

The limits of science

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I remember many years ago feeling rather disturbed when a fellow student declared: 'Love is only a load of chemical reactions.'

It turned out that she was just trying to provoke a discussion; she didn't actually believe this statement. Clearly, by my response, I did not believe either that the human experience of love could be reduced to a biochemical process.

I have since come to realise that my student friend's assertion is far from unusual or isolated. Francis Crick, Nobel Prize winner for his contribution to discovering the structure of DNA, expressed just such a belief in the following statement: "You", your joys and your sorrows, your memories and your ambitions, your sense of identity and free will, are in fact *no more* than the behaviour of a vast assembly of nerve cells and associated molecules¹ (italics added).

Much neuroscientific literature nowadays expresses similar beliefs, where an understanding of the structure, processes and functions of the brain invalidates the concept of mind. To scientific materialists like Crick, the belief that 'self' and 'personhood', for example, can be understood and described outside the domain of neuroscience is actually an illusion created by the brain.

I have increasingly been thinking about the influence of neuroscience on counselling/psychotherapy, partly in response to the number of clients who refer to their mental experiences or 'self' in neurobiological terms. My client Amanda is a good example of this. She struggles to cope with disabling anxiety and bouts of

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depression. When her despair is at its most acute she will often refer to her 'brain not working' and her hope that I can do something that will 'make it work properly again'.

I find this profoundly challenging. Certainly I do not dismiss the fact that we human beings are composed of billions of nerve cells engaged in electrical and chemical processes that are instrumental to our mental functions and consciousness. I am, however, left with some searching questions. Here are just a few.

Would I be letting Amanda down if I neglected to consider the possibility that her mental distress was (in part or even solely) the outcome of a biological process that might be amenable to some form of medical intervention – psychiatric drugs being the most common example?

How would such a consideration influence my relationship with Amanda and the therapeutic activity in which we are engaged?

Does moving into neuroscientific territory shift the discourse in ways that are helpful or unhelpful to Amanda? (I'm sure it will be different for each client.)

How does my consideration of what goes on in Amanda's brain influence how I see her and her difficulties?

How comfortable am I with the explanatory, causal

language of neuroscience entering the therapy space?

How much CPD time do I need to give to neuroscience and its relevance to counselling and psychotherapy?

Like Amanda, I am mindful that we are physical bodies, and I regard the brain as a wondrous biological apparatus of unfathomable complexity. However, even if neuroscience should one day understand fully the structure and workings of the brain, I do not believe this makes redundant questions about the nature of human consciousness, mental phenomena, human behaviour, personhood, our sense of identity etc. But I acknowledge that this is a matter of belief and philosophy, just as the scientific assertions of Crick and those like him are fundamentally built on a particular belief system.

What is true is that neuroscience will continue to develop and exert its increasingly powerful influence on numerous fields of human activity and endeavour, including counselling and psychotherapy. Perhaps we need to be more aware of the ways it shapes the therapy discourse and influences how we understand the processes of therapy, as well as how we practise. I think we also need to be alert to the ways that scientific knowledge and language can exclude or render inferior other forms of knowledge and understanding, particularly in a culture that is attached to scientific certainties.

And when someone declares that I am being unscientific, they are probably right, and I try to resist the impulse to defend myself. ■

Reference

1. Crick F. The astonishing hypothesis: the scientific search for the soul. London: Simon and Schuster; 1994.