Reprocessing or Repackaging? Placing Eye Movement Desensitization and Reprocessing in the History of Modern Psychotherapy

Peter J. Behrens, Ph.D.

Department of Psychology Penn State Lehigh Valley Center Valley, PA, USA.

Caroline L. Andersen, M.S.W.

School of Social Policy & Practice University of Pennsylvania Philadelphia, PA, USA.

Overview and Origins

Eye Movement Desensitization and Reprocessing (EMDR) is a relatively recent therapeutic intervention in American clinical psychology, the result of the work of Francine Shapiro (b. 1948). It is included in the category that has come to be composed of a variety of interventions known generally as *exposure therapy* (Shapiro, 1995). Although EMDR's efficacy in the treatment of PTSD has received considerable support in the literature, an examination is in order directed at the historical and American cultural context which facilitated its rapid trajectory onto the psychotherapeutic landscape and led to its techniques, clinical protocol, and professional legitimization from the point of its inception in the last decades of the 20th century to the present, and as it relates to both traditional and contemporary alternative therapies in terms of the efficacy of methods and in a determination of true distinctiveness that establishes places it apart from other psychotherapies.

EMDR is an intervention that has attempted to distinguish itself from other therapies in method and results with exuberant claims. Its origins, not unlike other therapies in the history of psychology, derive from the work of a single individual, yet there is little precedence for the rapid development and acceptance of EMDR within the psychotherapeutic community. Furthermore, it is of value to examine the ontological factors within EMDR that may bring into question its distinctiveness in comparison to other therapies. In this regard, the principle of suggestibility will be offered, a potent but frequently overlooked variable for understanding the efficacy of EMDR and related therapies.

From her own account, Shapiro in 1979 was a high school English teacher on the verge of completing her dissertation in English literature at New York University on Thomas Hardy. Until then, psychology was only a side interest, but a diagnosis of cancer began a journey for her that shifted her professional and personal attention to the study of psychoneuroimmunology based on the work of Norman Cousins and others (Shapiro, 1995). She devoted herself to learn about the physiological and psychological methods to enhance physical health by participating in numerous workshops and programs that taught stress reduction, self-enhancement, and mental and/or somatic self-care procedures. The connection between disease and stress became obvious to her (Shapiro, 1995) and she enrolled in the Professional School of Psychological Studies in San Diego, an unaccredited, now defunct, California school ("The Diploma Mill"), to obtain psychology licensure.

Then it was in 1987 that she had a "day of discovery" (Shapiro, 1995). It was an accidental discovery that recurring, disturbing thoughts suddenly disappeared and did not return when accompanied by saccadic eye movements. She recalled the event that would become the singular, most enigmatic moment in the history of EMDR:

While walking through the park one day, I noticed that some disturbing thoughts I was having suddenly disappeared. I also noticed that when I brought these thoughts back to mind, they were not as upsetting or as valid as before.

(Shapiro, 1995, p. 2)

This landmark experience reported by her was the watershed event that led to her exploration into the effects of saccadic (rapid) eye movements on traumatic memory and her attempt to wed psychological trauma to hypothesized physiological pathways.

Albeit subjective and personally profound, the incident has taken on an unusually distinctive character subsequently recounted by Shapiro (Shapiro, 1995; Van Nuys, 2007); by many EMDR enthusiasts (e.g., Luber, 2010; Rosen, 1995; Tolin, Montgomery, et al., 1995); and even has taken on something of a mystical character as the "famous walk in the park" (Hensley, 2009). Curiously, in the van Nuys (2007) interview, she could not or would not deviate even grammatically from her original published recount from more than 10 years earlier (Shapiro, 1995). Nor has she ever subsequently described the context of her experience, other than referring to the "park." One would be hard-pressed to find a comparable report of a subjective experience that carries with it such authority or significance for the birth of an important psychotherapeutic movement. Indeed, it may very well be the unusual combination of a "mystical" and "pedestrian" event that intrigued and persuaded practitioners.

For her dissertation, Shapiro applied her new-found technique for trauma therapy to a small caseload of 22 Vietnam veterans and victims of sexual abuse to demonstrate the beneficial effects of saccadic eye movements on disturbing thoughts. Results from the procedure and the report she received in 1989 that she was free from cancer sealed Shapiro's contention that a connection existed between physiological and psychological well-being and the immune system (Shapiro, 1995). She was awarded the doctoral degree in 1989.

Her dissertation was published in the *Journal of Traumatic Stress* and defined the eye movement desensitization technique:

The investigator has developed a technique, the Eye Movement Desensitization (EMD) procedure, which on the basis of clinical observation appeared to be extremely promising in the treatment of traumatic memories and stress-related symptoms. The primary component of the EMD procedure is the generation of rhythmic, multi-saccadic eye movements while the client concentrates on the memory to be desensitized. (Shapiro, 1989a, p. 201)

A second paper was published on invitation from the *Journal of Traumatic Stress* the same year, which proposed saccadic eye movements as a "new treatment" for post-traumatic stress, deemed "extremely effective." As validation of EMD, Shapiro offered a physiological model based upon Ivan Pavlov's inhibitory/excitatory processing. This, she averred, was the underlying neural mechanisms for sensitization and desensitization (Shapiro, 1989b).

