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## Treatment of grief and mourning through EMDR: Conceptual considerations and clinical guidelines

*Traitement du chagrin et du deuil grâce à l'EMDR : considérations conceptuelles et lignes directrices pour une pratique clinique*

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### ABSTRACT

**Introduction.** – Eye Movement Desensitization and Reprocessing (EMDR) is an empirically-supported psychotherapeutic approach for treating trauma, which is also applicable to a wide range of other experientially-based clinical complaints. It is particularly useful in treating grief and mourning.

**Literature findings.** – EMDR is guided by the Adaptive Information Processing Model (AIP), which conceptualizes the effects of traumatic experiences in terms of dysfunctional memory networks in a physiologically-based information processing system. Numerous empirical studies have demonstrated EMDR's efficacy.

**Discussion.** – The death of a loved one can be very distressing, with memories and experiences associated with the loss becoming dysfunctionally stored and preventing access to adaptive information, including positive memories of the deceased. EMDR can be utilized to integrate these distressing experiences and facilitate the assimilation and accommodation of the loss and movement through the mourning processes.

**Conclusion.** – Applying the eight phases of EMDR to grief and mourning can yield potent clinical results in the aftermath of loss.

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### R É S U M É

**Introduction.** – La thérapie Eye Movement Desensitization and Reprocessing (EMDR) est une approche qui a apporté de nombreuses preuves quant à sa capacité à traiter les traumatismes. De la même manière, elle se révèle intéressante sur un large éventail d'autres plaintes cliniques.

**Littérature.** – Cette approche s'appuie sur le modèle du traitement adaptatif de l'information, qui conceptualise les effets des expériences traumatisantes en termes de réseaux de mémoire dysfonctionnels qu'il convient de remettre en œuvre.

**Discussion.** – La mort d'un proche peut être une épreuve des plus pénible, avec des souvenirs et des expériences liées à la perte, qui peuvent devenir dysfonctionnels et empêcher le processus de deuil, y compris en interférant avec les souvenirs positifs de la personne décédée. Dans ce cas, l'EMDR peut être utilisée pour intégrer ces expériences douloureuses et faciliter l'assimilation et l'accommodation de la perte, donc en optimisant le processus de deuil.

**Conclusion.** – L'application de l'EMDR au deuil sera illustrée ici par des cas permettant de comprendre ce qui se passe pour chacune des phases du protocole EMDR en huit phases.

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## 1. Introduction

The death of a loved one typically confronts human beings with particularly difficult challenges at a time of often unparalleled distress. It has long been known that even when uncomplicated, bereavement can precipitate significant psychological, behavioral,

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social, physical, and economic sequelae (Osterweis, Solomon, & Green, 1984). Consequently, there are few, if any, situations that warrant greater consideration for the application of therapeutic methodologies to alleviate pain, reduce dysfunction, work through conflicts, and promote adaptation. This article describes the rationale and clinical considerations for utilizing Eye Movement Desensitization and Reprocessing (EMDR) within an overall treatment framework for grief and mourning.

EMDR is an integrative psychotherapeutic approach comprised of eight phases and a three-prong methodology to identify and process past memories that underlie current problems, present triggers that elicit disturbance, and positive templates to be incorporated into the client's repertoire for adaptive future behaviors. Currently, EMDR is recognized and recommended as a first-line treatment for trauma in numerous international guidelines (American Psychiatric Association, 2004; Bisson & Andrew, 2007; Department of Veterans Affairs and Department of Defense, 2004; National Institute for Clinical Excellence, 2005). Over the past two decades, more than 20 randomized studies have established its efficacy with a wide range of trauma populations (Bisson & Andrew, 2007).

Each phase of EMDR therapy includes a variety of standardized procedures. However, one component of EMDR therapy that has garnered considerable attention is the use of eye movements. A meta-analysis (Davidson & Parker, 2001) found little support for this component. However, a later review of the research included in the analysis conducted by a committee of the International Society for Traumatic Stress Studies (Chemtob, Tolin, van der Kolk, Pitman, 2000) found the studies flawed because of a variety of factors. Since that time, more than 20 randomized controlled trials have demonstrated positive effects for the eye movement component (Bisson & Andrew, 2007), including decreases in emotionality and imagery vividness. These two factors alone would be expected to make treatment more tolerable for any trauma victim, including those suffering from the loss of loved one. One of these studies (Hornsvelt, Landwehr, Stein, Stomp, Smeets, & van den Hout, 2010) specifically evaluated participants recalling an aversive experience of loss. They were asked to hold in mind the image of the most distressing scene while either performing eye movements, listening to relaxing music, or not performing any dual attention task (recall only). The eye movement condition was found to be more effective than recall only, or recall with relaxation in decreasing emotionality of the most distressing scene related to loss.

In a nonrandomized study, Sprang (2001) demonstrated the effectiveness of EMDR therapy in the treatment of those suffering from the loss of a loved one. EMDR therapy was compared to exposure based Guided Mourning (GM) for treatment of complicated mourning. Of the five psychosocial measures of distress, four (State Anxiety, Impact of Event Scale, Index of Self-Esteem, and PTSD) were found to be significantly altered by the type of treatment provided, with EMDR clients reporting the greatest reduction of PTSD symptoms. Positive treatment effects were attained more rapidly with EMDR which necessitated fewer sessions. Data from the behavioral measures showed similar findings. Both groups had significant decreases in grief intensity with no significant difference. The author concluded that the benefit of EMDR treatment lies in the expeditious reduction of trauma symptoms, which can have an availing, though indirect effect on grief. Conversely, and as would be predicted by the Adaptive Information Processing (AIP) model which guides EMDR therapy, subsequent to treatment the rate of positive memories improved at a significantly greater rate for those treated with EMDR therapy than with GM.

As predicted by the AIP model, several studies and clinical reports have shown the beneficial effects result from processing the experiences that underlie current problems, which can include the deep distress, sense of powerlessness, vulnerability, or guilt

that accompany a significant loss (Gattinara, 2009; Lazrove et al., 1998; Puk, 1991; Solomon & Shapiro, 1997; Solomon, 1995, 1998; Solomon & Kaufman, 2002; Solomon & Rando, 2007; Solomon & Shapiro, 1997). The application of EMDR therapy with grief and mourning will be explored through a case example below.

