The Integrative Use of EMDR and Clinical Hypnosis in the Treatment of Adults Abused as Children

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The potential benefits of the use of a permissive style of clinical hypnosis as a therapeutic medium to enhance *eye movement desensitization and reprocessing* (EMDR) trauma treatment are explored. A comparative review of hypnosis and EMDR is provided, including putative psychophysiological mechanisms for both. A rationale for integrating clinical hypnosis with EMDR treatment is presented. It is suggested that hypnosis primarily enhances the accessibility of traumatic information while EMDR primarily enhances the reprocessing of traumatic information and that accessibility and reprocessing are reciprocal features. The relative and combined merits of hypnosis may be incorporated into EMDR without necessarily modifying the eight-stage EMDR protocol apart from modifications that are indicated for special conditions. Three case vignettes are used to illustrate the integrative use of clinical hypnosis and EMDR in the treatment of adults who experienced childhood abuse.

Keywords: clinical hypnosis; EMDR; complex PTSD; ACC; VMPFC

oth eye movement desensitization and reprocessing (EMDR) and clinical hypnosis are popular treatment approaches that have endured varying degrees of skepticism, controversy, and misunderstanding. EMDR has sometimes been confused with hypnosis, perhaps compelling EMDR founder Francine Shapiro (2001) to argue for a clear distinction between the two. While EMDR is itself an integrative psychotherapy model based upon an adaptive information processing model (AIP), clinical hypnosis is not a system of psychotherapy but rather a medium within which psychotherapy may be practiced and enhanced (Brown, 2006; Brown & Fromm, 1986). With this distinction in mind, the intent of this article is not to present a separate and distinct psychotherapy model or treatment protocol but rather to describe the use of a hypnotherapeutic medium as a means of potentially enhancing EMDR treatment outcomes.

Both EMDR and clinical hypnosis share in common documented evidence of accelerated and efficacious treatment outcomes. EMDR is established as an efficacious treatment for posttraumatic stress disorder (PTSD) (Bisson et al., 2007; Spates, Koch, Cusack, Pagoto, & Waller, 2009). Clinical hypnosis has been

demonstrated to improve treatment outcomes when used as a treatment adjunct with both cognitive-behavioral and psychodynamic therapy (Bisson, 2005; Brown, 1992; Kirsch, Montgomery, & Sapirstein, 1995; Watkins & Watkins, 1997). Although no controlled studies have as yet been published on hypnosis as adjunctive therapy for PTSD, there are ample case reports suggesting the efficacy of hypnosis for trauma treatment outcomes (Cardena, Maldonado, van der Hart, & Spiegel, 2009). With regard to combining EMDR and clinical hypnosis in treatment, previous articles have explored the potential benefits of such an approach (Beere, Simon, & Welch, 2001; Gilligan, 2002; McNeal, 2001; Phillips, 2001), with some authors proposing either a new integrative treatment model or new treatment protocols (Fine & Berkowitz, 2001; Hollander & Bender, 2001). These articles describe the integrative use of EMDR and hypnosis as alternating treatment approaches with the same patient and often within the same session. By contrast, this author is describing the use of EMDR treatment within a hypnotherapeutic medium.

How is EMDR distinct from hypnosis? Shapiro (2001) references studies that incorporate electroencephalographic (EEG) readings and which demonstrate that EMDR does not generate brain wave patterns associated with hypnotic trance. Shapiro presents these studies as evidence that EMDR and hypnosis have distinct, separate features and that EMDR outcomes are therefore not associated with hypnosis (Nicosia, 1995). Gilligan (2002) agrees with Shapiro that hypnosis and EMDR are distinct approaches, but he suggests that both share in common an emphasis on a *special learning state*; or in other words a distinct psychophysiological state of mind that facilitates desired change in the patient.

Shapiro also presents some caveats with regard to the integration of hypnosis and EMDR. While noting that "light trance" work may enhance stabilization for clients with dissociative disorders and may be used to assist with identifying EMDR targets for clients in general, Shapiro (2001) warns that "inducing deep trances during the EMDR treatment session may be contraindicated because the altered physiological state of hypnosis may not permit all the information to be processed adequately" (p. 297). It has been the observation of the author that deep trance per se does not interfere with the processing of information. In cases where interference to processing is observed, there is likely a reason unrelated to hypnosis as to why trauma processing is contraindicated, such as the patient who lacks self- and affect-regulation capacities. Patients in hypnotic trance, including those in deep trance, are not unconscious (Yapko, 1995). Although both light and deep trance is an altered state distinct from the normal waking state, it is nevertheless a natural state. In deep trance states, an individual may maintain a dual focus of attention to both internal stimuli and external present reality and may simultaneously have access to unconscious material or creative resources that might otherwise not be consciously accessible. The patient who proves unable to maintain a dual focus of attention, regardless of whether or not hypnosis is utilized, may be experiencing a flashback or symptoms of pathological dissociation requiring that the clinician shift to stabilization strategies. The goal of such strategies is to help the patient maintain levels of arousal to a tolerable range with the hope that the patient's window of tolerance (Ogden, Minton, & Pain, 2006; Siegel, 1999, 2002) be expanded over time so that the patient can begin to tolerate higher levels of arousal while maintaining the dual focus of attention essential for effective trauma processing.