From the outset and to her credit, Shapiro recognized that the *neurological* basis for her procedure was neither clear nor derived from any substantive theoretical position. But it was useful, and even preferable, to existing behavioral therapies, such as systematic desensitization (Wolpe 1982) or flooding (Keane & Kaloupek, 1982; Cooper & Clum, 1989). Despite the absence of validation by controlled experimental procedures, such as might be accomplished by double-blind designs, Shapiro proclaimed that traumatic memories could be significantly reduced or even eliminated in a *single session* of treatment. She drew this inference from the results achieved with her clinical cases in her dissertation and further asserted that the treatment effect could be maintained "virtually unchanged" in follow-up sessions:

Follow-up measures obtained as many as 12 months later have revealed that the memories continue to be desensitized, cognitions restructured, the pictures remain altered or difficult to retrieve, and the therapeutic effects on presenting complaints persist. (Shapiro, 1989a, pp. 216-217)

The long-awaited "cure" for PTSD seemed to be at hand, thanks to the technique of EMD, soon renamed EMDR (Shapiro, 1991a).

The Historical Context in the Rise of EMDR

It is unusual in the history of psychology for a therapeutic modality to rise to prominence, generate so much literature, produce so many areas of application, and attract so many practitioners as EMDR did in about one decade - - not Freudian psychoanalytic psychotherapy, not Gestalt therapy, not even behavior modification. EMDR seemingly came out of nowhere and took center stage, especially without external validation from controlled studies or a sound theoretical grounding. However, the relatively sudden appearance of alternative and nontraditional forms of psychotherapy in clinical psychology is not new, nor should it be surprising.

One can identify a small number of approaches over the last several centuries, such as 18th century mesmerism, that made significant impacts on the practice of psychotherapy as a result of specific, contextual factors. For now, though, the observation can be made that several factors appear to have combined quite conveniently and rapidly to help propel EMDR into the spotlight and contributed to its character and influence that defines it today.

To begin with, the rise of EMDR occurred in the context of demands on the American psychotherapeutic community at a time that the newly defined syndrome call post-traumatic stress disorder (PTSD) appeared in the 1980 (third edition) of the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association (APA, 1980). Areas of growing concern expressed by the PTSD diagnosis were traumarelated memories presented in symptoms of patients who had experienced physical and sexual assault, catastrophic natural events, and combat-related stress. The latter was identified by the U.S. Veterans Administration in a disturbingly large numbers of combat veterans from the Gulf War, Vietnam conflict, the Korean War, and World War II.

Proponents of eye movement therapy, like Danie Beaulieu, criticized extant approaches, such as variations of psychodynamic psychotherapy and hypnotherapy, as well as the newer cognitive and behavioral therapies, such as systematic desensitization and biofeedback training (Beaulieu, 2003). Beaulieu contended that "clinging to the expectation that the rational mind is capable of resolving all problems dooms the therapist to frustration – and too many of our clients to a lifetime of supportive therapy and medication that control, but do not relieve, the pain" (Beaulieu, 2003, p. 5). Such critics asserted that supportive therapy was at least moderately effective, but inconsistent. Above all, they were time-consuming (Rose, 1986).

Beaulieu practiced and furthered Eye Movement Integration (EMI) therapy, which was originally developed by Connirae and Steve Andreas in 1989; the same date as Francine Sharpiro's first publication on EMDR. Regarding similarities between the two methods, both emphasize the importance of supervision and training workshops for the practitioners (Beaulieu, 2003); both make use of non-verbal cues and sensory experiences in line with Gestalt methods (Beaulieu, 2003); and patterns and segments are employed to generate eve movements. When compared to other psychotherapeutic approaches, eye movement techniques are concerned with somatic manifestation of psychological pain and do not give as much emphasis to the cognitive aspects of trauma (Beaulieu, 2003). Unlike EMI, though, EDMR, does employ some level of conscious cognitive restructuring (Beaulieu, 2003).

Recounting the origins of EMI, Beaulieu distinguishes EMI from EMDR (despite the significant similarities in protocol) only in terms of Shapiro's creation narrative: "It wasn't invented in the blink of an eye, or inspired by a dream, but was carefully created by two highly skilled developers of Neuro-Linguistic Programming" (Beaulieu, 2003 p. 5). She claims to have learned about EMDR in 1996, 7 years after the original publications by Shapiro and attributes the lapse to geographic and language barriers associated with being situated in Quebec, Canada (Beaulieu, 2003). In a word, Beaulieu carefully tried to distance EMI from EMDR, perhaps suspicious of Shapiro's rather unorthodox entrance into the therapeutic community.

As late as the early 1980's, direct therapeutic exposure (DTE) was hardly ever the therapy of choice for a variety of reasons, not the least of which were concerns and focus on the serious gender issues surrounding traditional psychotherapies. Any focus on the trauma itself was not viewed as productive and could even perpetuate genderbased differences in treatment. In Women and Psychotherapy, Brodsky and Hare-Mustin proposed that "focus on the traumatic event may obscure the important information about the woman's background that should be addressed in therapy and in the evaluation of outcome" (Brodsky & Hare-Mustin, 1980, p.402).