## 2. Adaptive Information Processing model

The AIP model, emphasizes the role of both memory networks and the physiological information processing system (Shapiro, 2001), which transfers experiences into physically encoded memories that are stored in associative memory networks. These memory networks provide an important basis for the person's interpretation of new experiences, and significantly influence his or her current perception, behavior, and feelings. Under normal circumstances, the information processing system integrates new experiences with previous ones, gleaned the information that is useful and discarding that which is not. This information, along with the appropriate emotional states, is stored in interconnected memory networks that guide the person's future actions.

However, high levels of disturbance, which can occur during even ubiquitous events (e.g., humiliations), can disrupt the system and cause the unprocessed memories to be stored in excitatory, distressing, state-specific forms (Shapiro, 1995, 2001). As a result, these experiences contain the perspectives, affects, and sensations that were encoded at the time of the disturbing event. Such experiences become dysfunctionally stored in a way that does not allow them to connect to more adaptive information, therefore preventing assimilation within more comprehensive memory networks. For instance, a person who experiences a traumatic or overwhelming incident may continue to experience the emotions, physical sensations, and frame of mind that occurred during the event, such as a sense of vulnerability and powerlessness.

Predictably, if a current situation triggers memory networks of dysfunctionally-stored information, the emotions and physical sensations inherent in the unprocessed memory automatically arise. These affects underlie the negative beliefs and perspectives that emerge and define the individual's response in the present. For instance, following the death of a loved one, a person can be "stuck" in negative beliefs and perspectives, and continue to experience the deep distress and pain that accompanies the loss.

The goals of the procedures and protocols of EMDR are to access the dysfunctionally-stored experiences and stimulate the innate information processing system in such a way that these isolated memories are linked up to and assimilated with new or currently existing functional neurological networks. Clinical observations of recovery observed in EMDR treatment sessions (for session transcripts, see Shapiro, 2001, 2002) show a rapid progression of intrapsychic connections, as emotions, sensations, insights, and memories emerge and change with each new set of bilateral stimulation (directed lateral eye movements, alternating taps or tones). In addition to a decline in trauma symptoms, clients give evidence of a comprehensive perceptual and psychological reorganization.

Physiological changes have also been evidenced by neuroimaging studies (Bossini, Fagiolini, & Castrogiovanni, 2007; Lansing, Amen, Hanks & Rudy, 2005; Levin, Lazrove, & van der Kolk, 1999; Ohtani, Matsuo, Kasai, Kato & Kato, 2009). It is posited by the AIP model that successful EMDR treatment results in the targeted memory emerging from its isolated state to become appropriately integrated with the wider comprehensive memory networks comprising the totality of the individual's life experience. Some researchers posit that the EMDR procedures link into the same processes that occur during rapid eye movement sleep, and that the memory is transferred from episodic to semantic memory (Stickgold, 2002, 2008). Data from approximately, 10 randomized trials support

this hypothesis (Parker, Buckley, & Dagnall, 2009; Parker, Relph, & Dagnall, 2008; Schubert, Lee, & Drummond, 2011). In essence, the memory is now stored in a new adaptive form, able to be recalled and verbalized by clients without the negative affect and physical sensations that characterized their previous psychological condition.

EMDR differs from Cognitive Behavioral Therapy (CBT) exposure methods in that it is not necessary to describe the memory in detail or do homework (e.g. daily going over the details of the event). Further, EMDR seems to result in an adaptive shift in perspective and affect—more than just desensitization—with such changes taking place spontaneously during all the reprocessing phases rather than through direct cognitive challenges and shaping of behavior as found in CBT.

### 3. Potential mechanisms of action

As with all therapies and many pharmaceuticals, the neurobiological mechanisms of EMDR therapy are not definitively known, and it is undoubtedly the result of the synergy and dynamic interplay between a number of processes and mechanisms (Solomon & Shapiro, 2008). For example, the assessment phase of EMDR may be helpful in that it involves an alignment of memory fragments (e.g. accessing a negative image, irrational beliefs, emotions, sensations), cognitive restructuring (in identifying negative and positive cognitions), and somatic awareness, which may help to separate negative sensations from their negative interpretations. EMDR also involves elements of mindfulness with the client instructed to just notice what is happening during the processing. Perceived mastery may be a factor with clients gaining a sense of control for their ability to mentally circumscribe and manipulate disturbing material during EMDR treatment, which can increase coping efficacy.

The eye movements component used during EMDR therapy also have been demonstrated to have an effect. Studies indicate the eye movement lowers arousal and decreases the emotionality and vividness of negative memories (Barrowcliff, Gray, Freeman, & MacCulloch, 2004; Eloffsson, von Scheele, Theorell, & Sondergaard, 2008; Engelhard, van den Hout, Janssen, & van der Beek, 2010; Hornsveld et al., 2010). Possible mechanisms underlying the therapeutic effect of eye movement which have received research support include interference with working memory (Andrade, Kavanagh, & Baddeley, 1997), elicitation of the orienting response which prevents avoidance and facilitates integration (MacCulloch & Feldman, 1996), and the elicitation of similar physiological processes to those involved in rapid eye movement sleep (Stickgold, 2002). Further research is needed to determine the effectiveness of the various components of EMDR, their interaction effects, and to understand the mechanisms of action. Ultimately, the mechanisms of action are viewed as facilitating reorganization of memory networks, resulting in adaptive integration of negative experiences.

### 4. Application of Eye Movement Desensitization and Reprocessing (EMDR) to grief and mourning

Death of a significant attachment figure can result in a state of traumatic loss and symptoms of acute grief (Rando, 1993, 2013; Shear & Shair, 2005). In many cases, such symptoms often resolve following revision of the internalized representation of the deceased that incorporates the reality of the death (Shear & Shair, 2005). Failure to accomplish this integration can result in one or more of the forms of complicated grief (Rando, Doka, Franco, Lobb, Parkes, & Steele, 2012). The case discussions below show how EMDR therapy can facilitate a rapid integration through processing the traumatic aspects of the loss and facilitating an adaptive inner

representation evidenced by the emergence of positive, meaningful memories with felt affect (Solomon & Rando, 2007). A discussion of the EMDR protocol will follow to illustrate EMDR treatment in more depth.