A second caveat presented by Shapiro (2001) is with regard to hypnotic *suggestibility*. Shapiro writes that "clinical reports clinically indicate that clients will reject a suggestion that is not ecologically valid,"

the implication being that patients in hypnotic trance may lose the ability to reject invalid suggestions. It has not been the author's experience that patients in trance, including deep trance, lose the ability to reject an invalid suggestion, and there is ample research evidence that hypnotic responding is not correlated with subject suggestibility (Killeen & Nash, 2003). Barabasz and Watkins (2005) argue that the term suggestibility as applied to hypnosis is a misnomer and that a more appropriate term might be receptivity, for under hypnosis it is possible for the subject to relax "his or her vigilance and defenses while allowing internally generated stimuli to become established at the hypnotic level of awareness" (Barabasz & Watkins, 2005, p. 71). A popular maxim used by clinical hypnotists in addressing misconceptions about hypnosis with clients is to state that "all hypnosis is essentially self-hypnosis" (Spiegel & Spiegel, 2004). In this regard, clinical hypnosis is compatible with a patient-centered stance in psychotherapy. Although the author sometimes utilizes traditional hypnotic direct trance induction as well as Eriksonian naturalistic approaches (Erikson, 1958), in all instances the author maintains a permissive (Yapko, 2003), patientcentered style in which guided imagery is either patient-directed or carefully tailored by the therapist to the patient. In permissive hypnosis, hypnotic suggestions are also verbalized in a manner emphasizing patient choice.

A final concern raised by Shapiro (2001) is that the use of hypnosis might contribute to memory distortion or confabulation. It has been thoroughly documented that hypnosis per se does not invite the creation of pseudomemories but rather this problem stems from the use of leading questions and suggestive statements by the clinician, whether or not hypnosis is utilized (Brown, Scheflin, & Hammond, 1998). This conclusion speaks to the critical importance of the use of nonsuggestive language by the clinician while working with traumatic material. Unfortunately, in some jurisdictions in the United States, the use of hypnosis will interfere with a patient's ability to take legal action against a perpetrator regardless as to how hypnosis is used. Therefore, it is imperative that informed consent by the patient, including knowledge of this limitation, be obtained before clinical hypnosis is to be utilized in any case. Shapiro's concern that integrating EMDR and hypnosis might jeopardize the forensic tenability of EMDR is unfortunately a valid one, and highlights an ethical dilemma for the clinician. This author will choose to refrain from the use of hypnosis in cases in which legal action against an alleged perpetrator is a consideration.

Although EMDR and hypnosis are different approaches that involve distinct mechanisms of action, the integration of both approaches may provide a complementary advantage for some patients. What do we know thus far about the putative psychophysiological mechanisms for EMDR and hypnosis, and how might they be similar or distinct? If both approaches can be explained by distinct mechanisms, might there be complementary benefits resulting from the integration of both treatment approaches? The following overviews of both EMDR and hypnosis will include summaries of psychophysiological research to date. This information is provided as background to a discussion of hypothesized complementary mechanisms involved in the combined use.

EMDR

EMDR is an integrative system of psychotherapy guided by the AIP which posits that dysfunctional state-dependently stored information is reprocessed and assimilated into adaptive memory networks (Shapiro, 2001; Shapiro & Maxfield, 2002). Initially developed by Shapiro as a treatment for PTSD, EMDR is a structured psychotherapy methodology that integrates elements of psychodynamic, cognitivebehavioral, patient-centered, and body-oriented modalities (Shapiro, 2001). A distinct feature of EMDR initially associated with some controversy is the use of alternating bilateral stimulation (ABS). This feature involves instructing the patient to focus upon disturbing material and associated negative cognitions (NCs) and sensations while simultaneously attending to an alternate stimulus. Initially, this stimulus was exclusively the induction of saccadic eye movements, but has since grown to incorporate other forms of bilateral stimulation, including tactile alternating bilateral stimulation (TABS) and auditory bilateral stimulation.

Shapiro (2001) posits that highly stressful situations, including traumatic experiences, unbalance the AIP system and that rather than becoming integrated into adaptive autobiographical memory, disturbing material remains dysfunctionally stored in its original form, accompanied by autonomic arousal and associated dysfunctional beliefs, perceptions, and sensations. She describes the rapid resolution of traumatic memories associated with EMDR treatment as a "transmutation from the dysfunctional to the adaptive perspective." Using hypothetical neurobiological constructs as opposed to specific neurobiological substrates, Shapiro (2001) suggests imagining "a sequential linkage of associated information that is brought about by a shift in the rules guiding associative linkages within the targeted (neural) network" (p. 328).

The efficacy of EMDR treatment of adult onset, single trauma PTSD has been established in the research literature. Schubert and Lee (2009) identify three phases thus far in the research of EMDR for the treatment of PTSD. In the first phase of research, numerous studies demonstrated that EMDR was superior to waitlist or delayed treatment controls. In the second phase of research, EMDR has been demonstrated consistently more effective in treating adult PTSD than nonspecific treatments in four randomized controlled trials. In addition, nine randomized controlled trials demonstrate that EMDR is as effective as other trauma-focused therapies such as exposure, stress inoculation, and cognitivebehavioral therapy but with a trend toward greater efficiency than exposure therapies (Ironson, Freund, Strauss, & Williams, 2002; Schubert & Lee, 2009). As a result of these numerous rigorously controlled studies, EMDR has been listed in the practice guidelines of the International Society for Traumatic Stress Studies as an effective treatment for PTSD (Shapiro, 2001; Spates et al., 2009). The third phase of research is focused on understanding the underlying mechanisms of EMDR treatment. Aspects of this research will be reviewed later in the discussion of proposed EMDR psychophysiological mechanisms.

The 8-phase EMDR protocol involves the following phases. Phase 1, Client History and Treatment Planning, includes the initial intake and an evaluation for suitability to EMDR, as well as identification of targets for reprocessing. Phase 2, Preparation, involves educating the patient about EMDR, identifying potential obstacles, and assisting the patient in developing the resources essential before processing disturbing experiences. Phase 3, Assessment, involves obtaining a detailed assessment of the targeted memory, including associated negative imagery, an associated NC, a preferred positive cognition (PC), associated emotion(s), and physical sensations. Baseline measurements are obtained using the Subjective Units of Disturbance Scale (SUDS) and the Validity of Cognition Scale (VoC) (applied to the PC). Phase 4, Desensitization, involves the use of ABS combined with the patient's awareness of the targeted memory until the targeted memory is reprocessed and neutralized as measured by SUDS, therapist observation, and client self-report. Phase 5, Installation, involves the installation (increased subjective validity) of the PC utilizing ABS and then obtaining a measured outcome using the VoC. An insufficient increase in validity of the PC

alerts that clinician that some aspect of the original target was not fully processed or that there are associated as yet unidentified targets. Phase 6, *Body Scan*, involves client identification of tension or discomfort in the body which is then targeted with ABS. If the discomfort is not ameliorated, the target memory is revisited for further reprocessing. Phase 7, *Closure*, involves the use of strategies to help the patient leave the session in a state of equilibrium as well as to prepare the client for managing effects of unprocessed material between sessions. Phase 8, *Reevaluation*, is utilized at the beginning of subsequent sessions to ensure that treatment effects are maintained.