But early reported results with PTSD patients treated by Shapiro (1989a) and others (e.g., Vaughan, et al. 1994) using saccadic eye movement seemed gender-neutral and demonstrated that DTE in the form of EMDR produced a rapid diminution of symptoms, often in just one session (Shapiro, 1995). It is not surprising, then, that many therapists frustrated with less dramatic treatment outcomes for PTSD rushed to embrace the new procedure. Within just 5 years after Shapiro's initial 1989 articles, a large number of both controlled and uncontrolled studies were published on hundreds of patients successfully treated with EMDR (Acierno, Hersen, Van Hasselt, & Tremont, 1994). For example, Young reported the elimination of symptoms in a 46-yr-old Vietnam veteran within 1 60-min session. There was a dramatic resolution of 2 traumatic memories in which the subject reported nearly no distress upon recalling the memories. At 9-mo follow-up, intrusive images and fearfulness were still gone (Young, 1994).

In her 2007 Wise Counsel podcast interview with David van Nuys, Shapiro suggested that cognitive-behavioral therapy would take 40-100 hours of hallmarking to achieve the same results that EMDR can achieve in just a few sessions.

Continuing reports of success with the EMDR procedure made the broader field of psychotherapy take notice. At least in the earliest years, any therapist with a pencil to wave and a pad of paper to record stress response levels could practice EMDR.

Thus, another factor in the growth of EMDR therapy was its early *accessibility* to therapists. For example, Wolpe and Abrams (1991) reported the case of a female diagnosed with PTSD precipitated by a rape 10 years earlier. Unsuccessful attempts to treat the patient with psychodynamic and relaxation therapy were followed by a completely successful treatment with eye-movement desensitization. And this is just one of dozens of reports through the mid-1990's that satisfied EMDR adherents of its efficacy for PTSD and an increasing range of stress-related disorders, many of which, like phobias, met the clinical criteria for *DSM* diagnoses (cf., Bauman & Melnyk, 1994; Sanderson & Carpenter, 1992). The primary validation of the therapy, however, came from patient subjective evaluation of the change in level of distress of the memories. More on this will come later in this paper.

For the psychotherapeutic community to "take notice" of EMDR in this short period of time required a means of dissemination of results from studies and cases. This was in place for Shapiro and her like-minded practitioners in 1989 through existing societies and journals and would expand with the introduction of the electronic medium of communication. So, to further understand the trajectory of dissemination of efficacy, a count was made of EMDR research between 1989 and 2000, based on two independent reviews of the literature (Acierno et al., 1994; Herbert et al., 2000). In these reviews, studies were identified as controlled or uncontrolled case studies and studies which made comparisons between EMDR and other therapies. In all, 33 journals were found to have published 69 studies, some under the auspices of the American Psychological Association through its divisions (e.g., *Journal of Consulting and Clinical Psychology*) and many others by means of journals associated with independent societies (e.g., *Journal of Behavioral Therapy and Experimental Psychiatry*). Included are digitized journals and newsletters that could rapidly spread the EMDR "gospel," such as the *Electronic Journal of Traumatology*, founded in 1995. The analysis is represented in Figure 1 with the clear indication that the publication of EMDR research corresponds well to its peak years of growth by a community of practitioners as a therapeutic tool.

In addition, one could argue that national and international professional meetings also could contribute to the popularization of EMDR. The unorthodox protocol, the simplicity of procedures, and the success stories were likely irresistible to conference organizers and promised lively conference sessions. Indeed, Shapiro reported 32 conference papers on EMDR in national and international forums between 1989 and 1994 (Shapiro, 1995), including Sydney, Australia, Paris, Stockholm, and Buenos Aires, as examples. Geography was no barrier, either, for practitioners. EMDR research and practice sprang up literally around the globe, unimpeded by language or complex philosophical or theoretical foundations - - just the waving of a pencil.

Given the generally positive reception of EMDR by the mid-1990's, and even with growing skepticism raised by more than a few detractors (cf., Acierno et al., 1994; Herbert et al., 2000; McNally, 1999), another major development was without precedence in the modern history of psychology and appears to have been unique to EMDR. Shapiro moved to strictly codifying EMDR protocol in an attempt to restrict its practice to "qualified" practitioners.

Controlling the Practice of EMDR

Soon after Shapiro's 1989 publications, the veil of specialized training began to descend on the practice of EMDR by Shapiro and her close associates. Seminars conducted by EMDR Incorporated and the EMDR Institute established "safeguards" for training and practice. These steps reflected, by her own admission, concerns about the proliferation of EMDR practice and fears of ethics violations and incompetence in practice (Shapiro, 1991b). These rationales, however, also suggest an attempt to limit the practice EMDR, reminiscent of the defensive posture taken by Sigmund Freud when his enthusiastic followers began to practice psychoanalysis beyond his watchful eye as creator and arbiter. Specifically, control of EMDR took several forms. These include a strict protocol and set of procedures for its practice; channeling the research and clinical activities through the sanctioned community by workshops, conferences, and media; and establishing a multi-leveled credentialing process for practitioners.

None of this, of course, addresses directly the scientific validity of EMDR, such as methodology or ethical issues. Acierno et al. (1994), for example, point to the lack of experimental control in EMDR studies to establish treatment efficacy. In fact, many reports of EMDR "successes" have been based solely on case histories. Furthermore, there is considerable reliance in the EMDR protocol on clinical impressions of the severity of trauma, and even results obtained from so-called objective instruments are themselves subject to clinician bias.