In AIP terms, the death of a loved one can overwhelm the capacity of the mourner so that the experiences surrounding the death become dysfunctionally stored in memory. This is evidenced by a survivor becoming bombarded with negative images of the death scene, or continually re-experiencing the powerlessness and vulnerability associated with the worst moments of the event. As an example of the rapid treatment effects that can generally be attained, one client requested treatment because of prolonged grief over the death of her father in a nursing home four years before. Although she had many positive and neutral memories associated with her father, any deliberate attempt by the client to remember him (or any externally-stimulated reminders) induced vivid images of his suffering and death, along with feelings of powerlessness and guilt because she could not do anything to change the outcome. EMDR therapy was used to reprocess the memories of the events in the nursing home, along with her associated affect. EMDR therapy began with targeting the worst memory of her father in the nursing home (e.g. he was frightened, experiencing great pain, with the client feeling helpless to help him). Processing of this memory led to her remembering important forgotten details (such as how he would hold her hand at the bedside, his faith in God, and her attempts to make him more comfortable) and past positive memories (for example, a memory involving her father and her dog). Toward the end of the session, she felt that she helped him all she could, and had made a difference in his comfort level as he died. At the completion of the session, positive memories emerged when asked to think of her father.

According to the AIP model, the highly charged, disturbing memories of the father in the nursing home were stored dysfunctionally in the client's memory network. Since these distressing memories were so easily triggered, they became the major imagery available to her. Accessing and reprocessing the negative memories of the father's death resulted in the client's incorporation of more adaptive information (e.g., a more complete memory of the situation including positive moments and her efforts to help) and the spontaneous emergence of positive memories with corresponding affect. Now the metabolized events were accessible by choice, not by dysfunctionally-charged activation.

Traumatic and other adverse life experiences can complicate the grief. An important component of healthy grief and mourning is having access to memories of the loved one (Solomon & Rando, 2007; Solomon & Shapiro, 1997). But when there are sufficiently disturbing circumstances, intrusive symptoms can block access to the memory network pertaining to the loved one, interfering with the mourning processes. As the above example illustrates, EMDR can be helpful in accessing the distressing event, facilitating adaptive processing and moving through the processes of mourning. An example involving traumatic circumstances follows:

A baby was killed in a terrorist bombing. The mother was not allowed to see the remains, but was told that the baby had died of a head wound. For the next two months, the only image the mother had of her child was an imagined picture of her baby with a severe head wound. She had no access to other memories. Further, this negative image was easily triggered and disrupted her ability to function. Two months later, after an hour assessment, EMDR therapy was provided. The negative vicarious image of the baby was targeted with the standard EMDR protocol. During processing, the pain of the loss was experienced. With further processing other memories started emerging, e.g. a memory of the baby with her husband, the baby with her, family interactions, and finally the memory of

handing her baby to the daycare worker and saying “Goodbye” and “I love you”. At that moment, she wanted to stop the session because she felt a sense of peace and closure.

In this situation, the traumatic circumstances and being unable to view her baby had resulted in this mother’s intrusive negative vicarious imagery, had blocked access to other memories. Processing the vicarious image allowed access to those blocked memories and resulted in a sense of closure. This enabled normal mourning to resume. Four months later, EMDR was again utilized to help the mother work through the rage she felt at the perpetrators of the explosion.

The above examples illustrate how distressing circumstances of the death can complicate mourning. However, there are other factors that do this as well, such as characteristics of the attachment, prior or concurrent mourner liabilities of unaccommodated losses and stresses or mental health problems, and the mourner’s perception of lack of support (Rando, 1993). For example, a woman whose husband was killed had the belief, “I am not supposed to be happy”, which was linked to childhood attachment issues with her own mother. Treatment involved addressing relevant childhood memories associated with these developmental circumstances, as well as issues related to the loss of her husband. Assessment is always needed to construct a treatment plan that includes the identification and processing of dysfunctionally-stored memories underlying current symptoms, including past developmental memories and circumstances contributing to the present that are contributing to the clinical picture. As will be discussed below, present triggers also need to be identified as well as the skills and resources needed for adaptive future coping.

## 5. Eye Movement Desensitization and Reprocessing (EMDR) treatment protocol

A fundamental assessment issue for utilization of EMDR is identification of the upsetting moments, situations, and memories (dysfunctionally-stored information) that need to be processed to empower progression through the processes of mourning and the accommodation of the loss. What is targeted with EMDR is guided by a three-pronged protocol:

- processing the past memories underlying the current painful circumstances: these may include such instances as the moment the client heard about the death, hospital or funeral memories, or painful past memories involving the deceased. There may be dysfunctionally-stored memories of earlier events that underlie the current negative response to the loss (e.g., previous unresolved losses, traumas, attachment issues) that need to be identified and processed;
- processing the present triggers that continue to stimulate pain and maladaptive coping: it is important to address the current situations that evoke symptoms. This includes problematic situations that are difficult to cope with and/or evoke distress;
- laying down a positive future template: this involves facilitating adaptive coping patterns and strategies in present and anticipated future stressful situations. Clients may need to learn new coping skills first, which can then be actualized by imagining employing the new behavior during a future event.

EMDR is not a shortcut for movement through the processes of mourning or resolution of a trauma. Clinical observations indicate that the EMDR client goes through the same mourning processes, but may do so more efficiently because obstacles (e.g. “stuck points” or in AIP terms, dysfunctionally-stored information) to successful integration and movement are processed. Hence, rather than skipping aspects of mourning or forcing clients through

mourning processes by neutralizing appropriate emotions or truncating individual growth, EMDR promotes a natural progression by processing the factors that could complicate the mourning. While some may fear that EMDR will result in forgetting the loved one, research (Hornsveld et al., 2010; Sprang, 2001), as well as our clinical experience, indicates that EMDR seems to lead to the emergence of positive memories with felt affect. Very importantly, as illustrated in case examples, it appears that EMDR does not take away appropriate emotion. Again, EMDR must be integrated within a wider treatment framework appropriate for grief and mourning (Rando, 1993, 2013; Worden, 2009).

EMDR is an eight-phase, three-pronged (past, present, future template) protocol. These phases will be discussed with a case illustrating each phase of EMDR as it could be employed to address complicated mourning. The goal of these phases is to access and process conscious and non-conscious memories that are contributing to current difficulties. Thoroughly processing memory networks that are the basis of pathology, including vulnerability to stressors, results in the development of robust health, including a strong sense of resilience, coherence, and the ability to access and utilize personal resources. After this case history, which focuses on processing a past memory, brief case examples will be presented to illustrate processing of present triggers and future template.

## 6. Phase 1: client history taking

The history phase of EMDR includes identifying experiences that underlie present difficulties. In the context of grief, this involves the history of the relationship to the deceased as well as personal history. In terms of the AIP model, past distressing moments are identified. Often the moment of realization of the death is an appropriate initial target. This can be the moment the mourner heard about the news (e.g. a phone call), which can be an overwhelming and shocking moment; hospital scenes, the funeral, etc. However, the moment of realization could be before the death. For example, one man stated, “As soon as I saw him in the hospital, I knew we were going to lose him”.