Proposed Psychophysiological Mechanisms of EMDR

The EMDR protocol utilizes the different elements described above in order to activate the AIP, theoretically resulting in increased interhemispheric interaction, reduced emotional arousal, and the transformation of traumatic memory from implicit to both episodic and semantic memory (Propper & Christman, 2008; Siegel, 2002; Stickgold, 2002). What do we know about the possible neurological substrates of EMDR trauma processing? Initial neuroimaging studies appear to associate the activation of prefrontal regions with the subjective report of decreased trauma-related distress. In a study using single photon emission computerized tomography, four individuals diagnosed with PTSD and treated with EMDR evidenced increased activity of the anterior cingulate gyrus and left prefrontal cortex following EMDR treatment (Levin, Lazrove, & van der Kolk, 1999). These neurophysiological changes were correlated with the improvement of PTSD symptoms but no causality can be established. While the authors of this study provoked symptoms using script-driven imagery, another study of two women with PTSD had similar findings without the need to provoke symptoms (Oh & Choi, 2007).

More recently, a single case functional magnetic resonance imaging (fMRI) study (Richardson et al., 2009) associated EMDR with increased activity in the ventromedial prefrontal cortex (VMPFC). The authors note that the VMPFC plays a role in the regulation of autonomic responses to posttraumatic stress. Such responses are dependent upon VMPFC connections to midbrain and hypothalamic areas primarily involved with the activation of fight, flight, freeze, submissive, or aversive defense responses to traumatic memory. Previous fMRI studies have associated diminished ventromedial prefrontal activation in response to emotional stimuli associated with psychological trauma (Lanius, Williamson, & Densmore, 2001; Shin, Wright, & Cannistrano, 2005). The authors of the EMDR fMRI study hypothesize that the EMDR protocol facilitates increased VMPFC activation in the subject and that ABS further intensifies the AIP. The outcomes in each of these neuroimaging studies might suggest a neurological picture of restored functional balance between regions of the limbic system and the prefrontal cortex correlated with EMDR treatment and might reflect a neurological pattern consistent with the idea that implicit trauma memory is reprocessed and reconsolidated as it is linked with more adaptive cortical networks.

While ABS is only one element of EMDR, it is a unique feature associated primarily with the reprocessing of traumatic memories in EMDR. Existing randomized studies are inconclusive as to the role of ABS among clinical populations. However, some psychophysiological studies with nonclinical populations associate eye movements with lowered physiological arousal and increased parasympathetic activity using skin conductance measures (Barrowcliff, Gray, Freeman, & MacCulloch, 2004; Elofsson, von Scheele, Theorell, & Sondergaard, 2008; Sack, Lempa, Steinmetz, Lamprecht, & Hofmann, 2008), with decreased vividness and emotionality of both negative and positive memories (Gunter & Bonder, 2008; Kavanaugh, Freese, Andrade, & May, 2001; Maxfield, Melnyk, & Hayman, 2008), and with enhanced retrieval of episodic memory (Propper & Christman, 2008). Cumulatively, these studies suggest that ABS is an element contributing to the reduction of trauma-related symptoms associated with EMDR treatment thereby contributing to the reprocessing and reconsolidation of traumatic memory.

Hypnosis

There exists a rather contentious debate between two schools of thought as to the nature of hypnosis. (Barabasz & Watkins, 2005; Yapko, 2003). First, there is a predominate and more established *state* view of hypnosis as an altered state of consciousness, such as that described by Barabasz and Watkins (2005) as "a distinct psychological state characterized by focused attention allowing one to dissociate perceptions and sensations, to attend with intensity and precision to thoughts and events, and to rally innate resources in unusual ways" (p. 56). Hilgard (1977), who developed the *neodissociation* theory of hypnosis, was the first to liken hypnosis to a dissociative state. According to Hilgard, consciousness consists of both an *executive* *function* and a *monitoring function*. Under hypnosis, consciousness can be controlled so that some aspect of experience (e.g., pain) may be kept dissociated from conscious awareness, or so that some aspect of experience already dissociated from consciousness (e.g., implicit traumatic memories), might be accessed without overwhelming affect.

A dissenting nonstate view is the sociocognitive theory, which emphasizes social role-playing and compliance factors and denies that hypnosis involves a distinct state of mind (Kirsch & Lynn, 1995; Spanos & Coe, 1992). Others have sought to transcend this dichotomous debate on the nature and definition of hypnosis. Spiegel (Spiegel & Greenleaf, 1992, as cited in Brown et al., 1998, p. 288) provides a succinct, multidimensional definition of hypnosis as "a phenomenon characterized by a state of attentive, receptive concentration containing three concurrent features: dissociation, absorption, and suggestibility, all three of which need to be present in varying degrees." After summarizing the major theories of hypnosis, Brown et al. (1999) identify multidimensional factors of hypnosis as consisting of physical and state variables (e.g., dissociative capacity), cognitive variables (e.g., expectations, motivations, cognitive strategies, roletaking), imaginative variables (e.g., imaginative strategies, absorption, fading of reality orientation), and contextual-interpersonal variables (e.g., relationship factors, reinforcement, transference, cultural role conceptions, and history of abuse).