Finally, the subject bias inherent in the EMDR Subjective Understanding of Distress scale (SUD scale), a cornerstone of the protocol, offers a connection to the sanctioned practice of EMDR and the growing target for a reexamination of its uniqueness. The scale has patients rate their "feelings" on a 10-point level of distress, from "0" that represents no stress to "10" that represents maximum stress. The level chosen by the patient after each set of saccades is taken to be the representation of the traumatic picture in memory referred to as a "physiology check" (Shapiro, 1995). Other critical accounts of the EMDR protocol which have convincingly addressed its clinical limitations and shortcomings, but they are beyond the scope of this paper (cf., Benish, Imel, & Wampold, 2008; Denicola, 1993; Mueser & Herbert, 1993; Taylor et al., 2003).

Criticisms notwithstanding, an increasingly strict protocol evolved between 1989 and 1995 to sanction the practice of EMDR. Initially, Shapiro gave patients a series of instructions to visualize, rehearse, and concentrate on the traumatic memory and rate its distress on the SUD scale, followed by a series of rapid (2 per sec) saccadic eye movements over a period of about 60 min (Shapiro, 1989a). All of this was summarized as a 4-step process. By 1995, the process had changed significantly, and the original "deceptively" simple procedure was replaced by an 8-step treatment plan which required training from EMDR-authorized instructors and training seminars (Shapiro, 1995; van Nuys, 2007).

Furthermore, an EMDR community arose to sanction the scientific identity of EMDR through conferences, workshops, and print and digital media, thereby creating a "scientific community" for EMDR. For example, "memory networks," "information processing," and "neural networks" were taken from the broader psychological and neuropsychological literature as explanatory scientific processes related to traumatic memories that could then be desensitized and reprocessed (Shapiro, 1995). To support this, *The EMDR Network Newsletter* was begun in 1991 and in 2006 was renamed the Journal of EMDR Practice and Research with both print and on-line versions.

Scientific identity, as in other areas of psychology, promises much: membership in a community of professionals; achievement of specialized knowledge not open to a larger community; a rigorous initiation process leading to acceptance and status; ownership of standards of practice that signify excellence; fulfillment of ideals related to worthwhile service to humankind and society; and, yes, maybe even attainment of fame and fortune in academia or professional community.

Centralized credentialing entered the picture for EMDR remarkably soon after Shapiro's 1989 articles. The EMDR Professional Issues Committee was established as "an independent watchdog" in 1991 to oversee training. And the EMDR International Institute is responsible today for credentialing all practitioners. Periodic testing and payment of membership dues affirm the practitioners' professional and financial investment in the community. Applications to be certified are carefully evaluated and approved by clinicians who themselves have been certified. At the end of training, clinicians are "licensed" to perform EMDR therapy, even though state and Federal laws to not apply. As an example, Andrew Leeds, a psychotherapist in private practice and author of A Guide to the Standard EMDR Protocols received his initial EMDR training in 1991 and became an EMDR training supervisor that same year. In 1993, he became an EMDR trainer and "has conducted EMDR trainings for 15,000 clinicians at 140 training programs in the United States, Canada, France, England, and Japan" (Leeds, 2009, p. ii).

Practice in the Granfalloon

Herbert and colleagues (Herbert et al., 2000) use Vonnegut's (1976) concept of the "granfalloon" to characterize the EMDR community as a pseudoscience: a granfalloon is a proud and meaningless association of human beings. Granfalloons:

...are easy to create and establish a sense of social identity among the consumers of the persuasive message. Once such a group has been established, individuals become reluctant to express beliefs that are inconsistent with those of the group. (Herbert et al., 2000, p. 959)

In the EMDR granfalloon, training occurs by a special category of seasoned professionals called "facilitators." Facilitators train trainees, who, in turn, agree *not* to train others and agree to attend workshops to learn distinctive treatment protocols and clinical applications. At the end of training, trainees are awarded special privileges in the EMDR Network, such as a newsletter subscription (e.g., Luber, 2007), participation in the electronic mail list, patient referrals, and membership in the EMDRIA, the Eye Movement Desensitization and Reprocessing International Association (Herbert et al., 2000).

More recent examples of psychotherapeutic protocols that appear to meet the criteria for a granfalloon are that encompassing the practice of Dialectical Behavior Therapy (DBT) and Eye Movement Integration Therapy (EMI), both of which represent variations on exposure therapy. Originally developed by Marsha Linehan, DBT is a model of behavior change for mood and anxiety disorders, addiction, impulse control, and other clinically significant diagnoses largely derived from cognitive-behavioral principles of mindfulness, emotional regulation, stress tolerance, and interpersonal relationships (Linehan, 1987). EMI, on the other hand, has its origins in neuro-linguistic programming, which recognizes the connection between the linguistic and neurophysiological representations of the world (Beaulieu, 2003).

Finally, McNally (1999) has presented historical parallels between EMDR and an ancient form of a granfalloon, mesmerism. As examples, he makes the point that both Mesmer and Shapiro established commercial training institutes and professional organizations for their therapies; that both have been criticized for insisting that their trainees not teach others their techniques; and that claims of global historic significance have been made on behalf of both mesmerism and EMDR.

The Role of Suggestibility in EMDR and Related Therapies

The question remains, though, if there is an ontological understanding of EMDR that informs its narrative in the history of psychology. Shaping outcomes of psychological treatments, the principle of suggestion as represented by the hypnotic state is proposed here as a potent but frequently overlooked variable for understanding the efficacy of EMDR and other variants in psychotherapy that depend on cognitive restructuring for their positive outcomes (e.g., Beaulieu, 2003; Linehan, 1987).

