

apply the implications of these papers — specifically those that focus on biomedicine — in their daily practice through evidence-based health care. Most of us do this by following the guidance of trusted authorities, such as those issued by the National Institute for Health and Care Excellence, British Thoracic Society, and Scottish Intercollegiate Guidelines Network. These bodies are tasked with collecting, reviewing, and comparing the effectiveness (in terms of clinical effectiveness, safety, and cost) of existing and new treatment options. They condense these into usable algorithms to enable their safe, effective, and standardised deployment in the consulting room. Crucially, these treatment pathways save the increasingly busy GP substantial amounts of time by reducing their staying up-to-date requirements from the frontier of biomedical research publications (a truly impossible feat, as the number of papers added to the MEDLINE database alone each year reaches 1.3 million¹) to a manageable regular update of approved clinical guidelines.

Despite this, the General Medical Council requires all doctors to 'keep [their] professional knowledge and skills up to date',² which arguably includes their abilities to appraise the literature produced by medical research. In my own practice, this skill frequently becomes necessary when a patient requests advice on (or demands a prescription or referral for) a new pharmaceutical product, surgical procedure, or medical device. This requires me to locate and interpret the relevant studies to inform my management of, and explanation to, the patient. Strategies to maintain sufficient critical appraisal skills, which respect the busy GP's poverty of time, are therefore in order. In addition to the *BMJ Talk Evidence* podcast (to which I am a regular listener),³ one of these strategies is to read Stuart Ritchie's 2020 book *Science Fictions: Exposing Fraud, Bias, Negligence and Hype in Science* (which is also available in audiobook format for times when reading is impractical).

The book is a frank, revealing, and disturbing tour of the plethora of ways in which much of scientific research is deeply flawed and the generator of results that are minimally (if at all) reflective of reality. While it does not focus exclusively on research from the field of biomedicine (it also draws on

examples across the hardness-spectrum of science, from particle physics, engineering, and biology through to economics, sociology, and psychology), much of the book examines the problematic practices in medical research. In fact, the author identifies problems in biomedical science as of the most concerning. After all, it is the products of this kind of research that directly impact the lives of real people through the pharmaceuticals, surgeries, behavioural programmes, devices, and talking therapies that health professionals subject them to. The author recognises this as a profound ethical problem, not least because the doctors who authorise these interventions, and the patients that receive them, trust that they are underpinned by a robust evidence-base.

Of great utility to the time-poor GP, the book lays out the key features of scientific research, practices around the publication (or not) of its results, and the appraisal of academic papers using suitable language for clinicians wishing to remind and update themselves of this landscape. The exploration includes what is usually central to the interpretation of scientific papers, and what is often most feared by those tasked with doing so — statistical analysis. The book explains these features by revealing how each can be, with alarming frequency and impact, misused and warped by researchers and journal editors. Each of these faults — specifically fraud, bias, negligence, and hype — is treated in its own dedicated chapter to describe how incompetence, carelessness, and even malfeasance and malice can infect and distort the products of scientific research. The result of such malpractice has led to the so-called 'replication crisis', which the author describes at the outset to powerfully make the case for the rest of the book. An autopsy of the causes of these problems explores the perverse incentives that exist within the academia industry, scientific research, and scholarly journals (this may be of particular interest to readers in academic primary care).

Science Fictions is an accessible and enjoyable read that is directly relevant to our work as GPs, useful for our much-needed critical appraisal skills, and fascinating to the curious mind that wishes to explore the behind-the-scenes going on that underlie the research we base our practice on.

Richard Armitage
GP and Honorary Assistant Professor at the

University of Nottingham's Academic Unit of Population and Lifespan Sciences.

Email: richard.armitage@nhs.net
[@drricharmitage](https://twitter.com/drricharmitage)

References

1. National Library of Medicine. Citations added to MEDLINE® by fiscal year. 2022. https://www.nlm.nih.gov/bsd/stats/cit_added.html (accessed 9 Feb 2024).
2. General Medical Council. *Good Medical Practice*. 2019. https://www.gmc-uk.org/-/media/documents/good-medical-practice--english-20200128_pdf-51527435.pdf (accessed 9 Feb 2024).
3. BMJ. Talk Evidence. <https://www.bmj.com/podcasts/talkevidence> (accessed 9 Feb 2024).

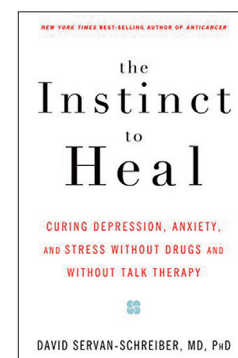
This article was first posted on BJGP Life on 20 Jan 2024; <https://bjgplife.com/scifi>

DOI: <https://doi.org/10.3399/bjgp24X736641>

* * * * *

The Instinct to Heal: Curing Depression, Anxiety, and Stress Without Drugs and Without Talk Therapy

David Servan-Schreiber
Rodale Press, 2004, HB, 288pp, £26.18, 978-1579549022



The medicine of emotions

This must be a first — a book review in English for a French book that I have read in the German translation. First of all, don't be put off by the title, it is a complete misnomer. This book is not about any 'instinct', it is as much about physical illness (morbidity and mortality) as mental health, and David Servan-Schreiber supports both drug treatments and talking therapy!