Relevant factors involved in hypnosis are likely to vary according to individual levels of hypnotizability, defined as differences in the capacity to enter trance (Brown et al., 1998). Hypnotizability is a trait that may be measured from high to low by a standardized scale such as the Stanford Hypnotic Susceptibility Scale (Weitzenhoffer & Hilgard, 1962). Hypnotizability may be likened to an innate natural talent such as musical ability. It is distributed bimodally among the general population with about 8% of the population classified as very highly hypnotizable, 2% of the population classified as not hypnotizable, and most people falling somewhere on a continuum between low to high. Test-retest reliability indicates that hypnotic performance is reasonably consistent over time and is generally a consistent trait across cultures (Barnier & McKonkey, 2003). Neuroimaging studies appear to indicate deep trance phenomena evident among highly hypnotizable individuals but not evident among low-hypnotizable individuals (Barabasz & Watkins, 2005). For highly hypnotizable individuals it has been observed that hypnotic induction, not suggestion alone, may lead to hypnotic event-related potentials. The research appears to demonstrate that the experience of hypnotic depth produces effects among high hypnotizables that cannot be explained by social influence or suggestion per se.

Proposed Psychophysiological Mechanisms of Hypnosis

Rainville et al. (1999; Rainville & Price, 2003) evaluated the effects of hypnosis among hypnotizable subjects who responded to hypnotic suggestions altering their perception of pain (a phenomenon referred to as *hypnotic analgesia*) with positron emission tomography (a measure of cerebral blood flow) combined with EEG (measures of brain electrical activity). In this case, subjects were able to rate the level of pain but reported either no pain or diminished pain sensation. The results suggest that the mental absorption associated with hypnotic trance is correlated with a pattern of thalamocortical activity involving the anterior cingulate cortex (ACC), the thalamus, and the brainstem.

Gruzelier (2006) observed a similar thalamocortical pattern of activation using fMRI and EEG scanning of hypnotized subjects performing the Stroop task. The Stroop task involves naming the color ink of words that are incongruent (e.g., the word "red" written in blue). Hypnotized subjects were given suggestions that compromised their ability to differentiate between the color and the word. Performance on the Stroop task was heavily compromised among high hypnotizables, while low hypnotizables tended to improve with practice. Gruzelier argues that such thalamocortical connections are central to the alterations of consciousness experienced in hypnosis and that more than 70% of these connections involve the ACC, which has been identified as playing a critical role in the executive control of attention involving such tasks as "attention motivation," "attention allocation," and "error detection" (Carter, Botvinick, & Cohen, 1999).

The patterns observed in these studies bring to mind the neodissociation theory of hypnosis. It may be in the selective "shutting down" of frontal executive and inhibitory functions that hypnosis enhances the accessibility of unconscious memory, described as *hypermnesia* (increased memory accessibility) and *revivication* (the reliving or reexperiencing of a memory). That hypnosis can also be used to enhance the regulation of hyperarousal, intrusive imagery, and emotional numbing speaks to the utility of clinical hypnosis in the treatment of complex PTSD and dissociative disorders.

Potential Complementary Benefits

It is hypothesized that a distinct benefit of the use of clinical hypnosis in the treatment of trauma is to activate the brain's attentional system in a manner that enhances the accessibility of traumatic information not readily accessible. It is also hypothesized that a distinct benefit of the use of EMDR in the treatment of trauma is to activate prefrontal cortex mediation of cortical and subcortical input necessary for traumatic memory processing and resolution. This is not to suggest that EMDR does not serve a function in enhancing the accessibility of trauma information, nor that hypnosis does not serve a function in enhancing the processing and resolution of traumatic memory, but rather that such functions may not be their relative strengths. The author has experienced scenarios when a client did not respond to EMDR strategies used to identify target nodes but then did respond to hypnotic strategies to identify target nodes. The author also has experienced occasions when a client was responsive to the use of clinical hypnosis for resource development and the identification of traumatic material, but became stuck with regard to the reprocessing and resolution of the trauma until EMDR was utilized. Within such scenarios, clinical hypnosis and EMDR may work in a complementary manner. Initially, clinical hypnosis may engage the ACC and associated thalamocortical connections in the brain to inhibit frontal executive defenses and access both unconscious resources and implicit trauma memories that are not adaptively processed. EMDR may then contribute to the dearousal of limbic activity while simultaneously activating prefrontal areas such as the VMPF associated with reprocessing and reconsolidation of traumatic memory.

During the Preparation Phase of EMDR, clinical hypnosis may be incorporated into resource development. The use of guided or suggested imagery in treatment is essentially a naturalistic form of clinical hypnosis. Safe place imagery combined with ABS became established early on as an EMDR technique for providing a positive context for the introduction of ABS as a tool for managing anxiety and arousal during trauma processing (Leeds, 2009; Shapiro, 2001). Safe place imagery originated as a clinical hypnosis imagery technique (Brown & Fromm, 1986; Korn & Johnson, 1983) and is an example of a hypnotic tool already widely utilized in EMDR treatment. EMDR Resource Development and Installation (RDI) protocols were developed following published case reports involving the installation of imagery with ABS (Leeds,

2009; Korn & Leeds, 2002). In addition to the use of imagery, RDI utilizes skills building, metaphor, and art therapy in the development of resources, all identified by the patient and installed with short sets of ABS. Phillips (2001) describes examples of the use of ego-strengthening hypnotic strategies that became incorporated into RDI, cognitive interweaves, and other standard EMDR procedures. Phillips presents a protocol for hypnotic ego-strengthening in EMDR that incorporates the concept of a *conflict-free image*, which is focused on "a positive sense of self that has already been actualized" and which can also be linked to EMDR cognitive interweaves. Ego-state therapy (Watkins & Watkins, 1997) is a clinical hypnosis approach that has also been combined with EMDR and incorporated into protocols for the treatment of complex trauma and dissociative disorders (Forgash & Copeley, 2008; Schmidt, 2007).

