Traumatic Memories, Eye Movements, Phobia, and Panic: A Critical Note on the Proliferation of EMDR

PETER MURIS, PH.D., AND HARALD MERCKELBACH, PH.D.

Maastricht University, Maastricht, The Netherlands

Abstract—In the past years, Eye Movement Desensitization and Reprocessing (EMDR) has become increasingly popular as a treatment method for Posttraumatic Stress Disorder (PTSD). The current article critically evaluates three recurring assumptions in EMDR literature: (a) the notion that traumatic memories are fixed and stable and that flashbacks are accurate reproductions of the traumatic incident; (b) the idea that eye movements, or other lateralized rhythmic behaviors have an inhibitory effect on emotional memories; and (c) the assumption that EMDR is not only effective in treating PTSD, but can also be successfully applied to other psychopathological conditions. There is little support for any of these three assumptions. Meanwhile, the expansion of the theoretical underpinnings of EMDR in the absence of a sound empirical basis casts doubts on the massive proliferation of this treatment method. © 1999 Elsevier Science Ltd. All rights reserved.

In the last 7 years or so, Eye Movement Desensitization and Reprocessing (EMDR) gained popularity as a treatment method for a broad range of psychopathological and even medical conditions. For example, more than 14,000 therapists have now attended the international workshops on EMDR (Lohr, Kleinknecht, Tolin, & Barrett, 1995) and it is said that the vast majority of them report “positive clinical results” (Shapiro, 1995, p. 6). As another example, more and more clinicians who treat survivors of war or disaster-related traumas are trained in the basic principles of EMDR (e.g., APA Monitor, August 1995; Levin, Grainger, Allen-Byrd, & Fulcher, 1994). As to the clinical status that therapists ascribe to EMDR protocols for PTSD, one review paper claims that “it is already considered a treatment of choice by many”
Thus, it is fair to say that the career of EMDR is quite impressive in terms of the enthusiasm it has evoked and its expansion (see also, Acierno, Hersen, Van Hasselt, Tremont, & Mueser, 1994; Lohr et al., 1995).

In *Eye Movement Desensitization and Reprocessing: Basic Principles, Protocols, and Procedures*, Shapiro (1995) gives a lively description of how she accidentally discovered EMDR: “I noticed that when disturbing thoughts came into my mind, my eyes spontaneously started moving very rapidly back and forth in an upward diagonal....At that point I started making the eye movements deliberately while concentrating on a variety of disturbing thoughts and memories, and I found that these thoughts also disappeared and lost their charge” (p. 2). On the basis of this experience, Shapiro (1989a) elaborated EMDR and explored its efficacy in Vietnam veterans and molestation victims. All patients had chronic difficulties with their traumatic memories, but EMDR appeared to be an effective treatment. That is, after treatment, patients reported that their traumatic memories were less disturbing and that they functioned better in daily life. A cascade of case studies on EMDR and trauma followed. Most (e.g., McCann, 1992; Puk, 1991; Wolpe & Abrams, 1991), but certainly not all (e.g., Oswalt, Anderson, Hagstrom, & Berkowitz, 1993) suggested that EMDR is a fruitful treatment approach for this type of psychopathology. Since that time, two major changes have taken place in the development of EMDR. To begin with, the techniques underlying EMDR have become more liberal in the sense that the eye movement component of EMDR is no longer considered as a *conditio sine qua non* for obtaining treatment effects. Shapiro (1995) admits that “...even without the eye movements, EMDR has shown itself to be an efficient and structured approach to pathology that offers positive therapeutic benefit” (p. 26). Secondly, although originally developed to treat PTSD symptoms, EMDR is now increasingly extended to other mental disorders, such as obsessive-compulsive disorder (Rosenthal, 1993), dissociative disorders (Paulsen, 1995), nightmares (Pellicer, 1993), specific phobias (Marquis, 1991), and panic disorder (Feske & Goldstein, 1997; Goldstein & Feske, 1994). This expansion is largely guided by case material.