The German title, *Die Neue Medizin der Emotionen* (*The New Medicine of Emotions*), is more to the point, unfortunately with essentially the same terrible subtitle. This almost 20-year-old book has been sitting on my bookshelf

unread for at least a decade, and what made me pick it up is my recent interest in the history of emotions (see my latest book review¹). So I probably wouldn't have picked up the English version!

Servan-Schreiber was a French physician, neuroscientist, psychiatrist, and author. He sadly died in 2011 aged 50 from a malignant brain tumour. This book has been written for the general public, but it has an extensive reference section and bibliography. His academic credentials are not in doubt.

His starting point is that deep within the brain there is the 'emotional brain' (the limbic system), which is in both structure and in terms of its cells and biochemical properties distinct from the neocortex (or cognitive brain). The emotional brain functions independently of the neocortex — language as well as perception only have a limited influence on it. In turn, this 'emotional brain' has a direct impact on the body's physiology, including blood pressure, hormones, digestion, and the immune system. Emotional problems (and their bodily effects) can often be better addressed through methods that influence the emotional brain via the body, rather than rationally via the thinking brain.

He draws on academic and clinical research to present methods that have been shown to be effective. Yes, there are a couple of paragraphs that seem dated or rooted in French culture that sound a bit, well, 'French' to the German (or I imagine the English) reader, but the overall impression is that everything in here is still very relevant today — some maybe even more so than when he first wrote it.

In many ways, we have come a long way. For example, eye movement desensitisation and reprocessing (EMDR) therapy, which was then still regarded as very esoteric, is now generally accepted as a treatment for trauma, which Improving Access to Psychological

Therapies (IAPT) services are offering to our patients. On the other hand, omega-3 for the treatment of depression is not recommended by the NHS. The chapter on 'emotional communication' describes much of what recent medical graduates will hopefully have come across in their communication training, on which there is a much greater emphasis in medical training today than 20 years ago. It is now generally accepted that loneliness can literally kill people, and many societies including the UK are taking steps to counteract that.

This is a modern manual on how to live well. Servan-Schreiber summarises his advice in the last chapter, which I will paraphrase (rather than quote in German!).

The first step is to control our inner life. Everybody develops strategies of how to deal with difficult phases in life, which all too often involve cigarettes, chocolate, ice cream, beer, whisky, or TV (today he would probably reference gambling). Once medicine gets involved, tranquillisers (maybe more in France and/or more so in the past) and antidepressants get added. If 'consulting' friends rather than a doctor, this might instead be cannabis, cocaine, or heroin. The first treatment is to help a patient rediscover how to regulate their heartbeat and create a state of coherence (further explained in one of the first chapters). Then, if there are any difficult occurrences in the past that still cause burdensome emotions in the present, they could be addressed via EMDR.

Next, one has to become aware of any complicated affective relationships, in our personal (close family) or professional life (colleagues and superiors) — these can be improved by applying the principles of violence-free emotional communication. Having harmonious relationships will have a ripple effect on health and wellbeing. He advises changing the diet — his concrete advice is achieving a balanced intake of omega-3 and omega-6 fats

(which is not generally accepted today — however his wider emphasis on the Mediterranean diet is unchallenged), and exercise for 20 minutes, three times a week — run if you can, but walking if you can't is good enough, and it is now recognised that the people who most benefit from very moderate exercise are the ones who previously have done none.² Aligning our biological clock by getting a lamp that simulates the sunrise is beneficial not just for people who suffer from seasonal affective disorder, and he recommends acupuncture for people who beyond emotional and physical problems particularly have pain. Last but not least is the importance of finding a role within the wider community — if we are cut off from others, we are strangers in the world and to ourselves.

What title would I give to this book? I think I would stick with *The Medicine of Emotions*. My subtitle would be: *Making Life Better — for Yourself and Others*. Read it critically, look into how research in the past 20 years has furthered our understanding to support or refute the core ideas, and then put theory into practice.

Elke Hausmann

Salaried GP in Derby.

Email: zweitadresse@hotmail.com

References

1. Hausmann E. Books: The History of Emotions: A Very Short Introduction. *Br J Gen Pract* 2024; DOI: <https://doi.org/10.3399/bjgp24X736329>.
2. Department of Health and Social Care. *UK Chief Medical Officers' physical activity guidelines*. 2019. <https://assets.publishing.service.gov.uk/media/5d839543ed915d52428dc134/uk-chief-medical-officers-physical-activity-guidelines.pdf> (accessed 9 Feb 2024).

This article was first posted on BJGP Life on 13 Jan 2024; <https://bjgplife.com/instinct>

DOI: <https://doi.org/10.3399/bjgp24X736653>