Complex PTSD, or disorders of extreme stress not otherwise specified, is a category used to describe individuals with a history of interpersonal trauma that involves harm or neglect to the individual, usually in childhood, by adult caregivers, and which occurs at developmentally vulnerable times (Ford & Courtois, 2009). Sequelae of complex trauma may include insecure attachment, dissociative disorders, self and affect dysregulation, somatic distress, and relational impairment. Phase-oriented treatment is considered by consensus in the trauma literature to be essential for working with this population (Brown et al., 1999; Ford, Courtois, Steele, van der Hart, & Niejenjuis, 2005) and with the first phase focused on stabilization (coinciding with the Preparation phase of EMDR), the second phase focused on traumatic memory reprocessing, and the third phase focused on reintegration and development of a new identity. The development of self and affect capacities through internal resource development, the gradual desensitization to phobias of the patient's internal experience, and the use of developmental repair strategies toward resolution of unmet attachment needs are emphasized in phase 1 trauma treatment. Recently, Korn (2009) reviewed the application of EMDR in the treatment of complex trauma, and she has provided a comprehensive overview of both EMDR and non-EMDR stabilization treatment strategies. Korn noted that EMDR RDI, originally developed by Leeds (1998), incorporates interventions such as skill building, the use of metaphors, art therapy, imagery, and hypnosis into a protocol combined with ABS for the installation of these strategies. Korn and Leeds (2002) presented outcome data on the use of RDI in the treatment of complex PTSD demonstrating clinically significant positive

changes on several standard measures, although the data was uncontrolled for non-RDI and non-ABS treatment conditions. Leeds (2009) reviewed the development and use of resources in trauma-focused psychotherapy with both EMDR and non-EMDR treatment approaches and noted that interventions focused on stabilization originated with hypnosis and specifically with Janet (1897) in his treatment of patients with dissociative disorders.

With regard to the benefits of incorporating hypnosis into stabilization treatment strategies, Hollander and Bender (2001) noted that clinical hypnosis can enhance a subjective sense of safety through the voluntary element of dissociation in contrast to the involuntary element of dissociation associated with psychological trauma. The deepening absorption associated with hypnotic trance can enhance and deepen the self-regulatory effects of safe place imagery. Hypnotic imagery can be used with resource development incorporating nurturing figures that serve as inner helpers (Phillips & Frederick, 1995; Watkins & Watkins, 1997), inner advisors (Bresler, 1990), inner strength (McNeal & Frederick, 1999), or ideal parent figures as developed by Brown (Brown, 2006; Murray-Jobsis, 1990). Hypnoprojective techniques (Brown & Fromm, 1986), such as an inner screen or stage or suggested dreams, may be utilized for the identification and development of coping strategies. Posthypnotic suggestion may also be used to enhance ego functioning and self-development. When integrated into EMDR treatment, hypnotic strategies may be combined with ABS to install the resource.

Exploratory hypnosis or hypnotic uncovering may be incorporated into EMDR treatment to help identify EMDR target memories or unconscious motives for blocked information processing when a standard EMDR approach such as the *cognitive interweave* is not yielding results. As previously discussed, the use of hypnosis does not contribute to memory confabulation as long as the clinician is not being suggestive when exploring the patient's experience. After an exhaustive literature review, Brown et al. (1998) conclude that hypnotic hypermnesia for personally relevant information recollected using age-regression techniques may accurately capture the gist of a traumatic memory even though hypnotic hypermnesia is not reliable for recalling nonpersonally relevant details of memory. The authors also conclude that memory distortion and confabulation may indeed result from social/contextual demands such as interviewer bias and suggestive interviewing but not from hypnotic procedures per se. In a sample informed consent for hypnosis published by the American

Society of Clinical Hypnosis (Hammond et al., 2004), it is suggested that a patient be informed that hypnotically recalled memory should be regarded as "simply one more source of data that cannot be relied on as more accurate or necessarily superior to material already in conscious awareness."

During the desensitization phase of EMDR treatment, clinical hypnosis can be incorporated to enhance a dual focus of attention and affect modulation during the reexperiencing of trauma imagery. For instance, split-screen imagery (Spiegel & Spiegel, 2004) can be used so that an image of safety may be juxtaposed with images associated with the revisiting of traumatic memory. A patient may continue to experience an optimal level of anxious and affective arousal associated with traumatic memory while accessing visual, auditory, and kinesthetic elements of such memory during hypnotic trance. Hypnotic trance per se will not interfere with the accessing of, exposure to, and reprocessing of implicit trauma memory and may in fact help the patient maintain an optimal window of tolerance and dual focus of attention during reprocessing. In the following case vignettes, fictional first names were used.

Case Vignette #1

Joe, a 55-year-old male, received six sessions of shortterm psychotherapy incorporating EMDR and clinical hypnosis at the time he presented for treatment. The first session included the initial interview, psychosocial assessment, and the first phase of EMDR. The second session involved the assessment of hypnotizability and initial use of clinical hypnosis for developing safe place imagery, cue-induced relaxation, and the introduction of TABS to install imagery identified by the client during hypnosis. The second session also involved phase 2 of EMDR. The third session involved the use of clinical hypnosis for hypnotic uncovering and identification of EMDR target nodes to complete EMDR phase 3. Hypnotic trance was maintained during EMDR treatment, which proceeded into phases 4 through 7. The fourth session involved EMDR phases 7 and 8, with the use of hypnosis for further practice and mastery of resources previously installed. The fifth session involved EMDR phase 8 at a 2-month follow-up, and the sixth session involved the same in a 6-month follow-up.