Basically, EMDR and its career can be brought back to three assumptions. The first assumption is that traumatic or aversive memories that underlie psychopathological conditions reside in a fixed and stable format in the brain. The second assumption is that lateral eye movements, or more generally lateralized, rhythmic movements, inhibit the negative affect associated with these memories and in this way contribute to the resolution of the trauma. The third assumption is that PTSD, on the one hand, and conditions such as phobias and panic disorder on the other, share sufficient features so that EMDR can be applied to all these conditions (see Shapiro, 1999 [this issue]).
The present article critically evaluates these assumptions as follows. We first discuss notions on traumatic memory as they are found in EMDR literature. We then summarize experimental data on the alleged inhibitory power of eye movements. Following this, studies concerned with the effects of EMDR in specific phobias and panic disorder are considered. We conclude with a critical note on what seems to us the most defining feature of EMDR: the expansion of theoretical notions, techniques, and applications in the absence of robust empirical findings.

THE NATURE OF TRAUMATIC MEMORIES

Although Shapiro (1995, p. 216) admits that EMDR “was not derived from a theoretical position,” a core assumption in the EMDR literature is that traumatic or aversive memories play a pivotal role in a broad range of psychopathological conditions. The dysfunctional nature of traumatic memories is most evident in PTSD. In Shapiro’s (1995) words “When someone experiences a severe trauma, it appears that an imbalance may occur in the nervous system, caused perhaps by changes in neurotransmitters, adrenaline, and so forth. Due to this imbalance, the system is unable to function and the information acquired at the time of the event, including images, sounds, affect, and physical sensations is maintained neurologically in its disturbing state. Therefore, the original material, which is held in this distressing, excitatory state-dependent form, continues to be triggered by a variety of internal and external stimuli and is expressed in the form of nightmares, flashbacks, and intrusive thoughts, the so-called positive symptoms of PTSD” (p. 30).

By this view, traumatic memories are fixed or indelible and flashbacks are accurate echos of the traumatic incident. While such an interpretation of traumatic memories is relatively common among clinicians (e.g., Terr, 1994; van der Kolk & Fisler, 1995), it is also highly questionable (e.g., Merckelbach & Wessel, 1998). For example, a recent study by Southwick, Morgan, Nicolaou, and Charney (1997) compared traumatic memories of Desert Storm veterans 1 month and 2 years after their return from the Gulf War. It was found that there were marked changes in the traumatic recollections of these veterans. More specifically, the authors observed that “level of PTSD symptoms was positively correlated with overall inconsistency of memory for combat exposure” (p. 176) and they also found evidence to suggest that a high level of PTSD symptomatology is accompanied by an amplification or exaggeration of traumatic memories. A similar conclusion was reached in an older study of Grunert, Devine, Matloub, Sanger, and Yousif (1988) about traumatic hand injuries. These researchers found that some 60% of their patients displayed an exaggerated memory of the traumatic hand injury. These findings are, of course, difficult to reconcile with the suggestion found in many theoretical papers about EMDR, namely that traumatic memories consist of accurate details that
TABLE 1
CHARACTERISTICS ASSOCIATED WITH “WORSE CASE SCENARIO” AND “REALISTIC SCENARIO” FLASHBACKS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Realistic Scenario Flashbacks (n = 11)</th>
<th>Worse Case Scenario Flashbacks (n = 8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accompanied by strong emotion</td>
<td>72.7%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Accompanied by bodily sensations</td>
<td>45.5%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Increasing in frequency</td>
<td>18.2%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Increasing in intensity</td>
<td>18.2%</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

are flawlessly retained over long periods. We emphasize this point because traumatic and disturbing flashbacks and intrusions play a critical role in EMDR as they serve as the starting point for different types of treatment maneuvers. So, it is reasonable to require that EMDR’s interpretation of flashbacks is in keeping with research findings. Alas, it is not. For example, Greenwald (1993) claims that “EMDR can be used to recover memories and fill out the details, so that the story may be told fully and accurately for the first time” (p. 26).

In his thorough review, Frankel (1994, p. 329) reminds us of the fact that “flashbacks, although not clearly defined or fully understood, have been managed in much of the literature and in clinical practice for almost a decade as if they are indeed accurate reports.” Frankel further argues that the assumption of flashbacks or trauma revisualizations as historically accurate recollections is incorrect. A pilot survey conducted in our laboratory (Merckelbach, Rassin, & Muris, 1998) underlines this point. In that study, 80 undergraduate students were asked whether they had experienced traumatic incidents in the last 3 years. A substantial minority (23.8%) reported traumatic events such as death of a friend, serious illness of a parent, rape, witnessing a shooting incident, and so on. The undergraduates were then interviewed about the traumatic intrusions they had about these events. Eight out of 19 undergraduates who had traumatic intrusions said that these intrusions took the course of a “worse case scenario,” that is, an exaggeration of the traumatic incident. Table 1 shows the main characteristics associated with “realistic scenario” and “worse case scenario” intrusions. Although these preliminary results are based on a small sample size, there are some interesting tendencies to note. For example, “worse case scenario” intrusions were more often accompanied by bodily sensations, and were more frequently reported to increase in intensity, compared to “realistic case scenario” intrusions.