The leading example in the history of medicine is the treatment of hysteria, beginning with Anton Mesmer (1734-1815). Mesmer achieved a modicum of success in Paris in the 1770's with his trance-induction procedure, albeit he had his patients sit around a tub (the *baquet*) of various chemicals, out of which protruded iron bars placed to the affected areas of their body. The room was darkened; Mesmer made his appearance in a lilac robe; he passed from one patient to the next and touched them with his hands or a wand; and the hysterical symptoms were removed (Coleman, 1964; McNally, 1999). Although branded a charlatan and forced to leave Paris, modern psychiatry and psychology agree that his technique contained fundamental characteristics of the hypnotic state later seen in the therapeutic protocols of physicians of the Nancy school, such as Liebeault and Bernheim, and with Charcot in Paris (Coleman, 1964; Nietzel, Bernstein, & Millich, 1991; Sue, Sue, Sue, & Sue, 2013). Their work demonstrates the significant contribution of *suggestion* to the course of hysteria and its treatment.

The orthodox formulation of the *treatment protocol* developed in the 19th century with the rise of psychoanalysis further illustrates the connection between efficacy and suggestibility. After all, psychoanalysis is a psychosomatic theory as well as a psychodynamic theory. A mind-body dichotomy is validated through the use of hypnosis: that there is an altered state of consciousness, quite different from wakefulness and sleep; that there is a particular induction procedure; that the hypnotic state is the causative agent in producing responses to suggestion; and that the degree of hypnosis affects the phenomenon. The conscious-unconscious construction of the mind implicit in this protocol views the hypnotic procedure as one road to the exposure and examination of the malady, whether it takes the form of hysteria or neurosis.

Suggestion as the human tendency to incorporate information provided by others into one's own recollections and beliefs is, in this argument, the common thread among restructuring therapies, including EMDR (Schacter, 1999). The recollection or belief is represented either as a damaging problem to be minimized or as a backward tendency to be overcome (Clark, 1998). For example, Elizabeth Loftus designed a series of studies demonstrating how subtle suggestions could shape erroneous memories at subconscious levels. She provided clear evidence that suggestive interviews can_lead to profound errors in eyewitness accounts (Zaragoza, Belli, & Payment, 2006). The disturbing implication is that erroneous thoughts and assumptions are subject to materialization. In a criminal justice setting, this could be the prosecution of innocent persons. Misinformation induced by suggestion can indeed have devastating effects.

The role of suggestion for positive outcomes, by contrast, appears much more sporadically in the literature, but may still be proposed as the mechanism. It is a framework designed to aid the client in challenging negative conceptions and restructuring thoughts to generate self-selected outcomes, such as incepted thoughts, feelings, or beliefs, which are then materialized. Suggestions or prompts imposed by the clinician, therefore, can generate expectations or beliefs for the client, thereby increasing potential for manifestation. This is the notion of a selffulfilling prophesy.

This mechanism is represented explicitly in the cognitive restructuring oral protocol which is designed to aid the client in challenging negative conceptions and restructuring thoughts to generate self-selected outcomes. Techniques are designed to promote helpful thinking and beliefs, thus shaping favorable outcomes (Clark, 1998). Incepted thoughts, feelings, or beliefs are subject to materialization. For example, stating "the traumatic memory can be significantly reduced or even eliminated in a single session of treatment" is likely to produce positive treatment outcomes for PTSD. Additionally, suggestions or prompts imposed by the clinician could generate expectations or beliefs for the client, thereby increasing potential for manifestation, inadvertently producing something like a self-fulfilling prophecy.

This proposition was not articulated well in the medical or psychological arenas until well into the 20th century by those who upset the prevailing assumptions regarding the relationship between patient and practice. Among them was Theodore Barber. He proposed that inherent in mesmerism and, indeed, most versions of hypnosis, is a subject-based understanding of the phenomenon, what Barber termed "seeker-after-a-cure": an expressed, recognized affliction; a credible process that includes reverence for the therapist and knowledge of previous cures; the inability to attain cure through conventional means; and the creation of a proper attitude (Barber, 1969). Thus, emphasis on the person "seeking" the cure, rather than on the person "conducting" the cure becomes the basis for understanding the course and success of the treatment. Something of this sort was proposed by Danziger in his careful analysis of the psychological experiment beginning with Wundt (Danziger, 1985). Neither subjectexperimenter nor patient-practitioner social interactions can be overlooked as contributing components to outcomes, regardless of theoretical or methodological orientations.

The emergence and acceptance of radical or non-traditional practice in psychotherapy may be understood in these terms. Particularly where there has been a significant presence or increase in the presence of a disorder; where individuals have had relative ease to the access of a therapy by perceived legitimate practitioners; and where claims of success for the therapy have been credible. Schmit (2005), for example, in his cogent article on the history of mesmerism in the United States, points to several deciding factors that sealed its acceptance, at least for a while. A "rush of enthusiasm" was inspired by the early 19th century American ethos of reform to understand the acceptance and dissemination of mesmerism, just as the present analysis identifies the testimonials and rapid dissemination of EMDR treatment to understand its impact. Furthermore, a popular manual on mesmerism was printed to better prepare mesmerists for their new career (Schmit, 2005), not unlike seminars, workshops, and protocols required to legitimize EMDR. Other examples are Freudian psychoanalysis of the 19th century in the treatment of hysteria; the "talking cure" for World War I veterans suffering from shell shock; and the recent rage of alternative therapies for PTSD exemplified here by EMDR, but applicable to even more current interventions, such as Accelerated Resolution Therapy (ART), which claims "unique features" to distinguish itself from EMDR (Kip et al., 2012).