At the time he presented for treatment, Joe reported that he had been married for 3 months to Diana. This was Joe's fourth marriage and he had lived with Diana for a year before they were married. Joe's presenting complaint was that for the past 2 months he would "shut down" or "go into another zone" for at least 24 hr following sexual relations with Diana during which he would become irritable and would "shut Diana out" for at least a couple of days following sexual relations. Joe was unable to identify thoughts or feelings related to his experience during these episodes. Joe insisted that he was very happy to be married to Diana, that previously the sexual aspect of their relationship had been very satisfying, and that nothing had changed with regard to his positive perception of Diana. He perceived that he had no control over these episodes, which had begun 2 months prior to his initial appointment and which he had never experienced before that time. Joe reported that neither a previous marriage nor any previous relationships were as fulfilling and intimate as his current marriage but that ironically he had never experienced similar episodes with partners in the past. Joe was unable to consciously identify any conflict or emotional problems, current or past, or any past traumatic or disturbing experience that might explain his presenting symptoms. He also complained of anxiety related to fearing damage to, or the loss of, his marital relationship because of this problem, despite reassurances from his wife Diana. Joe completed two self-report scales before the second session, the Dissociative Experiences Scale (Bernstein & Putnam, 1986) and the Multiscale Dissociation Inventory (Briere, 2002), and neither scale provided evidence for pathological dissociation. Joe's treatment goal was to identify why he was experiencing the undesired episodes and for him to be able to modify both the negative affect state and behavior in order to maintain a level of healthy intimacy with his wife.

In the second session, Joe was assessed for his level of hypnotizability using the Hypnotic Induction Profile (HIP; Spiegel & Spiegel, 2004), which indicated a high level of hypnotizability. A traditional eye fixation induction (Hammond, 1998) was utilized, and Joe easily evidenced signs of a deep hypnotic trance. Safe place imagery was established as Joe visualized himself in a favorite natural setting, and Joe reported experiencing the imagery vividly. Hypnotic suggestions for recollection of a cue word (Yapko, 2003) to induce relaxation were then utilized; for example, "When you begin to experience distress, it will automatically occur to you to think the word sunset (word chosen by the client) and the body will begin to relax." Following discussion of his initial experience of hypnosis and instructions for the practice of self-hypnosis, EMDR was presented to Joe as an approach that might be utilized if it were determined that some past disturbing experience might be related to the current presenting symptoms. TABS was utilized to install Joe's safe place imagery experience and to introduce him to the experience of TABS.

In the third session, Joe reported that he was able to utilize safe place imagery to help him manage stress between sessions, and he reported that he was ready to begin EMDR treatment. NCs, feelings, and body sensations associated with Joe's episodes of "shutting down" were identified and targeted with TABS. Because Joe continued to experience blocked processing, an affect bridge (Watkins, 1971) technique combined with TABS was attempted with the intention of helping Joe identify any previous experiences that might feel similar in the body to the more recent disturbing experiences associated with Joe's presenting complaint, but this approach yielded no information. Hypnotic trance was then induced, and after revisiting his safe place, Joe was invited to visualize a safe room where he would be able to undertake exploratory therapy work with the intention that he would revisit his safe place before the end of the session. Ideomotor questioning (Cheek & LeCron, 1968; Hammond, 1998) was then utilized to explore the nature of Joe's episode of detachment and irritability following sex with his wife. Ideomotor questioning is a method of rapid unconscious exploratory hypnosis first developed by LeCron (Cheek & LeCron, 1968), who identified seven areas of exploration, one of which involves past unconscious memory. The approach has been further refined and developed and is applied to conversion disorders as well as traumarelated disorders. Ideomotor signaling involves the use of involuntary finger signaling during hypnotic trance in which one finger becomes identified as signaling a "yes" response, another finger as signaling a "no response," a third as signaling an "I don't know" response, and a fourth signaling an "I don't want to say" response, with uncovering questions directed specifically to the unconscious mind while the client is in a trance state.

While in trance, Joe was asked a series of questions exploring LeCron's seven areas. When a question was directed to Joe's unconscious mind as to whether his presenting complaint was related to some past unresolved event, a "yes" response was signaled. Joe's unconscious mind was then asked whether he was willing to explore and understand whatever may have happened in the past to cause his current problem, and Joe again signaled "yes." (Joe had already given informed consent with regard to hypnosis and memory.) Further questioning identified the general age of significant event(s) as occurring between the ages of 10 and 12 years. Joe was asked if he was ready on a conscious level to know or recall the past event(s), and the "yes" finger again floated up. Joe's unconscious mind was then instructed to orient him back to a time soon before the event(s) occurred and from there for the unconscious mind to orient him forward to the very first experience of the event(s). Joe then identified visualizing himself at the age of approximately 10 at summer camp and begins to recall three separate occasions of forced mutual masturbation, by a male camp counselor, that occurred during summer camp experiences from the ages of 10-12. Joe reported that he had been afraid of this counselor, and while in hypnotic trance he views the abuse experience as though he is watching it on a screen. While continuing to be in a state of hypnotic trance, Joe gave permission to proceed with EMDR now targeting his memory of abuse with the goal of reprocessing the memory to adaptive resolution. Joe identified a mental picture that represented the worst of these abuse experiences, and the following EMDR assessment phase information was identified:

NC: "I am dirty because I should have stopped it."

PC: (An EMDR *cognitive interweave* exploring the theme of "responsibility" was used in helping Joe formulate the PC): "I was only a child, and I didn't do anything wrong because he threatened me."

VoC = 2

Emotions: guilt, anger, disgust

Body sensations: tightness in the chest; discomfort in the genitalia.

SUDS (0–10): 10

A theratapper[™] (Schmidtwerks, LLC) consisting of alternating vibrating pods was used for TABS while Joe continued to be in a state of trance with his eyes closed. Theratapper pods were placed under each palm as Joe had his hands resting on his lap, palms down. Desensitization proceeded with about 8-10 sets of TABS until Joe's SUDS were reduced to 1 and then installation continued until Joe's VoC was 7. Following desensitization, a body scan did not indicate any further evidence of needed processing. A question was then directed to Joe's unconscious mind as to whether there were any other events or experiences relevant to the presenting complaint, and a response was a signaled from the no finger. Another question was then directed to Joe's unconscious mind as follows: "Given that this experience occurred in the past and has now been remembered and processed on a conscious level, is it necessary for the undesired symptoms to continue?" This question elicited a "no" response and it was then suggested to Joe that he again visualize his safe place, and then visualize his adult ego state consoling and protecting his child ego state, the child part of him identified as having suffered the abuse. Once Joe was brought out of trance, he continued to report a SUDS of 1 and was given instructions for coping in the event that he were to reexperience distress or further processing before the next scheduled session.