In sum, then, EMDR advocates rely on problematic assumptions about the nature of traumatic memories. More specifically, they do not acknowledge the
flexible and reconstructive aspects of traumatic memory. Note that this aspect is better captured by a behavioral-cognitive approach. After all, correction of misinterpretations and exaggerations are the hallmark of cognitive therapy.

THE INHIBITORY POWER OF EYE MOVEMENTS

The following instructions are recommended for patients who undergo EMDR treatment: “The eye movements we use in EMDR seem to unlock the nervous system and allow your brain to process the experience. That may be what is happening in REM, or dream sleep: The eye movements may be involved in processing the unconscious material” (Shapiro, 1995, p. 121). In her book, Shapiro (1995) makes several attempts to provide a neurobiological rationale for the alleged effects of lateral eye movements. Eye movements are said to rebalance the nervous system, to shift information that is dysfunctionally locked in the nervous system, and/or to catalyze the appropriate biochemical balance. Several authors have criticized Shapiro’s (1995) speculative neurobiological theorizing. For example, Allen and Lewis (1996) argue that “these claims for rapid efficacy are not inherently problematic—they are testable—but they are embedded in dubious neurobiological thinking” (p. 251).

Indeed, Shapiro’s neurobiological reasoning mainly consists of metaphors (“rebalance,” “dysfunctionally locked,” “adaptive resolution”) that all boil down to the assumption that lateralized eye movements possess an inhibitory quality. The supposed inhibitory effects of eye movements on emotions has been examined in a number of well-conducted laboratory experiments.

In a first study carried out in our lab (Merckelbach, Hogervorst, Kampman, & De Jongh, 1994a), the inhibitory effects of eye movements of emotional responding during retrieval of aversive information was tested. Forty subjects were exposed to an aversive slide depicting a mutilated hand. Then, half of the subjects underwent an eye movement intervention while they rehearsed the slide information, whereas the other half underwent a control procedure (i.e., finger-tapping). Before and after the eye movement or control intervention, heart rate and self-report data were obtained while subjects retrieved and visualized the aversive slide. No evidence was found to suggest that eye movements inhibit emotional reactivity more than does finger-tapping. In a highly comparable study, Tallis and Smith (1994) also failed to document that eye movements facilitate emotional processing.

One could counter that these null findings are not very convincing, since aversive emotions were evoked through personally irrelevant cues rather than negative autobiographical recollections. This point was addressed in another study conducted in our lab (Merckelbach, Hogervorst, Kampman, & de Jongh, 1994b, experiment 2). In that study, 28 undergraduates were asked to retrieve a disturbing autobiographical memory. They were also instructed to rate their target memory in terms of its negativity and the amount of distress it evoked.
TABLE 2
MEAN PRE- AND POSTINTERVENTION EMG AND VAS SCORES FOR THE EYE MOVEMENT AND FINGER-TAPPING GROUPS

<table>
<thead>
<tr>
<th>Eye Movement Group</th>
<th>Finger-Tapping Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 14)</td>
</tr>
<tr>
<td></td>
<td>Pre</td>
</tr>
<tr>
<td>EMG activity</td>
<td>M (SD)</td>
</tr>
<tr>
<td>-1.2 (3.3)</td>
<td>-1.2 (4.6)</td>
</tr>
<tr>
<td>VAS negativity</td>
<td>66.8 (22.7)</td>
</tr>
<tr>
<td>VAS distress</td>
<td>49.0 (17.2)</td>
</tr>
</tbody>
</table>

EMG activity = corrugator electromyographic activity. EMG was scored second-by-second as change in microvolts from baseline. VAS = visual analogue scale.

on 100-mm visual analogue scales (0 = neutral/no distress at all; 100 = extremely negative/extreme distress). Additionally, corrugator electromyographic (EMG) activity was recorded. Note that numerous psychophysiological studies have demonstrated that engaging in unpleasant thoughts is accompanied by an increase in corrugator muscle activity (Dimberg, 1990). Following these baseline measurements, half of the undergraduates engaged in lateral eye movements, whereas the other half carried out a finger tapping task while retrieving the pertinent memory. Next, participants retrieved the memory once again and visual analogue scale (VAS) and EMG measures were taken for a second time. Table 2 summarizes the results of this experiment.