Finally, this paper would be remiss without at least a passing recognition of the current research that seeks to add new value to the "placebo effect." Most often referenced to as producing palliative effects for medical conditions in the form of the "sugar pill," placebos have begun to be explained within psychotherapeutics as ameliorating pain and suffering through both physiological and psychological mechanisms (Rutherford, Wall, Glass, & Stewart, 2014). This means a large number of contributors to intervention that have no "curative" properties may yet be responsible for observed palliative outcomes such as decreased subjective discomfort. For example, people who expect pain reduction have less activity in brain regions associated with pain processing, such as the thalamus and dorsal anterior cingulate (Atlas & Wager, 2014). And, it can be argued, beliefs and expectations that accompany the so-called placebo effect influenced by verbal instructions, nonverbal cues, and other elements of the treatment context can contribute to the efficacy of DTEs, such as EMDR, to the extent that they measure subjective distress.

Epilogue

The remarkable trajectory of EMDR to a position of respectability and prominence in such a short span of time has few rivals in the history of psychology, and appears to hold a place of dominance in the crowded field of alternative psychotherapies. So, is it reprocessing or repackaging? Although only a limited historical perspective is presented here, after a little more than two decades of practice the following points appear to summarize the present status of EMDR and, in fact, may inform the consideration of related alternative therapies.

First, what was once a rather unsophisticated and egalitarian procedure is now complex, controlled, and centrally credentialed. For many years, Shapiro even insisted on restrictions for the public distribution of the protocol to protect certified EMDR practitioners (McNally, 1999), but there is no evidence that authorized training in EMDR produces significantly better therapeutic outcomes, nor is certification in any way related to state licensing or board certification (Acierno et al., 1994; Herbert et al., 2000).

Second, what was touted as a radically new protocol superior to existing interventions has come to be viewed more as a viable alternative for *some* disorders. Studies with adequate controls, such as wait-list, attention, and novel treatment, have shown no evidence that EMDR contributes significantly more to the reduction or elimination of traumatic memory in clients than other forms of therapy, particularly cognitive-behavioral methods (Bradley, Greene, Russ, Dutra, & Westen, 2005; Tolin, Montgomery, Kleinknecht, & Lohr, 1995).

Third, what began as a PTSD-specific treatment has been expanded to a wide range of clinical and non-clinical disorders in some way related to anxiety and stress, such as couples and interpersonal conflict, personality disorders, drug and alcohol dependence, infertility, and sexual dysfunctions. Patient subjective evaluation of stress remains the primary source of validation of the procedure (Shapiro, 1995). Also in relation to the clinical value of EMDR, that which has been touted as a procedure to produce permanent restructuring of traumatic memories has been shown in longitudinal studies to produce no more permanent changes than other types of exposure treatments, such as relaxation training, and not as effective as exposure therapy for some clinical disorders involving avoidance (Taylor et al., 2003).

Lastly, in connection with *physiological* or *neurophysiological* mechanisms for efficacy, and what was regarded initially by practitioners as a procedure without a biological, physiological, or theoretical rationale for success, continues so. Much speculation (Bergmann, 2012), but little understanding, exists twenty-plus years after the appearance of EMDR of its underlying neuropsychological mechanisms, and the Pavlovian explanation based on excitatory and inhibitory mechanisms originally proposed by Shapiro in 1989 has received little attention, let alone support.

It appears that the proponents of EMDR have made insufficient progress and presented less than convincing support for EMDR as a *unique* protocol involving saccadic eye movements to establish it as profoundly different or more efficacious method than other psychotherapies. Indeed, it is generally understood as a variant among the many current cognitive restructuring interventions (Carlson, Chemtob, Rusnak, Hedlund, & Muraoka, 1998; Marcus, Marquis, & Sakai, 1997; Rothbaum, 1997; Scheck, Schaeffer, & Gillette, 1998; Wilson, Becker, & Tinker, 1995). The eye movement component remains confined to the arena of an intervening variable, much like Mesmer's rods, and may be no more essential to the therapeutic process than Mesmer's rods or Freud's couch if suggestibility is understood to be a major variable in its success. Indeed, without establishing EMDR as other than a variant of cognitive restructuring therapy, the subjectivity of the paradigm will continue to ground it on a utilitarian rather than on a scientific foundation (Herbert et al., 2000).

