



Commentary: EMDR, RCTs, and the Proliferation of Trademarked Acronyms

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Abstract

Eye Movement Desensitization and Reprocessing (EMDR), while recognized as evidence-based, continues to be viewed as a novel and controversial treatment. At the same time, numerous alternative eye movement therapies have been introduced, each of which requires its own set of randomized controlled trials (RCTs) to assess remarkable claims of cure. The present situation is untenable in our opinion because any clever entrepreneur can claim a new method and trademark a new acronym. Recommendations are made for more stringent criteria to establish science-based methods that guide clinical practice.

Keywords EMDR · Eye movements · RCTs · Evidence-based · Science-based

Spiritualism in America tested the wits of scientists. Consider the nineteenth century phenomenon of table turning and claims that the dead communicated with the living by moving furniture. Looking back on this history, Pankratz (2021) reported that those who believed in table turning evaluated every imaginable variable, including the possible influence of weather, table construction, and personality traits of séance leaders. Pankratz observed: "The variables were endless- and ridiculous... men of science daily forwarded the results of their research to medical journals, all

declaring their open-mindedness (p. 272)." Studies seeking a more rational explanation found that "quasi-involuntary" movements performed by séance sitters accounted for tables moving, rather than any occult force (Faraday, 1853; Page, 1855; Pankratz, 2021).

Fast forward to 1989 and the introduction of Eye Movement Desensitization and Reprocessing (EMDR), a novel treatment approach promoted by Francine Shapiro (1989). As with spiritualism, EMDR has tested the wits of scientists at every turn, including its undisclosed origins in the theories of Neuro-Linguistic Programming (Rosen, 2023); Shapiro's never to be replicated report of a 100% treatment response (Shapiro, 1989); the pairing of novel eye movements with known mechanisms of change (e.g. exposure, cognitive reframing); Shapiro's implausible theories, changing methods, and dismissal of negative results (e.g. DeBell & Jones, 1997; Devilly, 2002; Herbert et al., 2000; Lohr et al., 2015; Rosen, 1999); the confound of allegiance effects impacting randomized controlled trials (RCTs; Cuijpers et al., 2020); and the method's trademarked status, proprietary workshops and other promotional efforts (Herbert et al., 2000). Despite these concerns a set of positive findings took precedence and EMDR obtained recognition as an empirically supported treatment (EST). Now the door was opened for competing eye movement therapies to enter the marketplace.

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Competing Acronyms and RCTs

Nineteenth century spiritualists had various means by which they could communicate with the dead (e.g. Ouija boards, trumpets, spirit cabinets). Similarly, today's mental health professionals can choose among several trademarked eye movement therapies. One alternative to EMDR, also derived from NLP theory, is Eye Movement Integration (EMI): an approach that extols the benefits of slow paced, multi-directional eye movements. Integral Eye Movement Therapy (IEMT) focuses on feelings and multiple events. Accelerated Resolution Therapy (ART) claims that its faster-acting eye movements are easier to learn. EMDR 2.0 and Rapid Eye Technology (RET) similarly claim advancements over Shapiro's methods. Brainspotting (BSP) doesn't use eye movements at all. Instead, it recommends that patients maintain a fixed gaze, a rather ironic innovation given that others emphasize the putative necessity of eye movements. Visual Schema Displacement Therapy (VSDT) employs the most novel of all methods. During VSDT sessions, a watch is moved in circular fashion while the patient identifies at what position a happy memory makes them feel like laughing and at what position an aversive memory causes the most disturbance. The watch is then moved between the two identified points after which the therapist suddenly and loudly shouts "whoosh".

Those with an interest in eye movement therapies can explore the internet to appreciate the current landscape of these numerous trademarked treatments, accompanying claims of cure, and related international societies linked to specialty certification programs. Then take a deep breath and consider how each post-EMDR acronym requires its own set of RCTs to evaluate claims of extraordinary success. A recent RCT by Matthijssen et al. (2021) exemplifies how untenable is our current circumstance. In that study, healthy participants recalled a negative emotional memory under one of six conditions: an abbreviated form of EMDR; a standard form of VSDT; VSDT without shouting "Whoosh;" VSDT using fixed eye positions; VSDT without a happy point; and a control condition in which participants were told to do nothing and just relax. Emotionality and vividness of their aversive memories decreased under all procedural variants, which could have led the authors to discuss placebo effects or the possibility that VSDT was a hodgepodge of unusual and likely inert elements packaged in a brand-new bottle. Instead, the authors stated: "... because VSDT is remarkable (sic) effective, replication of the present findings in a clinical sample is strongly needed." Matthijssen et al. went even further and suggested that blinking and sighing might be worthy of investigation as active ingredients

in VSDT. Here, one is faced with limitless variables for future research and new trademarked acronyms. What if other words or phrases (e.g. "Shazam") are more effective than simply shouting "Whoosh"? Once the most effective verbal prompt is identified should it be paired with lateral, circular, or fixed eye positions? Might there be interaction effects? The possibilities are endless and raise a question of primary concern: When does a proposed method variant, however trivial, warrant a new acronym and a new round of RCTs?