During the fourth session, Joe reported that he and his wife had engaged in sexual relations on two occasions during the prior week and he also reported that at neither time did he experience any disturbing symptoms or exhibit any withdrawing behaviors afterwards. When asked to bring up the picture of the abuse that was used as the target for EMDR reprocessing, Joe reported a SUDS of 0 and identified no unusual sensations in his body. In further exploring the connection between the recovered memory of abuse and the episodes of mood disturbance and withdrawal that constituted his presenting complaint, Joe verbalized the possibility that unconscious guilt and shame associated with his negative belief that he was "dirty," something he had not been consciously aware of before the abuse memory was conscious, may have led him to feel unworthy of sexual intimacy with a woman he loved and respected to a degree he had not previously experienced. Despite some verbalized concern by this therapist, Joe decided to discontinue regular therapy at this point, believing that the problem had been resolved. He did, however, agree to two follow-up appointments and to contact this therapist if the problematic episodes were to resurface. Both a 2-month and 6-month follow-up session with Joe indicated that treatment effects had been maintained, and Joe reported that he was having no further problematic behaviors associated with sexual or emotional intimacy with his wife Diana.

This case primarily illustrates the use of hypnosis in the identification of an EMDR target in short-term integrative trauma treatment. Initially, the memory of the past abuse was not consciously accessible to the patient and did not spontaneously surface during the initial EMDR intervention. The induction of deep trance appeared to enhance the exploratory hypnosis intervention thus enabling the patient to identify the relevant memory. The memory recovery was accomplished without therapist bias or suggestion that any unrecovered memory was related to the presenting symptoms. The patient had consented to the use of hypnosis with the knowledge that it could interfere with possible future litigation against a past offender. The patient also benefited from hypnosis to identify and utilize imagery as a way to manage stress and anxiety, thereby also providing him a sense of mastery and confidence in the treatment approach.

Case Vignette #2

Mike was 36 years old when he started psychotherapy, which initially incorporated clinical hypnosis. Approximately 3 months into treatment, EMDR was incorporated. Mike received 28 weekly sessions over a period of 8 months. Mike is a divorced male and father of two young children whose presenting complaint included low self-esteem and social anxiety, both of which the patient related in part to his family of origin experience. Mike also hinted at past sexual abuse and associated intrusive imagery, but he did not wish to address this problem early in the treatment process. He complained that social anxiety was interfering with his ability to form satisfying relationships and with the realization of his career goals. Mike reported that friends and acquaintances had described him as surly at times. Mike described his parents as having been highly critical, anxious, and preoccupied throughout his childhood. He reported that he was an only child and that he was restricted from normal socialization with his peers because of parental worries. The goal of Mike's treatment was for him to experience and maintain improved selfesteem, especially in social contexts, and for him to identify and modify negative beliefs and affect states interfering with interpersonal relationships and vocational goals.

Mike gave informed consent for hypnosis and evidenced high hypnotizability on the HIP. During the first 3 months of treatment, clinical hypnosis was used for ego strength development, with an emphasis on using visualization for developmental/attachment repair and self-esteem development. While recognizing his role in the failure of his marriage, Mike identified that one of his strengths included being a parent to his two young children. Mike drew from these positive traits in order to visualize his adult self attuned to and re-parenting his child ego state. In addition, experiences in which Mike had experienced self-confidence were identified, and the emotions were amplified using hypnotic suggestion. Mike was then encouraged to visualize sustaining the positive emotions and sensations in different past and current situations with the intention of developing an ability to sustain positive affect regardless of context. TABS was incorporated to install each occasion in which Mike sustained positive affect in a different context. *Rehearsal in imagery* (Brown & Fromm, 1986) was also utilized as Mike practiced identifying and modifying automatic negative thoughts that occurred in social contexts with suggestions given that he automatically recall positive reframes. This was coupled with cueinduced relaxation suggestions to help him reduce anxious arousal in social contexts; for example, "whenever you begin to notice that feeling of anxiety in your body, it will automatically occur to you to think of that time when you were confident and relaxed..." TABS was again incorporated to install the imagery as Mike reported a subjective sense that the TABS enhanced the intensity of images and suggestions.

Imagery emphasizing the re-parenting of a child ego state by Mike's adult ego state was used to address specific unmet developmental attachment needs. This was exemplified in the following hypnotherapy session excerpt during which hypnotic suggestions incorporate information from previous therapy sessions. The suggestions are tailored to the client and delivered in a manner designed to address unmet early attachment needs and to convey attunement by the therapist:

perhaps the child can notice and see in your eyes that you are caring and genuine and consistent, that you are tuned in and accepting ... He can know what it is like to be with someone who is there for him and not preoccupied... You help him learn words for what he is feeling... He doesn't have to hold back for fear of being shamed or criticized. You want his curiosity and his desire to explore the world around him to grow...

Approximately 3 months into the therapy, Mike requested EMDR treatment for a childhood sexual abuse experience. EMDR Assessment phase work was commenced and integrated with the clinical hypnotherapy that had become a consistent medium in Mike's treatment. After visualizing his safe place, Mike was asked to visualize a separate room where he would be able to process the disturbing abuse memory in which he was abused at the age of approximately 8 years by an older teenage boy. While in trance, Mike recalled a picture of a memory in which he was "on the floor in the dark in the bathroom and he is on top of me, touching me." Split-screen imagery was used and the abuse memory was juxtaposed with an image associated with strength and safety. EMDR assessment work then identified the following:

> NC: "I am emasculated and damaged." PC: "I am masculine and empowered again."

