

'In the blink of an eye' (March)

Emperor's new clothes?

STEPHEN JOSEPH asks whether EMDR is a pseudoscientific repackaging of existing psychotherapeutic factors dressed up in the emperor's new clothes of eye movements.

In the March issue of *The Psychologist*, Shapiro and Maxfield say that EMDR is an effective treatment for post-traumatic stress disorder. They point toward reviews by the International Society for Traumatic Stress Studies (Chemtob *et al.*, 2000) and the American Psychological Association (Chambless *et al.*, 1998). What is less evident from Shapiro and Maxfield's article is that the conclusions of these reviews were based on evidence that EMDR is *probably more effective than no treatment at all*. As McNally (1999a) notes, a similar conclusion might have been reached in the 18th century for the efficacy of Mesmer's animal magnetism therapy! It too was probably more effective than no therapy at all. However, scientists at the time concluded that any effect of Mesmer's therapy was probably due to the power of suggestion, thereby discrediting mesmerism. In contrast to this, the American Psychological Association committee set up to look at the empirical validation of treatments 'recently startled many psychologists by proclaiming EMDR as "probably efficacious for civilian PTSD"' (McNally, 1999a, p.235).

Eye movements are unnecessary

The fact that EMDR is an effective treatment does not imply support for the

role of eye movements, hand-taps, or audiotones. It is a fallacy to assume that just because a treatment works this tells us about *how* the treatment works. Shapiro and Maxfield are of course aware of this and in their article they say that the active ingredients, as they call them, are far from settled upon. But it is the eye movements that were the novel ingredient in EMDR and that give it its name. What is the evidence that eye movements are of any importance at all? McNally (1999b) writes:

...the novel component of EMDR (eye movements) adds nothing to the traditional imaginal exposure component... Therefore, what is effective in EMDR is not new, and what is new is not effective. (p.619)

More recently, the *Journal of Consulting and Clinical Psychology* has published a meta-analysis review of the EMDR literature (Davidson & Parker, 2001). Following computerised literature searches for studies published between 1988 and 2000 examining the effects of EMDR, Davidson and Parker selected 34 group comparison studies that had been carried out into the effectiveness of EMDR. Unlike more traditional literature reviews, meta-analysis is a statistical technique that allows the researcher to aggregate the

different results of lots of studies and reach an overall conclusion. What Davidson and Parker (2001) concluded was this:

In sum, EMDR appears to be no more effective than other exposure techniques, and evidence suggests that the eye movements integral to the treatment, and to its name, are unnecessary. (p.305)

Presumably Shapiro and Maxfield were not aware of Davidson and Parker's article at the time of writing theirs. The evidence just does not support the claim that EMDR is an important new therapeutic discovery. Most importantly, the evidence does not show eye movements to be an active ingredient. Rather, the evidence points toward EMDR being nothing more than a repackaging of existing therapeutic techniques. Hyer and Brandsma (1997) discuss how EMDR is successful simply because it applies common and generally accepted principles of psychotherapy. For example, they argue that EMDR is based on the idea dating back to Carl Rogers that the client will move towards positive growth given the right environment. They also argue that EMDR respects the position of the client with the application of a method that is non-directive over content and therefore empowering to the client.

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EMDR as pseudoscience

Other critics, Herbert *et al.* (2000) for example, have claimed that EMDR has many of the characteristics of 'pseudoscience'. They argue (see www.pseudoscience.org) that EMDR is pseudoscientific because although it has been presented by its proponents using the language of science, the rigours of scientific investigation have not been followed. Whereas the scientific approach is to proceed cautiously, first building up the evidence base before introducing a new therapy, a pseudoscience claims to do this but in reality introduces the therapy without the evidence. The fact that over 25,000 therapists have trained in EMDR when the best evidence now suggests that EMDR is no more effective than other exposure techniques, and that the eye movements are unnecessary, certainly suggests that the

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therapy has come before the data. Put it this way: given the results of Davidson and Parker's meta-analysis, if EMDR did not already exist, there would now be no reason to invent it.

But not only has EMDR already been invented, it has been accompanied by complex theoretical speculations on accelerated information processing mechanisms and on how eye movements might affect the central nervous system. A key tool in Carl Sagan's (1996) 'baloney detection kit' is Occam's Razor. Simply put, Occam's Razor is a convenient rule of thumb that says that when we are faced with two explanations that explain the data equally well, we should choose the simpler of the two. If EMDR is effective, but it is no more effective than exposure, and it actually involves exposure, Occam's Razor tells us that EMDR is probably exposure. There is no compelling scientific reason to invoke more complex theoretical frameworks. As noted above, the scientific approach would be to gather the evidence first.

However, studies into the role of eye movements have only appeared in the last few years (e.g. Andrade *et al.*, 1997; van den Hout *et al.*, 2001). The results of these studies suggest that there might be some therapeutic value in eye movements, and it might well turn out yet that Shapiro has indeed stumbled upon one of most

important therapeutic discoveries of all time. But at the moment we simply don't know enough to warrant the existence of a fully developed therapeutic approach based on eye movements or any of the other dual-attention tasks. Shapiro's approach, even if pseudoscientific, might turn out to be a catalyst for the experimental work into eye movements that will in the end lead to the development of important new therapeutic techniques. But equally plausible is that EMDR will prove to have been a distraction from a more worthwhile research agenda and in time we will look back and view EMDR in the same way that we now view phrenology and mesmerism.

EMDR stands out because of its seemingly bizarre protocol. But much of what has been said about EMDR might apply more widely. Other recently introduced therapies like dialectical behaviour therapy, functional analytic psychotherapy, and acceptance and commitment therapy, can also be accused of 'getting ahead of the data' (Corrigan, 2001). Indeed, Garfield (1996) argues that many of the current recommendations for effective therapies are premature. The story of EMDR raises questions about what ought to constitute evidence for the recommendation of a psychological treatment.

Senior (2001) reminds us that the importance of the EMDR debate is because of the duty of care we owe to our clients. She quotes Rosen as saying:

Clinicians may find themselves in front of reasonable fellow citizens, having to explain why they waved fingers in front of a patient's face, when studies failed to support the miraculous claims made in the late 1980s by the founder of EMDR. (p.363)

Given the statements from the various professional bodies that EMDR is probably efficacious, and simply recognising the difficult day-to-day clinical reality of working with clients who are extremely distressed, it is not surprising that many individual clinicians have adopted EMDR into their ways of working. Many clinicians say that they have found EMDR very useful and that it has helped them to work with clients who they would otherwise have found difficult to engage. There is perhaps something interesting in the mix of how the EMDR therapist is non-directive over content and trusting in the positive growth processes of the client, while simultaneously engaging the client in

imaginal exposure. Nevertheless, the adoption of EMDR so readily without the appropriate evidence does not do any favours to the reputation of those whose status is supposedly based on the idea of scientific progress and evidence-based practice.

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