It is important to assess the client for suitability for EMDR. It is strongly cautioned against using EMDR in the aftermath of a loss when numbness, denial, or dissociation is being experienced. These psychological defenses are needed to cope with what is often a horrible, overwhelming reality for the mourner; they need to be respected. To process them prematurely can be an intrusion on the client that can stimulate overwhelming emotions that client cannot yet handle. Psychological first aid, support, friends, family, and “tender loving care” are needed at this point, rather than a probing therapy. Generally speaking, EMDR can be considered when the emotional impact starts to be felt, the client has sufficient affect tolerance to deal with the emotions that may arise, and there is sufficient internal and external stabilization (Solomon & Rando, 2007).

*Case example: mother:* A teenager was killed in a car crash. The 42-year-old mother was very distraught and, along with her husband, was engaged in grief counseling. She was referred for EMDR treatment two years after the death to help her deal with post-traumatic symptoms. She did not have a previous trauma history.

## 7. Phase 2: preparation

The preparation phase of EMDR involves establishing a therapeutic alliance, providing education regarding the symptom picture (including the grief and mourning processes, discussing EMDR treatment and its effects, and developing stabilization, depending on the needs of the client).

With processing in which new connections are forged between the targeted dysfunctional memory network and the memory networks containing more adaptive information, the clinician must determine whether the necessary memory networks containing this information actually exist. If not, memory networks will need to be supplemented with appropriate experiences and information. For example, a client with a history of attachment difficulties may need experience with an accepting, nurturing therapist to encode positive relationship experiences to serve as counterexamples to their previous negative experiences. Once these positive experiences are encoded, they become part of the client's memory network involving relationships that is now available to link into and reconfigure memory networks containing negative relationship experiences.

For processing to take place, it is necessary for the client to access the dysfunctionally-stored information as it is currently encoded, and maintain a dual awareness; that is, to stay present ("one foot in the present") while the earlier memory is being experienced ("one foot in the past"). If the client lacks the ability to maintain dual awareness, preparation will need to include teaching him or her self-control techniques, such as relaxation skills, that foster stabilization, a sense of personal self-mastery, resourcefulness and control, which thus become encoded into the appropriate memory networks.

A client may also need resources and methodologies relevant to the specific clinical population being dealt with. For example, with loss, appropriate psychosocial education regarding grief, the mourning processes, and coping strategies are important.

*Case example: mother:* The mother met criteria for EMDR, that is, stabilized social situation, the ability to be present with her memories and emotions, and sufficient coping skills and ability to modulate her arousal. In the initial session, EMDR therapy was discussed and the client was taught several affect management strategies. This included a "safe place" exercise, deep breathing and other grounding methods. In the next session, a treatment plan was discussed with the agreement that the following session would target her memory of getting the news about her son's death. She could not think of this moment without experiencing significant distress.

### 8. Phase 3: assessment

The assessment introduces the reprocessing phases of EMDR and it is in this phase that specific elements of the targeted memory are called to mind. After accessing the disturbing experience to be used as the initial target for reprocessing, the client identifies the worst image, negative belief and emotion associated with the recall of that experience, and the location of the associated bodily sensations. The negative self-referencing belief that arises when the disturbing experience is brought to mind might be something like, "It's all my fault", "I am not good enough", "I am vulnerable", "I am powerless". A preferred, positive cognition (or positive, adaptive belief) is also identified to ascertain and verbalize the client's desired outcome. Baseline measures include the Validity of Cognition ([VoC] Shapiro, 1989) scale, on which clients rate how true the positive cognition feels to them on a 1 to 7 scale, where 1 = totally false and 7 = totally true, and a Subjective Units of Disturbance ([SUD] Shapiro, 1989; Wolpe, 1969) scale, which uses a 0–10 scale, where 0 = calm/neutral and 10 = the worst it could be.

*Case example: mother:* This session focused on receiving the news that her son had been killed. The image was the police coming to her door. The negative cognition, having to do with her sense of powerlessness was "I cannot cope". Her positive cognition was "I

can go on and thrive" with a VoC of 2. Her emotions were sadness and a profound anguish. The SUD was 10, and she felt the sensations in her stomach.

### 9. Phase 4: desensitization

The desensitization phase is the first of the three active reprocessing phases. Here, the client focuses on the image, negative belief, and physical sensations associated with the disturbing memory, while simultaneously engaging in sets of bilateral stimulation. The goal of this phase is to address the dysfunctional aspects of the memories and allow their full integration within adaptive memory networks. Spontaneous shifts in cognition, emotion, and physical sensation demonstrate the in-session treatment effects. Positive templates for adaptive future behavior are also incorporated, as described below. Further, clinical observations indicate that EMDR can facilitate the processing of the "raw felt emotion" (Solomon & Rando, 2007) often experienced by mourners that prevent realization of the loss.

*Case example: mother:* The mother's initial sets of bilateral stimulation were characterized by significant emotional distress. She would think of her son, and again experience a deep felt sense of loss when she realized he was dead, and feel that she could not connect with him (e.g. "I keep losing him over and over again"). Thirty minutes into the session (which included many sets of bilateral stimulation – in this case, eye movement), she said, "I can think of him now, and it's sad, but it's not so deep and hopeless". After this, another deep wave of emotion came up, with continued sobbing. After a few minutes she reported, "I just had a realization – that it's like being robbed a second time. When I look at his face, think about his beautiful smiling face, instead of being able to experience that love and that person, it's just horrible – I am not allowed to enjoy that". With continued processing for a few minutes she reported, "I was just thinking maybe I would be able to miss him without being devastated". After further eye movements she said, "It just occurred to me that when I clear some of this devastation, I can think of (names her son). . . I still don't want it to be true that he is dead, but he is". Several sets later, she said she felt more relaxed, as if a burden was lifted. After several more sets she said, "I feel more at peace. I know I can continue to heal". Then she was brought back to the initial target and asked what she noticed She replied, "I can think of him and feel love and I feel happy, but I also feel sad. . .". With continued processing, she reported, "A thought just came to me that I don't have to expend so much energy fighting it. I guess maybe I could possibly come back to trusting the universe a little" (She chuckles). Again going back to the initial target, she said, "I just feel pretty good and peaceful at this moment in time. . . This is the first time I could think about (names her son) beautiful, smiling face without hurting so bad". With further sets of bilateral stimulation she said, "I can't say that I've totally accepted his death, but I'm feeling more willing to move through the process because I want to honor him". "I can learn to live with this and honor his life". The SUD was a "2", which was thought to be appropriate to the situation. She also wanted to stop because she felt she was in a good place.