Stop the Madness! There is a Better Way

Imagine that all of the competing eye movement patterns (EMDR, EMDR-2.0; EMI; IEMT; ART; RET; BSP; VSDT) become routine practice among mental health professionals and the door opens for crystal therapies to be paired with exposure and cognitive reframing. Researchers might then conduct RCTs to evaluate how hard one should squeeze the crystal while conjuring up an aversive image. They could explore if individuals should hold the crystal in their dominant hand or if cures were better achieved by using the opposing limb. Additional studies could assess if aromatherapy benefited treatment, leading perhaps to a trademarked therapy called Reinforced Exposure with Aroma and Crystal Healing (REACH). If it should turn out that research on VSDT finds that "Shazam" is the most powerful word a clinician can shout then wouldn't it follow that another RCT would be needed to see if the same effect carried over to REACH? If all this sounds too preposterous, then what does it say about Matthijssen et al. (2021) and all the future RCTs on competing eye movement therapies?

The growing absurdity of the current situation was foreseen by Rosen and Davison (2003, p. 305):

Hypothetically, a doctor could ask clients with driving phobias to wear a large purple hat while applying relaxation and cognitive coping skills to in vivo practice. The places a band of magnets in the purple hats, claiming that particular algorithms for positioning the magnets are determined by age, sex, and personality structure of the client. When properly placed, so the practitioner claims, the magnets reorient energy fields, accelerate information processing, improve interhemispheric coherence, and eliminate phobic avoidance. The inventor might call his method "purple hat therapy" (PHT) or "electro Magnetic Desensitization and Remobilization" (eMDR).

The core problem here is that the current framework for determining evidence-based therapies leaves clinical psychology open to any clever entrepreneur who claims a new method, trademarks an acronym, conducts the required

RCTs with only no-treatment comparisons, and obtains evidence-based status (Chambless & Hollon, 1998; Hollon et al., 2014). Adding to this unfortunate situation, RCTs can be designed to advance the goals of an investigator by maximizing allegiance effects, cherry-picking outcome measures, recruiting non-clinical student participants, employing only no-treatment controls, and turning the burden of proof upside down by providing weak tests of a novel therapy. When positive findings are obtained from these custom designed RCTs the results are praised often in complete disregard for the full network of findings that pertain to construct validity issues. Should negative findings occur then treatment methods are criticized for lack of fidelity or flawed control conditions. For an amusing take on how RCT's can be misused see Cuijpers and Cristea (2016). These authors provide a fairly complete guide on how to prove a favored treatment is effective even when it's not.

On balance, and not unlike nineteenth century spiritualism, eye movement therapies have created their own world with novel methods, specialized terms, and implausible theories. Practitioners and researchers who wish to see past the distorted lens of this alternate reality should focus their attention on mechanisms of change (Davison, 2000; Rosen & Davison, 2003), Lilienfeld's (2019) distinction between *science-based* vs evidence-based practice, and this single therapy process question, namely: "How can clinicians best structure method variables that are based on experimentally established principles of change (e.g. real life versus imaginal exposure) to maximize meaningful treatment outcomes (Davison, 2000; Lohr et al., 2012)?" Within this framework clinicians might address how best to conduct real life or imaginal exposure so as to match the tolerance levels and coping styles of their patients. Researchers could investigate if competing tasks (e.g. moving eyes, shouting, counting) influence treatment outcome, reduce the intensity of exposure, tax working memory, or from a less sanguine point of view increase expectancies and demand effects by presenting novel tasks that tax credulity. Notice how these clinical and research issues can be addressed without ever mentioning trademarked therapy acronyms, institutes, workshops, or certifications.

In support of a science-based stance, professional organizations must revisit and revise the weak criteria that have been used to determine evidence-based status. The task will be to assure that the burden of proof falls on those who promote novel techniques and advance improbable claims, thereby constraining those who take on the imprimatur of science but abuse its rules and methods.

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