VAS and EMG data were analyzed with separate 2 (Intervention: eye movements vs. tapping) x 2 (Time: pre-intervention vs. postintervention) analyses of variance (ANOVA). A significant main effect of Time was only found with regard to the VAS measures. This effect was due to the fact that in both groups autobiographical memories were rated as less negative and distress provoking after than before the intervention. Most importantly, neither for the self-report nor for the EMG data, the critical Intervention by Time interactions attained significance. Thus, the results of this study do not support the assumption that eye movements have an inhibitory effect on negative affect associated with autobiographical memories.

Andrade, Kavanagh, and Baddeley (1997) examined whether eye movements reduce the vividness of distressing images. Non-PTSD participants were asked to form images of neutral and negative pictures while engaging in eye movements or a control task that did not involve eye movements (e.g., finger-tapping). Although eye movements were found to reduce the vividness of the distressing images so did the control task.
Of particular pertinence to the present discussion are two controlled clinical studies. In a study of Renfrey and Spates (1994), PTSD patients were treated with either a standard EMDR procedure, an EMDR procedure in which eye movements were induced through a light-tracking task, or with an EMDR procedure in which patients had to focus their eyes on a fixed point. All three interventions, including the treatment procedure without eye movements, were found to produce significant improvements on therapy outcome measures and there were no differences in this respect between the three interventions. A recent study of Pitman, Orr, Altman, and Longpre (1996) examined emotional processing and outcome in 17 Vietnam veterans with PTSD. These veterans underwent EMDR therapy with and without the eye movement component in a crossover design. Results are suggestive of emotional processing during EMDR because clear symptom reduction occurred. However, no evidence was found for the eye movement condition being more effective than the eyes fixed condition.

To summarize, none of the experimental studies cited above support the idea that lateralized eye movements have the capacity to inhibit negative emotions. Additionally, the results of clinical studies indicate that, although initially considered as the most defining feature of EMDR, eye movements are not essential to produce therapeutic effects. Admittedly, this point has been noticed by Shapiro (1995), who now emphasizes the therapeutical potential of lateralized movements other than eye movements. Meanwhile, the value of rhythmic behavior has not been subjected to systematic outcome research.

EMDR IN SPECIFIC PHOBIA AND PANIC

As things stand, empirical research has provided some tentative evidence for the efficacy of EMDR in PTSD. That is, in a number of controlled studies, EMDR was found to be more effective than no-treatment conditions (e.g., Shapiro, 1989b; Rothbaum, 1997; Wilson, Becker, & Tinker, 1995). In recent years, EMDR has been increasingly recommended for psychological disturbances other than PTSD. Thus, Shapiro (1995, p. 16) claims that even severe conditions, such as “personality disorders may be amenable to comparatively rapid change through the targeting and reprocessing of key memories.” In a similar vein, EMDR is recommended as a treatment for specific phobias (Marquis, 1991; Shapiro, 1995; De Jongh, Ten Broeke, & Renssen, 1999 [this issue]). Yet, it is a well-established fact that this disorder responds extremely well to exposure in vivo therapy. Öst (1989) has shown that even a single treatment session of 2.5 hours is successful in about 90% of the patients with specific phobias (see also Hellström & Öst, 1995; Muris & Merckelbach, 1998; Öst, 1996; Öst, Salkovskis, & Hellström, 1991). Not surprisingly, then, various studies have compared the efficacy of EMDR to that of exposure in vivo. A case study by Acierno, Tremont, Last, and Montgomery
(1994) describing a woman who suffered from multiple phobias (e.g., fear of the dark), failed to find evidence to suggest that EMDR produces improvement beyond a control intervention (i.e., imaginal exposure). In their case study, only exposure *in vivo* was found to result in clinically significant improvement. Lohr, Tolin, and Kleinknecht (1995) described treatment effects of EMDR in two patients with blood-injury-illness phobia. These authors not only obtained self-report data, but also behavioral and physiological measures. Their results were disappointing in that EMDR affected self-report measures, but not behavioral or physiological indices of phobia.

