which he
characterised as a ‘new, strong, very effective anti-sickness’ drug. This time not just some of the women, but all of them experienced relief from nausea and vomiting. What was this amazing new pharmaceutical? It’s called Ipecac and check this, Ipecac is a very powerful drug used in hospital emergency rooms to induce vomiting! Just the strong belief that they were taking an amazing new anti-sickness drug was enough to totally reverse the chemical action of this drug on their bodies. Think about this result for a moment. The women’s belief in the doctor and expectation about the effect of the drug not only totally eradicated their symptoms, it completely reversed the chemical action of a purgative drug in their bodies. I don’t know about you, but for me this study is among the most convincing evidence yet that our minds are amazingly powerful. To paraphrase a popular saying in the hard sciences, incredible claims require incredibly reliable proof. So let’s keep looking at that proof via studies of the placebo effect that reveal our minds as being one of the most critical factors to the state of our health, and by extension to the state of our entire lives and the potential we express.

Have you ever had a sore gum after some dental treatment? Morphine is an extremely powerful painkiller—can our mind be as powerful? In a study of pain after dental surgery, patients were given either intravenous morphine or a saline placebo. If they were told that the saline was a powerful new painkiller, they got just as much relief as the patients who received morphine. Once again, the only explanation is that their belief in the treatment translated into their bodies responding as if they were getting an effective treatment.

**Old Wisdom, New Wisdom**

Let’s look at a different kind of placebo effect study. It’s another one that throws into question all we have been told about ourselves, our bodies, our health and our abilities to influence our reality. Back in 1979, psychologist Dr Ellen Langar, then at Harvard University, and her colleagues devised an ingenious experiment to test the power of perceptions on the state of the physical body. Langar and her team hypothesised that they could reverse the biological ageing of a group of men aged 75 and older. That’s right—they were seeking to reverse physiological ageing. We determine our age by our birthday: you are 25, or 36, or 42 or 88. But another way to assess age is via physiological markers in the body and the cognitive function of the brain. Not all 56 year olds are in the same condition: some are physiologically older or younger than others who are their chronological age. So the intention of Langar and her team was to see if a person’s psychological perception of him- or herself as old or young could directly influence the biological ageing process.

The experiment involved only men, who were taken to live together at a retreat centre for one week. Before being taken there, they were all thoroughly evaluated and tested for short-term memory, cognition, hearing, taste, sight, posture, perception and physical strength (which are many of the markers that help determine biological age, as opposed to chronological age). They also had their pictures taken.

The retreat centre was specially created to be a time capsule from 1959—everything in
it, from the furniture to the appliances to the books and magazines to the music playing on
the stereo, was indicative of 1959. The men were not allowed to take anything with them,
such as recent family photos, personal papers, books etc., that would remind them of the
current time (1979), so they were thoroughly immersed in a world 20 years in the past. They
were also carefully counselled and coached to act as if it were 20 years earlier. They were
to discuss their wives and families as if it were 1959, and pretend they were still working at
the job or in the career of that year. The staff were very particular and paid attention to the
tiniest detail. To all intents and purposes, these men were time-travelling back to a time
when they were 20 years younger.

As any good study must be structured, there was also a control group of men who were
housed in another part of the retreat centre. The centre looked modern and current (1979)
and the men were told to simply enjoy themselves as if they were on holiday. They had no
instructions about dates, year or time, so they were more or less just enjoying a week of
retreat, with everything normal for 1979. As a control group, they would provide data about
whether relaxing in a non-stressful atmosphere had any impact on the biological markers
of ageing.

At the end of the week, all the men were tested once again for the markers of biological
ageing, and their pictures were re-taken. The before and after pictures were shown to a
group of independent ‘judges’ who were asked to compare the two photos and say in which
one the man looked younger and to guess how many years younger he appeared to be.
The judges did not know the reason they were being asked to compare the pictures, as
they were unaware of the experimental set-up. This way they would be totally impartial.
Almost unanimously, the impartial judges said the men in the post-retreat photos for the
time-capsule group were younger—by an average of three years—than their pre-retreat
photos. There was no difference for the non-time-capsule group. The scientists then went
on to do post-retreat physiological evaluations. Amazingly, the bodies of the men who had
been living as if it were 1959 actually grew younger! For example, the lengths of the fingers,
which tend to reduce or shrink with age, had increased, as had their hand grip strength.
Their vision and hearing acuities improved. Nearly half of this group of men experienced an
increase in IQ. As astounding as it seems, Dr Langar provided an opportunity for these men
to be psychologically 20 years younger, and their bodies followed suit. Their minds literally
turned back their body clocks. There were no such changes in biological markers for the
men in the non-time-capsule group.