In this phase of EMDR, the raw felt emotion was processed, which enabled her to think of her son positively and with hope for her future. Though still sad, she was no longer "devastated". The SUD got down to a "2", which was deemed appropriate for the situation. Usually, the goal of this phase is to achieve a SUD of "0", that is, no distress. However, we are not computers and EMDR clinical experience and observations show that EMDR will not take away anything a person needs nor appropriate emotion. Hence, the SUD of 2 is ecological and appropriate to the situation.

## 10. Phase 5: installation

Dr. Shapiro's original studies (Shapiro, 1989, 2001, 2002) found that the outcome of EMDR therapy was a spontaneous shift in the negative beliefs that people hold about themselves in relation to traumatic incidents. They shifted to positive beliefs. Further, as the result of the reprocessing, their psychological state shifts from distress to calmness, and from negative to positive emotions. Hence, with the consistently emergent adaptive, positive perspective that arises through processing, EMDR can be conceptualized as a paradigm for enabling resilience and coherence (cite Chapter). The Installation phase harnesses this naturally occurring shift toward resilience and an adaptive resolution by coupling the positive cognition with the traumatic memory and continuing the processing with additional bilateral stimulation. Processing continues by enhancing the connection of dysfunctionally-stored information with currently existing positive cognitive schemata and facilitating the generalization effects within associated memories networks. The VoC scale is used to measure treatment effects.

*Case example: mother:* The positive cognition that emerged for the mother was, "I could learn to live with this and honor his life". On a 1 to 7 scale, with one being totally false and 7 being totally true, the VoC was a 6. The "6" was thought to be appropriate to the situation since no matter how positive she felt, there was still sadness.

## 11. Phase 6: body scan

EMDR therapy strongly focuses on non-verbal information, including imagery, smells, tastes and sounds, and the bodily sensations associated with tension or discomfort. When the processing appears to be complete in relation to a specific target, clients are asked to close their eyes, hold in mind the positive cognition, and bring their attention to the different parts of their body, starting with their head and working downward, while noticing any tension, tightness, or unusual sensation. If such a sensation is experienced, it is processed with bilateral stimulation.

Not uncommonly, the body sensations that arise during the Body Scan can be connected to earlier, dysfunctionally-stored memories or other aspects of the target situation. Although the physical sensations are part of the stored memory, they are experienced through the afferent/efferent nervous system. Therefore, the body sensations themselves function as a direct link to the stored memory until it is fully processed. Processing is complete when no more disturbing physical sensations are associated with the memory. However, it is common for positive affective responses that are associated with strength and confidence to emerge and strengthen during this phase.

*Case example: mother:* The client was able to think of the target memory and the positive cognition with her body feeling much lighter and calm, though she felt some sadness. Another set of bilateral stimulation was given resulting in her continuing to feel calm. She still experienced some sadness and because it seemed to be appropriate to the situation, this phase of treatment was considered complete.

This example illustrates that EMDR does not take away appropriate emotion. The client's body felt much lighter and calm during the body scan, though she still experienced some sadness.

## 12. Phase 7: closure

At the end of the session, it may be important to provide methods to return the client to equilibrium (e.g. a safe place exercise or other stabilization and grounding strategies [Shapiro, 2012]). In addition, the client is advised that processing may continue

between sessions, and that it is helpful to take note of any disturbance that arises so that this can be addressed at a subsequent session. The client is also reminded of self-care techniques that were taught in the preparation phase of EMDR. No specific "homework" is assigned.

*Case example: mother:* The session was discussed and the mother was asked for her impressions about the session and what she noticed was different. Among the topics discussed was her becoming aware of a fear of letting go of her pain, because she thought it might lead to losing contact with her son. In the aftermath of the session, what she now felt was that without all the emotional pain she could feel the connection to her son more and enjoy her memories of him and honor him. She was informed that after the session, processing continues and that other feelings, thoughts, and memories related to her son may come up, and that she could use her safe place and other grounding exercises as needed.

## 13. Phase 8: re-evaluation

At the following session, clients are assessed on their current psychological state, whether the therapeutic effects of the previous session were maintained, and other material (e.g., dreams, flashbacks, other memories) that may have emerged since the last session. The result of this assessment guides the direction of further treatment.

*Case example: mother:* At the next session, two weeks later, the mother reported being able to think of her son with positive affect and "enjoy my memories of him and feel him in my heart. . . I feel connected to him now".

This case example illustrates how a traumatic loss complicated the mourning processes such that this mother could not think of her son without significant distress. She felt that she could not connect to him or move on with her life. EMDR therapy helped her to process the raw felt emotion, enabling her think of her son, feel connected to him, and continue to move through the mourning processes.

## 14. Present triggers

The above example illustrates processing a past distressing memory underlying current difficulties. It is also important to address present triggers and secondary losses (Rando, 1993). EMDR targets can include moments and situations (present triggers) where pain and distress were particularly acute ("Last Tuesday, when I was having my morning coffee, waves of sadness came over me") and situations or moments where the mourner experienced secondary losses (e.g., a moment when the mourner realized the death of his daughter means there will be no grandchildren).

*Case example: father:* Frank, a 49-year-old married man, came into treatment 11 months after his only child, a 23-year-old policeman, had been shot and killed. After three sessions of history taking and assessment, EMDR processing was administered. Over the next nine sessions, the moment he heard about the death, hospital and funeral scenes, and vicarious negative imagery involving what his son must have felt when he was shot, were targeted. Feelings of guilt over his son's felonious death were also targeted ("I could not be there for my son"). The following session, Frank came in very sad about the fact that he would not have grandchildren. An acute moment of distress was experienced several days earlier when he was sitting in his garden as the sun set. The image was looking at the sky as he realized there will be no grandchildren, the negative/positive cognitions being "I cannot be fulfilled/There are many ways to be fulfilled – I can be fulfilled". During this emotional session, Frank experienced deep sadness and loss over his son's death and painfully expressed that a core part of him had been killed along with his son. With further processing, memories

of past fulfilling times came to mind. Along with tears, were feelings of happiness and pride. The session ended with him feeling proud of his son and in touch with the fulfillment his son had given him. He described that he may never have grandchildren, but what he had with his son will always be with him, and that is of primary importance. The next session, Frank described that he felt more balanced: He was very sad about losing the possibility of having grandchildren, the children of his son, but felt balanced with the connection to his son and that he had been a good father. These thoughts were reinforced with more processing. More sadness was expressed, and more proud moments and more feelings of what Frank called “a father’s pride” were experienced. He said he may never have grandchildren, but he had a wonderful, fulfilling life as a father.