References

- Acierno, R., Hersen, M., Van Hasselt, V. B., & Tremont, G. (1994). Review of the validation and dissemination of eye-movement desensitization and reprocessing: A scientific and ethical dilemma. Clinical Psychology Review, 14, 287-299. doi: 10.1016/0272-7358(94)90026-4
- Atlas, L. Y., & Wager, T. D. (2014). A meta-analysis of brain mechanism of placebo analgesia: Consistent findings and unanswered questions. *Handbook of Experimental Pharmacology*, 225, 37-69.
- American Psychiatric Association (1980). Diagnostic and statistical manual of mental disorders (3rd Ed). Washington, DC: APA.
- Barber, T.X. (1969). Hypnosis: A scientific approach. New York, NY: van Nostrand. doi: 10.1080/00029157.1970.10402063
- Bauman, W., & Melynk, W. T. (1994). A controlled comparison of eye movements and finger tapping in the treatment of test anxiety. Journal of Behavior Therapy and Experimental Psychiatry, 25, 29-33. doi: 10.1016/0005-7916(94)90060-4
- Beaulieu, D. (2003). Eye movement integration therapy: The comprehensive clinical guide. Williston, VT: Crown House.
- Benish, S. G., Imel, Z. E., & Wampold, B. E. (2008). The relative efficacy of bona fide psychotherapies for treating post-traumatic stress disorder: A meta-analysis of direct comparisons. Clinical Psychology Review, 28, 746-758. doi: 12008103462
- Bergmann, U. (2012). Neurobiological foundations for EMDR practice. New York, NY: Springer.
- Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2005). A multidimensional meta-analysis of psychotherapy for PTSD. American Journal of Psychiatry, 162, 214-227.
- Brodsky, A. M., & Hare-Mustin, R. T. (Eds.). (1980). Women and psychotherapy. New York, NY: Guilford. doi: 10.1037/0003-066X.38.5.593
- Carlson, J. G., Chemtob, C. M., Rusnak, K., Hedlund, N.L., & Muraoka, M.Y. (1998). Eye movement desensitization and reprocessing for combat-related posttraumatic stress disorder. Journal of Traumatic Stress, 11, 3-24. doi: 10.1023/A:10244488114268
- Coleman, J. C. (1964). Abnormal psychology and modern life. Chicago, IL: Scot, Foresman.
- Cooper, N. A., & Clum, G. A. (1989). Imaginal flooding as a supplementary treatment for PTSD in combat veterans: a controlled study. Behavior Therapy, 20, 381-391. doi: 10.1016/S0005-7894(89)80057-7
- Danziger, K. (1985). The origins of the psychological experiment as a social institution. American Psychologist, 40, 133-140. doi: 10.1037/0003-066X.40.2.133
- Denicola, J. A. (1993). Quick fixes for complex problems? Behavior Therapist, 16,218. "Diploma Mill." The skeptic's dictionary. Retrieved July 29, 2014.
- Hensley, B. J. (2009). An EMDR primer: From practicum to practice. New York, NY: Springer.
- Herbert, J. D., Lilienfeld, S. O., Lohr, J. M., Montgomery, R. W., O'Donohue, W. T., Rosen, G. M., & Tolin, D. F. (2000). Science and pseudoscience in the development of eye movement desensitization and reprocessing: Implications for clinical psychology. Clinical Psychology Review, 20, 945-971. doi: 10.1016/S0272-7359(99)00017-3
- Keane, T. M., & Kaloupek, D. G. (1982). Imaginal flooding in the treatment of a posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 50, 138-140. doi: 1037/0022-006X.50.1.138
- Kip, K. E., Elk, C. A., Sullivan, K. L., Kadel, R., Lengacher, C. A., Long, C. J., Rosenzweig, L., ... Diamond, D. M. (2012). Brief treatment of symptoms of post-traumatic stress disorder (PTSD) by use of accelerated resolution therapy (ART). Behavioral Science, 2, 115-134.doi:10.3390/bs2020115
- Leeds, A. M. (2009). A guide to the standard EMDR protocols for clinicians, supervisors, and consultants. New York, NY: Springer.
- Linehan, M. M. (1987). Dialectical behavior therapy for borderline personality disorder: Theory and method. Bulletin of the Menninger Clinic, 51, 261-276.
- Luber, M. (2007). In the spotlight: Robbie Dunton. EMDRIA Newsletter, 12, 16-22.
- Luber, M. (2010). (Ed.). Eye movement desensitization and reprocessing (EMDR) scripted protocols: Special populations. New York, NY: Springer.