Another study on ageing was conducted by Professor of Preventative Medicine
Alexander Leaf, then of the Harvard Medical School. He travelled the globe researching
cultures that had many healthy centenarians—people who have reached their hundredth
birthday. He even found many people who were between 110 years old and 115 years old
and still in good health. He gathered massive amounts of data about them and their internal and
external environments, including the weather, their diet and their genetic dispositions. His
conclusions were that none of these factors made a difference to how healthy they remained
at such an advanced age. There was only one common denominator—their cultural beliefs
about ageing. In all of these cultures, elders are greatly respected, so that growing old is an
honour. The older you are, the wiser and more useful you are to your community. These elders were surrounded by family members, peers and a culture at large that valued them and their life experience. The collective perception of ageing had a dramatic effect on the individual’s biological expression of ageing, keeping them vigorous, alert and active, sometimes well into their second century.

We’ve all been told what to expect as we age—that it’s an inevitable process of our bodies and minds slowing down and even deteriorating. These studies and others show the lie to that belief. Let’s now look at some other ‘perceived wisdom’ that is turning out not to be totally reliable or even true.

**Pushing the Boundaries of Belief**

There is one area where evidence of the placebo effect would provide extremely compelling evidence of its existence and effectiveness—surgery. It is common knowledge in medicine that a placebo has no effect on surgery, whose effectiveness is entirely independent of our psychology. After all, going into the body with a scalpel is a precise and unambiguous event. The patient is usually under an aesthesia and there are not many variables from the person’s life, belief system or perceptions that affect how skillful a surgeon is or how he or she does the job. Although a patient’s attitude, beliefs and perceptions can influence the experience of post-surgical pain and the speed of recovery, they have no impact on the actual operation itself. Or do they? One doctor decided to find out.

Orthopaedic surgeon Bruce Moseley, of the Baylor School of Medicine, wondered which component of the arthroscopy (knee surgery) operation he performed was the most effective and beneficial for his patients, as there are at least two different procedures he could do while working inside a patient’s damaged knee: he could shave damaged knee cartilage or flush floating cartilage debris out of the knee cavity. Both approaches were very common, but there was no data on which was most effective. So, Dr Moseley decided to try to find out.

He consulted with the hospital director and others, who told him that to find an answer he would have to conduct a double-blind study, which would need two groups of patients—each group getting one or the other of the procedures—and a third group to serve as a control. The control group would have to think they had surgery, but not actually have anything done to their damaged knee. Dr Moseley was surprised at the need for a control group, which would make it possible for the study to factor in the placebo effect. He said, ‘All good surgeons know that there is no placebo in surgery.’

But he went ahead and managed to arrange for such a complex study to be carried out. There were three groups of patients—all comprised of men who had greatly reduced activity levels because of knee damage, with some of them even finding the need to use wheelchairs. Each man in each group underwent the arthroscopic surgery, with one group having the cartilage shaved, another having their knee cavity flushed, and the third group being brought into the operating room but not actually having either of the procedures.
Here’s what happened for the third group—the control group—during their ‘fake’ surgery.

To make them believe they were undergoing the procedure, everything was done normally. They were sedated, Dr Moseley made the standard incisions in their knee, but then he did nothing surgical. He faked the operation. He positioned the monitor that he used to see inside the knee and all other equipment exactly where he would have if he were actually going to operate. He played a video of a real operation on the monitor in case a patient were watching. (Although the patients were sedated, they were not totally unconscious and could watch an actual operation on the monitor; in this case it was all arranged so that they wouldn’t be able to know it was not their knee in the video.) After 40 minutes he stitched up the small incisions he had made in the knee as if he had performed the operation as usual. Every last detail was accounted for so that the control group could not know they had not received real knee surgery.

The results were totally unexpected. All three groups improved equally well, although according to received wisdom the men who had not had anything done to their knees should have been in the same debilitating condition as before the study. But they improved too! They regained motion, had less pain, were able to resume life activities—from walking without pain to playing basketball with their grandkids—that many had given up because of their knee problem. Even two years later, when the men in the placebo control group were told that nothing had been done to their knee, they still retained the benefits. Further follow-up six years later found the benefits to be lasting, with no relapses.