It has been said that with the loss of one’s parents, you lose the past; with the loss of one’s spouse, you lose the present; and with the loss of one’s children, you lose the future. Frank was grieving the loss of having grandchildren (his future), along with the loss of his son. With processing, happy and proud memories of his son emerged resulting in Frank being more in touch with his fulfillment as a “proud father”. Frank’s identity as a father appeared to provide a balance for Frank’s secondary loss of grandchildren.

An important aspect of mourning is the giving up of old (now unsuitable) attachments to the deceased and readjusting old assumptions and attachments to move adaptively into the new world without forgetting the old (Rando, 1993). EMDR processing can target painful and distressing moments where the attachment and difficulty in letting go is acutely felt (e.g., “I can no longer handle being in the garden because it reminds me she is dead, and I cannot give her up”) and future templates (e.g., finding some positive meaning in gardening). The pain of relinquishing the old attachments may become apparent at each prong of the protocol, that is, when, processing past memories involving the deceased, initial painful memories that reflect the realization of the death, more recent painful moments, and in anticipating the future without the deceased. Often, EMDR processing of such difficult moments resolves in an adaptive manner, which includes healthy revisions of the assumptive world.

*Case example: wife:* Dorothy’s husband was killed in an auto accident a year before she entered treatment. They had been married over 20 years. A highly accomplished professional, she now felt incompetent and unable to take care of herself. Her history revealed she had been very insecure when growing up due to a very critical mother. Her husband had been very supportive and accepting of her, enabling a significant increase in self-esteem. After processing traumatic moments including when Dorothy was notified of the death, situations where her belief, “I cannot take care of myself” were targeted. During the EMDR processing, she started describing how her husband had been the major encouragement in her life and helped her overcome her self-image problems. With her husband’s support, she developed a strong sense of competence and self-esteem and was successful academically and professionally. With further processing, a new awareness emerged – since his death she had been afraid to be competent because it meant to her that she did not need him and would have to let him go. Hence, feeling incompetent and not able to care for herself was a way of keeping the relationship with her husband. After this realization, she was able to appreciate the meaning of the relationship with her husband, how much she had grown with him, and how frightened she was of letting him go. With more sets and further realization about how her insecurity was her way of coping with her fear of letting go, she was able to say, “I can start to take care of myself”, which was installed as a positive cognition. Further sessions focused on issues related to her mother, as well as with her grief.

The loved one mirrors who one is, and is an important part of one’s identity. It can be difficult to give up an old identity that

included that loved one and redefine oneself in the world without that person. In this example, the surviving spouse’s insecurity was a manifestation of her fear of letting go of her husband. The husband had been the major source of encouragement and self-esteem in her life. After he died, she felt very insecure and found it hard to care for herself, even though she was functioning at a high level personally and professionally. Her insecurity was a way of continuing to need her husband and maintain her attachment to him. This example also illustrates how past issues can again be triggered. Dorothy’s insecurity also stemmed from unprocessed childhood memories. The death of the husband stimulated these memories stemming from childhood (e.g., a critical mother). Family of origin issues, combined with her unconscious desire to still need her husband and maintain her attachment, contributed to her present insecurity problems.

## 15. Future templates

Once past distressing experiences and present triggers are processed, coping ability and capacity to contend with future difficulties are dealt with by providing appropriate psycho-education and skills training and utilizing EMDR processing to provide a future template for adaptive functioning. This is helpful with the client coping with present stressors, as well as future anticipated difficulties. The future template involves having the client run a movie of coping with anticipated difficulties, and processing any tension, resistances, and blocks that may be present. Blocks or obstacles that arise during this time can be dealt with by further psychosocial education or doing further assessment or processing of past memories. Future templates can be particularly helpful in enabling the mourner to reinvest in the new life without the loved one. Indeed, as Rando (1993) points out, the emotional energy formerly directed toward preserving and maintaining the relationship with the loved one now must be reinvested elsewhere (such as in other people, activities, roles, goals, objects, hopes, beliefs, causes, pursuits, and so forth). The future template can be helpful to facilitate the mourner moving adaptively forward with a meaningful and productive life. The future template can be applied to facilitate “moving on”, and to deal with fear and anxiety about engaging in new activities, pursuits, and relationships, and/or resuming one’s life.

*Case example: wife:* Ann took a year off of work following the traumatic death of her husband. She started EMDR treatment four months after her loss. She addressed initial moments of traumatization (e.g., when she heard about the death), “stuck” points, and present triggers. Upon returning to work, she found that she could not concentrate as long as she used to. She got tired more easily, and could not complete her usual workload. She realized that this was normal and that she had to give herself time to build back up to her previous pace, but the drop in her efficacy was anxiety provoking. She felt inadequate and incompetent. First, a new schedule, more realistic expectations, and stress management strategies were discussed. EMDR therapy was utilized to target recent situations where she felt incompetent, with the processing resulting in a further appreciation of all she had undergone and a deeper respect for her present energy level. A future template, where she could see herself working at a reasonable pace and taking more frequent breaks, was helpful in alleviating her anxiety and deepened the permission she gave herself to work at a pace geared to her current energy level.

This example illustrates the difficulties a mourner may have adapting to life, even after the trauma of the loss and “stuck” points in mourning have been successfully dealt with. Processing present triggers, teaching new skills and perspectives, and provid-

ing future templates can be helpful in facilitating readjustment to life.

## 16. Discussion

EMDR is an integrative psychotherapeutic approach that has been shown to be effective with trauma. If we view trauma as a distressing situation that results in such significant distress that the experience becomes mal-adaptively or dysfunctionally stored, one can then see how EMDR applies suitably to a wide range of disorders. Indeed, Mol, Arntz, Metsemakers, Dinant, Vilters-Van Montfort, & Knottnerus, 2005 have pointed out that life events can generate at least as many PTSD symptoms as traumatic events. Case studies have demonstrated successful EMDR treatment of depression (Bae, Kim, & Clark, 2008); anxiety disorders (Gauvreau & Bouchard, 2008); and problems as diverse as body dysmorphic disorder (Brown, McGoldrick, & Buchanan, 1997), phantom limb pain (Russell, 2008), olfactory response syndrome (McGoldrick, Begum, & Brown, 2008), and deviant sexual arousal (Ricci, Clayton, & Shapiro, 2006), among others. Such issues have been resolved through the EMDR processing of core memories.