Three controlled studies conducted in our lab (Muris & Merckelbach, 1997; Muris, Merckelbach, Holdrinet, & Sijsenaar, 1998; Muris, Merckelbach, Van Haaften, & Mayer, 1997) compared the efficacy of EMDR with that of exposure *in vivo* in the treatment of a specific phobia (i.e., spider phobia). In these studies, treatment outcome was evaluated by standardized self-report measures and a behavioral avoidance test. The results are summarized in Table 3. As can be seen, exposure *in vivo* consistently produced significant improvement on both therapy outcome measures, whereas EMDR only yielded improvement on self-report indices of spider fear. Taken together, the case studies of Acierno et al. (1994), Lohr et al. (1995) and the findings of our controlled studies show that EMDR has no additional value in the treatment of specific phobias and that exposure remains the treatment of choice for this condition.

Shapiro (1995, p. 222) notes that some clients “may be continually traumatized by the fear of fear.” This is particularly the case in panic disorder patients. Thus, EMDR has also been advocated as a treatment option for panic...
disorder. In a first study, Goldstein and Feske (1994) presented a case series of seven panic disorder patients. Patients received EMDR treatment for memories of past and anticipated panic attacks and other anxiety-evoking, personally relevant memories. Standardized self-report measures and behavioral observation measures (i.e., frequency of panic attacks) were used to assess treatment effects. Results showed that after five sessions of EMDR, patients reported a considerable decrease in the frequency of panic attacks, fear of experiencing a panic attack, fear of body sensations, and other self-report measures of pathology. A second study by Feske and Goldstein (1997) more thoroughly evaluated the efficacy of EMDR in panic disorder. Patients were randomly assigned to receive EMDR, an EMDR treatment without eye movements, or to a waiting list. Results showed that EMDR was more effective in reducing panic and panic-related symptoms than the waiting-list procedure. Furthermore, at posttest, there was some tentative evidence that EMDR with eye movements produced better results than EMDR without eye movements. However, at a follow-up measurement (3 months later), these differences had disappeared, thereby failing to firmly support the usefulness of the eye movement component in EMDR (see The Inhibitory Power of Eye Movements section, p. 213). The problem with both studies is that they fail to compare EMDR with alternative, validated treatments for panic disorder (see, for a more extensive analysis of this problem, Lohr et al., 1995).

Currently, we are running a study in which the antipanic effects of EMDR are compared to those of cognitive-behavioral therapy (CBT). Patients either receive five treatment sessions of EMDR or five sessions CBT. Panic symptoms are evaluated before and after these five sessions (i.e., at pre- and post-treatment) by means of a weekly panic attack registration and various standardized self-report questionnaires. Figures 1 and 2 present the results of the first two cases from this study. As can be seen in Figure 1, the patient who was treated with CBT was panic-free after five sessions, whereas the patient treated with EMDR still suffered from panic attacks. This differential outcome was also found on the self-report questionnaires: the patient who received CBT exhibited more decrease on these measures than the patient treated with EMDR (see Figure 2). Admittedly, these are only two cases and they are far from conclusive. But, at the very least, they cast doubts on the cavalier fashion in which some EMDR advocates recommend EMDR for panic disorder.

**DISCUSSION**

There is little support for any of the three assumptions that were discussed above. First, EMDR is predicated on the view that traumatic revisualizations and flashbacks are veridical reproductions of past traumatic events. This is a problematic view in light of studies that demonstrate that flashbacks often
Fig. 1. Number of weekly panic attacks at pre- and posttreatment for both patients. CBT = cognitive-behavioral therapy; EMDR = Eye Movement Desensitization and Reprocessing.

represent “worse case scenario” reconstructions of the traumatic incident. We emphasize this point, not because it necessarily invalidates EMDR as a treatment technique, but because this point fits well with a cognitive-behavioral approach to trauma (e.g., CBT; see below).

Second, lateralized movements, particularly eye movements, have long been considered as the core feature of EMDR and it has been claimed that such movements have an inhibitory effect on negative affect. It is worthy of note that in more recent descriptions of the EMDR technique, lateralized eye movements are no longer thought to be an essential therapeutic component. For example, in her book, Shapiro (1995) argues that “alternative forms of stimulation (hand taps and sounds) can be used and have proved effective” (p. 67). To be sure, this liberal view on EMDR makes some of the studies (e.g., Merckelbach et al., 1994a,b) that we reviewed above less optimal tests of the inhibitory power of EMDR, simply because in those studies, lateralized rhythmic behaviors (e.g., hand-tapping) served as control condition. Meanwhile, the liberal view is too liberal: it lacks limits and it is unclear what components are really critical to obtain the alleged therapeutic effects. Also germane to this issue are controlled clinical studies that relied on an EMDR version without eye movements or other lateralized, rhythmic behaviors, and that, nevertheless, found symptom reduction in PTSD patients (e.g., Renfrey & Spates, 1994). Such results add to the confusion introduced by the liberal view on EMDR techniques.