This study and its years-long aftermath was a spectacular display of the power of the placebo effect. Dr Moseley concluded:

*My skill as a surgeon had no benefit on these patients. The entire benefit of surgery for osteoarthritis of the knee was down to the placebo effect.*

One of the patients in the control group, Tim Perez, told the reporters of the Discovery Health Channel for a programme on the placebo effect that detailed this study and interviewed Dr Moseley and some of the patients:

*Boy, was I surprised to know that it was the placebo. I couldn’t believe it. How is this possible? Well, in this world anything is possible when you put your mind to it. I know that your mind can work miracles.*

The placebo effect is not a psychological effect only. At one time, it was thought by the general public to mean that their disease and symptoms were all in their minds, and they were making themselves sick. That view is outdated and inaccurate. The modern concept of the placebo is one of optimism and wonder—that we have self-healing capabilities that we have not even begun to learn to harness. The placebo effect shows us that biology is still an infant science, as is medicine, and that we have a lot to learn. Emerging science on the placebo effect and the power of our minds means that one day we might not have to rely as heavily as we do on pharmaceuticals and their nasty side effects. We can use our
mind power and potential to activate our body’s own natural chemicals to do the job that synthetic chemicals and pharmaceuticals attempt to do.

Study after study is reminding us that somewhere in the deep recesses of our bodies, linked intimately with our thoughts, perceptions and beliefs, is a mechanism for healing ourselves. For instance, recent MRI brain scans taken of people on Prozac for depression showed changes in the brain when a patient took Prozac but showed the same changes when they received a placebo and just thought it was Prozac. Similarly, when Parkinson’s patients were given an anti-Parkinson’s drug, their tremors were reduced and their brains increased their production and use of dopamine, a natural brain chemical that helps alleviate Parkinson’s symptoms. However, when patients were given a placebo but thought it was the drug, the tremors also reduced and the brain still released the same amount of dopamine in the same areas. The pressing question is, if the drugs weren’t necessary, what was relieving them of their symptoms? The answer appears to be that the patients’ own belief systems and thought patterns activated what we might call the body’s own ‘intelligence and healing wisdom’, so their bodies worked naturally to deal with the disease symptoms. Many recent studies have shown that most of the major anti-depression drugs in use today are no more effective than a placebo. However, as former pharmaceutical scientist Dr David Hamilton says,

*The drugs probably do work, although we don’t absolutely know for sure, but when we believe in a drug, whatever the drug is for, our own natural healing capacity kicks in.*

The revolution that is coming in medicine and healthcare will be based on better activating and using our natural self-healing capabilities.

I can guess that as you read the placebo effect studies, you were asking yourself, ‘Well, if I believe something is working and that makes my body respond, then isn’t the opposite also true? Can’t my beliefs make me sick or stop a treatment from working?’ The answer is yes. The placebo effect works both ways, which brings me to a discussion of its twin—the nocebo effect. The nocebo effect is the term used to describe the harmful, unpleasant or undesirable reactions from a person’s pessimistic belief—the exact opposite of the placebo effect.

Here are a few examples of the nocebo effect to give you a brief idea of how it works.

- In a study, a group of 34 college students were told that a mild electrical current was being passed through their heads, which might induce a headache as an effect. There was no actual electrical current passed through their heads, yet over 66% of the 34 students developed headaches.

- In a study of people with asthma, a group of patients breathed in a vapour that researchers told them was a chemical irritant or allergen. Nearly half of the patients experienced breathing problems, with a dozen developing full-blown asthma attacks.
They were ‘treated’ with a substance they believed to be a bronchial dilating medicine, and they recovered immediately. In actuality, both the ‘irritant’ and the ‘medicine’ were a nebulised (reduced to a fine spray) saltwater solution.

Japanese researchers tested 57 high-school boys for their sensitivity to allergens. The boys filled out questionnaires about past experiences with plants, including lacquer trees, which can cause itchy rashes, much like poison oak and poison ivy do. Boys who reported having severe reactions to lacquer trees were blindfolded. Researchers brushed one arm with leaves from a lacquer tree but told the boys they were chestnut tree leaves. The scientists stroked the other arm with chestnut tree leaves but said the foliage came from a lacquer tree. Within minutes those who reported having severe reactions to lacquer trees were blindfolded. Researchers brushed one arm with leaves from a lacquer tree but told the boys they were chestnut tree leaves. The scientists stroked the other arm with chestnut tree leaves but said the foliage came from a lacquer tree. Within minutes the arm began to react, turning red and developing a bumpy, itchy rash. In most cases, but not all, the arm that had contact with the actual allergen did not react.

In each of these studies, it was the person’s beliefs—and fears and expectations—that created the nocebo effect. This effect has profound implications, and we would all do well to pay attention to our beliefs and expectations in terms of our health, for if you don’t have confidence in a treatment, it is likely that it won’t be that effective for you.

Professor William Tiller sums up the power of our minds and bodies in his ground-breaking book PsychoEnergetic Science,

Every change in the human physiological state is accompanied by an appropriate change in the mental emotional state, conscious or unconscious, and conversely every change in the human mental emotional state, conscious or unconscious, is accompanied by an appropriate change in the physiological state.

So from here, integrate new empowering belief systems about your health and healing abilities and have a clear intention to enjoy vibrant health.