In this context, EMDR therapy also can be helpful in processing the experiences that can complicate grief and mourning. Mourning involves processes of accommodation and assimilation, as well as of reorientation and reinvestment. When trauma and or other significantly distressing experiences interfere with mourning, EMDR can be used to treat the dysfunctionally-stored memories, along with the associated distressing thoughts and painful feelings, to enable the client to progress through mourning processes. Our clinical experience over the past three decades is that EMDR has the potential to be useful with all forms of mourning, including traumatic or complicated mourning. This is because EMDR generically affords ways of processing thoughts and feelings that, despite differences in the content found in different types of mourning, are part and parcel of all types of mourning.

It must be explicitly recognized that EMDR is not a substitute for the therapist having appropriate knowledge of treatment frameworks for grief and mourning, or indeed for any clinical concern that person is treating. The timing, pacing, and utilization of EMDR is always determined by appropriate assessment of client needs and situation. In general, EMDR is appropriate when the client has the ability to lower his or her level of arousal (e.g., can utilize grounding exercises or safe place imagery); can stay present with disturbing emotions and thoughts (e.g., can talk about painful experiences without going into hypo-arousal or hyper-arousal); and has a stable psychosocial situation, externally as well as internally. Therefore, when used with grief and mourning, EMDR needs to be integrated within an overall therapeutic framework, with appropriate stabilization, provision of specialized psychosocial education relevant to loss, and clinician knowledge of the clinical dynamics pertinent to grief and mourning. While there certainly are many avenues and therapeutic modalities to address these processes, we believe that EMDR is particularly efficacious and efficient in what it can bring to the treatment of grief and mourning – the processing of disturbances that are dysfunctionally stored and/or resulting from unprocessed affect.

## 17. Conclusion

The death of a loved one can be very painful, generating a level of distress that interferes with the healthy assimilation and accommodation of the loss and appropriate reintegration into the new world without the deceased. EMDR therapy is an eight-phase treatment approach that views symptoms arising from experiences that are dysfunctionally stored, unable to process and be integrated into the

wider memory networks. The constant triggering of the memory is manifested as the painful images, emotions, thoughts, sensations, and beliefs associated with the loss. This easily triggered, dysfunctional, unprocessed memory also blocks access to other parts of the memory network. Therefore, the mourner experiences the pain of the loss and is prevented from experiencing the positive memories (and other adaptive information) associated with the loved one. EMDR treatment protocols target the painful experiences enabling the integration of the dysfunctionally-stored experiences, along with current situations and future templates. Upon successful completion of treatment, the mourner can then think of their loved one beyond the painful memories and continue to move unimpeded through the mourning processes.

## Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

## References

- Andrade, J., Kavanagh, D., & Baddeley, A. (1997). Eye movement and visual imagery: a working memory approach to the treatment of post-traumatic stress disorder. *British Journal of Clinical Psychology*, 36, 209–223.
- American Psychiatric Association. (2004). *Practice guideline for the treatment of patients with acute stress disorder and post-traumatic stress disorder*. Arlington, VA: American Psychiatric Association.
- Bae, He, H., Kim, D., & Park, Y. C. (2008). Eye movement desensitization and reprocessing for adolescent depression. *Psychiatry Investigation*, 5, 60–65.
- Barrowcliff, A. L., Gray, N. S., Freeman, T. C. A., & MacCulloch, M. J. (2004). Eye movements reduce the vividness, emotional valence and electro dermal arousal associated with negative autobiographical memories. *Journal of Forensic Psychiatry and Psychology*, 15, 325–345.
- Bisson, J., & Andrew, M. (2007). Psychological treatment of post-traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*, 3, CD003388. <http://dx.doi.org/10.1002/14651858.CD003388.pub3>
- Bossini, L., Fagioli, A., & Castrogiovanni, P. (2007). Neuroanatomical changes after EMDR in post-traumatic stress disorder. *Journal of Neuropsychiatry and Clinical Neuroscience*, 19, 457–458.
- Brown, K. W., McGoldrick, T., & Buchanan, R. (1997). Body dysmorphic disorder: seven cases treated with eye movement desensitization and reprocessing. *Behavioural and Cognitive Psychotherapy*, 25, 203–207.
- Chemtob, C. M., Tolin, D. F., van der Kolk, B. A., & Pitman, R. K. (2000). Eye movement desensitization and reprocessing. In E. A. Foa, T. M. Keane, & M. J. Friedman (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (pp. 139–155). New York: Guilford Press (333–335).
- Davidson, P. R., & Parker, K. C. H. (2001). Eye movement desensitization and reprocessing (EMDR): a meta-analysis. *Journal of Consulting and Clinical Psychology*, 69, 305–316.
- Department of Veterans Affairs and Department of Defense. (2004). *VA/DoD Clinical practice guideline for the management of post-traumatic stress*. Washington, DC: Veterans Health Administration, Department of Veterans Affairs and Health Affairs, Department of Defense. (Office of Quality and Performance publication 10Q-CPG/PTSD-04).
- Elofsson, U. O. E., von Scheele, B., Theorell, T., & Sondergaard, H. P. (2008). Physiological correlates of eye movement desensitization and reprocessing. *Journal of Anxiety Disorders*, 22, 622–624.
- Engelhard, I. M., van den Hout, M. A., Janssen, W. C., & van der Beek, J. (2010). Eye movements reduce vividness and emotionality of “flash-forwards”. *Behaviour Research and Therapy*, 48, 442–447.
- Gattinara, P. C. (2009). Working with EMDR in chronic incapacitating diseases: the experience of a neuromuscular diseases center. *Journal of EMDR Practice and Research*, 3, 169–177.
- Gauvreau, P., & Bouchard, S. (2008). Preliminary evidence for the efficacy of EMDR in treating generalized anxiety disorder. *Journal of EMDR Practice and Research*, 2, 26–40.
- Hornsveld, H. K., Landwehr, F., Stein, W., Stomp, M., Smeets, M., & van den Hout, M. (2010). Emotionality of loss-related memories is reduced after recall plus eye movements but not after recall plus music or recall only. *Journal of EMDR Practice and Research*, 4, 107–112.
- Lansing, K., Amen, D. G., Hanks, C., & Rudy, L. (2005). High-resolution brain SPECT imaging and eye movement desensitization and reprocessing in police officers with PTSD. *The Journal of Neuropsychiatry and Clinical Neurosciences*, 17, 526–532.
- Lazrove, S., Triffleman, E., Kite, L., McGlasshan, T., & Rounsaville, B. (1998). An open trial of EMDR as treatment for chronic PTSD. *American Journal of Orthopsychiatry*, 69, 601–608.
- Levin, P., Lazrove, S., & van der Kolk, B. A. (1999). What psychological testing and neuroimaging tell us about the treatment of post-traumatic stress disorder (PTSD) by eye movement desensitization and reprocessing (EMDR). *Journal of Anxiety Disorders*, 13, 159–172.