- Marcus, S. V., Marquis, P., & Sakai, C. (1997). Controlled study of treatment of PTSD using EMDR in an HMO setting. *Psychotherapy*, *34*, 307-315.
- McNally, R. J. (1999). EMDR and mesmerism: A comparative historical analysis. *Journal of Anxiety Disorders*, 13, 225-236. doi: 10.1016/S0887-6185(98)00049-8
- Mueser, K. T., & Herbert, J. D. (1993). EMDR: Caveat emptor! Behavior Therapist, 16, 218-219.
- Nietzel, M. T., Bernstein, D. A., & Millich, R. (1991). *Introduction to clinical psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Rose, D. S. (1986). Worse than death: Psychodynamics of rape victims and the need for psychotherapy. *American Journal of Psychiatry*, *143*, 817-824.
- Rosen, G. M. (1995). On the origin of eye movement desensitization. *Journal of Behavioral Therapy and Experimental Psychiatry*, 26, 121-122.
- Rothbaum, B. O. (1997). A controlled study of eye movement desensitization and reprocessing for posttraumatic stress disordered sexual assault victims. *Bulletin of the Menninger Clinic*, 61, 317-334.
- Rutherford, B. R., Wall, M. M., Glass, A., & Stewart, J. W. (2014). The role of patient expectancy in placebo and nocebo effects in antidepressant trials. *Journal of Clinical Psychiatry*, 75, 1040-1046.
- Sanderson, A., & Carpenter, R. (1992). Eye movement desensitization versus image confrontation: A single-session crossover study of 58 phobic subjects. *Journal of Behavior Therapy and Experimental Psychiatry*, 23, 269-275. doi: 10.1016/0006-7916(92)90049-0
- Schacter, D. L. (1999). The seven sins of memory: Insights from psychology and cognitive neuroscience. (Full text). *American Psychologist*, *54*, No. 3, 182-203. doi: 10.1037/0003-066X.54.3.182
- Scheck, M. M., Schaeffer, J. A., & Gillette, C. S. (1998). Brief psychological intervention with traumatized young women: The efficacy of eye movement desensitization and reprocessing. *Journal of Traumatic Stress*, 11, 25-44. doi: 10.1023/A:1024400931106
- Schmit, D. T. (2005). Re-visioning antebellum American psychology: The dissemination of mesmerism, 1836-1854. *History of Psychology*, 8, 403-434. doi: 10.1037/1093-4510.8.4.403
- Shapiro, F. (1989a). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress*, 2, 199-223. doi: 10.1007/BF00974159
- Shapiro, F. (1989b). Eye movement desensitization: A new treatment for post-traumatic stress disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 20, 211-217. doi: 10.1016/0005-7916(89)90025-6
- Shapiro, F. (1991a). Eye movement desensitization & reprocessing procedure: From EMD to EMDR a new treatment model for anxiety and related trauma. *Behavior Therapist*, 14, 133-135,128.
- Shapiro, F. (1991b). Eye movement desensitization and reprocessing: A cautionary note. *Behavior Therapist*, 14, 188.
- Shapiro, F. (1995). Eye movement desensitization and reprocessing: Basic principles, protocols and procedures. New York, NY: Guilford.
- Sue, D., Sue, D.W., Sue, D., & Sue, S. (2013). *Understanding abnormal behavior*. (10th Ed.). Belmont, CA: Wadsworth.
- Taylor, S., Thordarson, D. A., Maxfield, L., Federoff, I. C., Lovell, K., & Ogrodniczuk, J. (2003). Comparative efficacy, speed, and adverse effects of three PTSD treatments: Exposure therapy, EMDR, and relaxation training. *Journal of Consulting and Clinical Psychology*, 71, 330-338. doi: 10.1037/0022-006X.71.2.330
- Tolin, D. F., Montgomery, R. W., Kleinknecht, R. A., & Lohr, J. M. (1995). An evaluation of eye movement desensitization and reprocessing. *Innovations in clinical practice: A source book, 14*, 423-437.
- Van Nuys, D. (Producer). (2007, November 29). An interview with Francine Shapiro, Ph. D. on Eye Movement Desensitization and Reprocessing Therapy (EMDR). [Audio podcast]. Retrieved from http://www.mentalhelp.net/
- Vaughan, K., Armstrong, M. S., Godl, R., O'Connor, N., Jenneke, W., & Tarrier, N. (1994). A trial of Eye Movement Desensitization compared to Image Habituation Training and Applied Muscle Relaxation in Post-Traumatic Stress Disorder. *Journal of Behavior Therapy and Experimental Psychiatry*, 25, 283-291.
- Vonnegut, K. (1976). Wampaters, foma, and granfalloons. New York, NY: Dell.

- Wilson, S. A., Becker, R. H., & Tinker, R. H. (1995). Eye movement desensitization and reprocessing (EMDR) treatment for psychologically traumatized individuals. Journal of Consulting and Clinical Psychology, *63*, 928-937.
- Wolpe. J. (1982). The practice of behavior therapy. New York, NY: Pergamon.
- Wolpe, J., & Abrams, J. (1991). Post-traumatic stress disorder overcome by eye-movement desensitization: A case report. Journal of Behavior Therapy and Experimental Psychiatry, 22, 39-43. doi: 10.1016/0005-7916(91)90032-7
- Young, W. C. (1994). EMDR treatment of phobic symptoms in multiple personality disorder. Dissociation, 7, 129-133.
- Zaragoza, M. S., Belli, R. S., & Payment, K. E. (2006). Misinformation effects and the suggestibility of eyewitness memory. In M. Garry & H. Hayne (Eds.). Do justice and let the sky fall: Elizabeth F. Loftus and her contributions to science, law, and academic freedom, (pp. 35-63). Hillsdale, NJ: Lawrence Erlbaum.

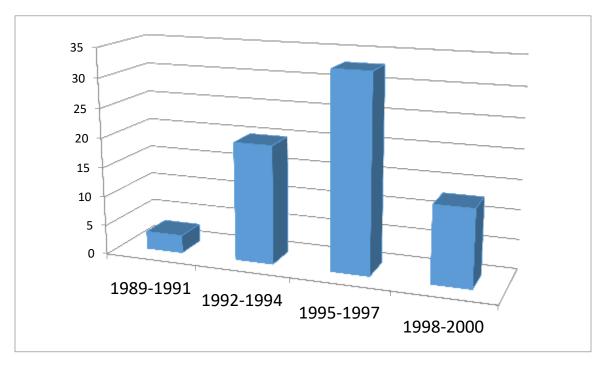


Figure 1. Number of studies on EMDR reported in 2 reviews between 1989 and 2000 (Acierno et al., 1994; Herbert et al., 2000).