Third, from the beginning, EMDR has been advocated as a treatment not only for PTSD, but also for various other psychopathological conditions. The
A CRITIQUE ON THE PROLIFERATION OF EMDR

Fig. 2. Changes from pre- to posttreatment on self-report questionnaires for both patients. CBT = cognitive-behavioral therapy; EMDR = Eye Movement Desensitization and Reprocessing; SCL-90 = Symptom Checklist-90; FQ-A = Fear Questionnaire Agoraphobia; FoF = Fear of Fear Questionnaire; ASI = Anxiety Sensitivity Index.

Treatment studies cited above as well as thoughtful review papers by others (Herbert & Mueser, 1992; Lohr, Kleinknecht, Conley, Dal Cerro, Schmidt, & Sonntag, 1992; Acierno et al., 1994; Lohr & Kleinknecht, 1995) make clear that mental health professionals should be reluctant in applying EMDR to other conditions than PTSD. Herbert and Mueser (1995, p. 8) rightly remark that “There are well-established, validated treatments for many of the conditions for which EMDR is being recommended.” They further point out that this issue has an important ethical dimension: “Patients should not be induced to forgo established treatments for the sake of an unproven therapy” (p. 8).

In the present article, we have largely ignored the question whether EMDR should be considered as an effective treatment method for PTSD or even the treatment of choice for this disorder (see Greenwald, 1996). As said before, there are a number of controlled studies on EMDR in PTSD suggesting that EMDR outperforms no-treatment control or suboptimal treatment conditions (e.g., biofeedback, relaxation; see, for a review, Shapiro, 1996). This is not the place for a point-by-point criticism of the methods and weaknesses of these studies. However, as pointed out in the scholarly review of Lohr, Tolin, & Lilienfeld (1998), these studies do not unequivocally demonstrate the superiority of EMDR over more established treatment alternatives for PTSD (e.g., CBT; see Foa, Rothbaum, Riggs, & Murdock, 1991; Resick & Schnicke, 1992). Moreover, controlled studies on EMDR treatment of PTSD do not validate the rapid and dramatic efficacy of EMDR that has been
claimed on the basis of anecdotal testimonials. For example, Kleinknecht and Morgan (1992) treated a victim of a shooting incident with EMDR and noted that “the initial trauma scene of the shooting was desensitized within about three minutes” (p. 48). The effects suggested here have not been mimicked in controlled studies, as these studies have found moderate effect sizes at best (Lohr et al., 1998). A final point that should not be overlooked is that some studies fail to find evidence for the efficacy of EMDR in PTSD (e.g., Jensen, 1994). There is a tendency in the literature to attribute these failures to lack of treatment fidelity and/or inadequate practical or conceptual grasp of EMDR (e.g., Greenwald, 1996). This tendency is highly questionable because it comes close to a circular argument in which failures are attributed to inadequate training and EMDR’s efficacy is seen as an established fact. We are reminded here of what Dawes (1994) has termed the argument-from-a-vacuum: it is always possible to refer to the ideal, hypothetical study that has not been conducted so far, but that will demonstrate the alleged effects. Meanwhile, studies that have examined training, credentials, and experience of psychotherapists appear to indicate that these factors are not especially decisive in obtaining therapeutic effects (see, for a review, Dawes, 1994). In this context, it is curious that Shapiro (1995) considers EMDR to be so potent that eye movements are rendered to a superfluous status. At the same time, however, minimal other departures from the protocol are seen by EMDR advocates as devastating to the integrity of the intervention.

The enthusiasm with which EMDR has been embraced by clinicians is quite impressive. This is not only true for the United States, but also for our own country, The Netherlands. As for The Netherlands, regular Level 1 and Level 2 EMDR workshops have been instrumental in proliferating this method. In our view, this is a precarious development. The theoretical basis, the techniques, and its applications have been expanded in a rapid fashion, while it remains unclear what precisely constitutes the unique properties of EMDR. So, the most crucial question that can be raised is: “What exactly is EMDR?” The empirical body of knowledge on which EMDR relies can only be identified if there is a straightforward answer to this question.

REFERENCES