- MacCulloch, M. J., & Feldman, P. (1996). Eye movement desensitization treatment utilizes the positive visceral element of the investigatory reflex to inhibit the memories of post-traumatic stress disorder: a theoretical analysis. *British Journal of Psychiatry*, *169*, 571–579.
- McGoldrick, T., Begum, M., & Brown, K. W. (2008). EMDR and olfactory reference syndrome: a case series. *Journal of EMDR Practice and Research*, *2*, 63–68.
- Mol, S. S. L., Arntz, A., Metsemakers, J. F. M., Dinant, G., Vilters-Van Montfort, P. A. P., & Knottnerus, A. (2005). Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study. *British Journal of Psychiatry*, *186*, 494–499.
- National Institute for Clinical Excellence. (2005). *Post-traumatic stress disorder (PTSD): The management of adults and children in primary and secondary care*. London: NICE Guidelines.
- Oh, D. H., & Choi, J. (2007). Changes in the regional cerebral perfusion after eye movement desensitization and reprocessing: a SPECT study of two cases. *Journal of EMDR Practice and Research*, *1*(1), 24–30.
- Ohtani, T., Matsuo, K., Kasai, K., Kato, T., & Kato, N. (2009). Hemodynamic responses of eye movement desensitization and reprocessing in post-traumatic stress disorder. *Neuroscience Research*, *65*, 375–383.
- Osterweis, M., Solomon, F., & Green, M. (1984). *Bereavement: Reactions, consequences, and care*. Washington, DC: National Academy Press.
- Parker, A., Buckley, S., & Dagnall, N. (2009). Reduced misinformation effects following saccadic bilateral eye movements. *Brain and Cognition*, *69*, 89–97.
- Parker, A., Relph, S., & Dagnall, N. (2008). Effects of bilateral eye movement on retrieval of item, associative and contextual information. *Neuropsychology*, *22*, 136–145.
- Puk, G. L. (1991). Treating traumatic memories: a case report on the eye movement desensitization procedure. *Journal of Behavior Therapy and Experimental Psychiatry*, *22*, 149–151.
- Rando, T. A. (1993). *Treatment of complicated mourning*. Champaign, IL: Research Press.
- Rando, T. A. (2013). *Coping with the sudden death of your loved one: Self-help for traumatic bereavement*. Indianapolis: Dog Ear Publishing.
- Rando, T., Doka, K., Fleming, S., Franco, M. H., Lobb, E., Parkes, C. M., et al. (2012–2013). A call to the field regarding complicated grief. *Omega: Journal of Death and Dying*, *65*(4), 263–267.
- Ricci, R. J., Clayton, C. A., & Shapiro, F. (2006). Some effects of EMDR treatment with previously abused child molesters: theoretical reviews and preliminary findings. *Journal of Forensic Psychiatry and Psychology*, *17*, 538–562.
- Russell, M. (2008). Treating traumatic amputation-related phantom limb pain: a case study utilizing eye movement desensitization and reprocessing (EMDR) within the armed services. *Clinical Case Studies*, *7*, 136–153.
- Schubert, S. J., Lee, C. W., & Drummond, P. D. (2011). The efficacy and psychophysiological correlates of dual attention tasks in eye movement desensitization and reprocessing (EMDR). *Journal of Anxiety Disorders*, *25*, 1–11.
- Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress*, *2*(2), 199–223.
- Shapiro, F. (1995). *Eye movement desensitization and reprocessing: Basic principles, protocols and procedures*. New York: Guilford Press.
- Shapiro, F. (2001). *Eye movement desensitization and reprocessing: Basic principles, protocols and procedures* (2nd ed.). New York: Guilford Press.
- Shapiro, F. (2002). Paradigms, processing and personality development. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 3–26). Washington, DC: American Psychological Association Press.
- Shapiro, F. (2012). *Getting past your past*. NY: Rodale.
- Shear, K., & Shair, H. (2005). Attachment, loss, and complicated grief. *Developmental Psychobiology*, *47*, 253–267.
- Solomon, R. M. (1995). *Critical incident trauma: Lessons learned at Waco Texas* Paper presented at the Law Enforcement Psychology Conference, San Mateo, CA.
- Solomon, R. M. (1998). Utilization of EMDR in crisis intervention. *Crisis Intervention*, *4*, 239–246.
- Solomon, R. M., & Kaufman, T. E. (2002). A peer support workshop for the treatment of traumatic stress of railroad personnel: contributions of eye movement desensitization and reprocessing (EMDR). *Journal of Brief Therapy*, *2*, 27–33.
- Solomon, R. M., & Rando, T. A. (2007). Utilization of EMDR in the treatment of grief and mourning. *Journal of EMDR Practice and Research*, *1*, 109–117.
- Solomon, R. M., & Shapiro, F. (1997). Eye movement desensitization and reprocessing: an effective therapeutic tool for trauma and grief. In C. Figley, B. Bride, & M. Nicholas (Eds.), *Death and Trauma* (pp. 231–247). Washington, DC: Taylor and Francis.
- Solomon, R. M., & Shapiro, F. (2008). EMDR and the adaptive information processing model: potential mechanisms of change. *Journal of EMDR Practice and Research*, *4*, 315–325.
- Sprang, G. (2001). The use of eye movement desensitization and reprocessing (EMDR) in the treatment of traumatic stress and complicated mourning: psychological and behavioral outcomes. *Research on Social Work Practice*, *11*, 300–320.
- Stickgold, R. (2002). EMDR: a putative neurobiological mechanism of action. *Journal of Clinical Psychology*, *58*, 61–75.
- Stickgold, R. (2008). Sleep-dependent memory processing and EMDR action. *Journal of EMDR Practice and Research*, *2*, 289–299.
- Wolpe, J. (1969). *The Practice of Behavior Therapy*. New York, NY: Pergamon Press.
- Worden, J. W. (2009). *Grief counseling and grief therapy: A handbook for the mental health practitioner*. New York: Springer Publishing Company.