VoC: 3

Emotions: confusion, degradation, anger **SUDS**: 10

Body sensations: difficulty breathing, discomfort in a leg, tightness in the chest.

Mike continued in hypnotic trance and while processing the memory, he recalled that he had shouted "stop" and as a result he was able to prevent the abuse from continuing. Mike then verbalized the following statements which were *installed* with TABS:

It was never my fault. I didn't know any better. ***** (TABS)

I have to reassure myself as an adult that I can go forward and not have anything holding me back.

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***** (TABS)
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It was never my fault to begin with... I am free. ***** (TABS)

Mike also rescripted the memory by imagining a new narrative in which he had the ability to prevent the abuse from continuing from the start and the rescripted narrative was installed with TABS, further strengthening a new sense of self-empowerment. Following desensitization and installment phases, Mike reported a SUDS of 0 and a VoC of 7. EMDR reprocessing of the sexual abuse memory consisting of EMDR phases 3 through 7 was complete in a single session. The SUDs and VoC score pertaining to this memory were sustained in subsequent sessions, and Mike reported further progress with increased self-esteem and self-confidence in both vocational and social contexts identifying that the abuse experience had a role in his problem with low self-esteem. After the 8-month episode of treatment, Mike was absent from treatment for 1 year. He returned for treatment following the loss of his job due to the economic downturn, but nevertheless reported that he had been able to maintain his previously experienced improvement in self-esteem and reported that he was no longer experiencing intrusive memories of the sexual abuse. Treatment returned to a focus upon reparative attachment imagery and the use of hypnoprojectives and rehearsal in imagery for coping with current stressors, and treatment is continuing during the writing of this article. Mike continues to report a subjective sense that the imagery work is more effectively retained when combined with TABS as an EMDR installation approach.

This case illustrates the continuation, while moving into an EMDR treatment phase, of the use of a hypnotic medium that had become an established

feature of weekly psychotherapy. Rather than discontinue what had become a familiar and effective medium for the patient, the continued use of hypnotic trance and imagery while moving into phases 3 through 7 of EMDR in a single session provided both a sense of continuity for the patient and assisted him in continuing to use resources he had already developed and had begun to master as he began to process the abuse trauma. The case also illustrates use of EMDR TABS installation of the use of hypnotic imagery and suggestion for ego-strengthening and developmental repair. Similar to RDI, brief and slower sets of ABS are used for installation of the resources in this approach. However, unlike RDI, there is no established protocol followed with regard to identifying and installing resources.

Case Vignette #3

Julia is a 44-year-old woman who had been receiving long-term phase-oriented therapy for complex trauma and dissociation (Dissociative Disorder, not otherwise specified). Julia is a survivor of childhood sexual abuse which occurred frequently during the ages of 8–14. She was sexually abused by her stepfather and frequently witnessed him physically abusing her biological mother. Julia reported that her mother did not attempt to protect her from the abuse and did not even acknowledge that Julia was abused until she was an adult.

Phase 1 *stabilization* trauma treatment was the focus during the first 4 years of treatment. During this time, Julia acquired skills and developed internal resources to enhance self and affect regulation, to manage intrusive symptoms and dissociation, and to identify and cope with trauma-related triggers. Similar to other patients who develop dissociative defenses in response to developmental and interpersonal trauma, Julia demonstrated a high capacity for imagery absorption and did not require formal trance induction.

Another major focus during the initial phase of treatment concerned the patient's *traumatic bonding* (Dutton & Painter, 1981) relationship pattern. Julia had been twice married to physically and sexually abusive men, each marriage manifesting a reenactment pattern of childhood abuse. After 4 years of therapy, Julia made a healthier relationship choice and is currently married to a man with whom she has a mutually supportive and safe relationship despite challenges stemming from schemas of mistrust and trauma-related triggers. Julia began to make healthier relationship choices following therapy addressing her negative schemas. The therapy included the use of hypnotic visualization in which Julia imagined becoming comfortable interacting with a partner who would be respectful, caring, and attentive. These visualizations were utilized with the goal of helping Julia to internalize a new set of positive expectancies about potential relationship experience and to modify an unconscious wish to reexperience and master past abusive relationships with a current partner.

Clinical hypnosis addressing Julia's insecure attachment involved the utilization of imagery for developmental repair, in this case "ideal parent" imagery as developed by Brown (2006) who incorporates constructs from attachment theory into the structured use of attachment repair imagery. Julia was able to identify an ideal surrogate mother whom she imagined to be attuned to her and to protect her from harm, especially from sexual predators. Over a series of hypnotherapy sessions, Julia visualized her child self thriving and developing enhanced self-esteem. The goal of treatment was to assist Julia internalize a new internal working model of healthy attachment (Bowlby, 1988) through the use of assisted imaginative visualization of healthy childhood development free from sexual abuse.

Midway through the fourth year of therapy, Julia verbalized a desire to utilize EMDR to overcome some avoidant responses to specific trauma triggers that had been negatively impacting her quality of life and ability to be more engaged in her relationship with her husband. The first trigger she identified involved a fear of hot weather, which had led her most of her life to be housebound during hot summer days and which had limited her ability to engage in outdoor activities with her husband. With the assistance of exploratory hypnosis and ideomotor signaling, Julia was able to identify that her fear of hot weather was associated both with a feeling of suffocation and the unpleasant body heat she had experienced during sexual abuse. She also identified the fact that most episodes of sexual abuse by her stepfather occurred outdoors during the summer months. While in trance, Julia visualized being outside in hot weather, and an EMDR assessment identified the following:

NC: "I am trapped and going to be hurt."
PC: "I am able to enjoy the summer weather and know that I am safe."
VoC: 1
Emotions: terror, disgust
Bodily sensations: suffocation, nausea
SUDS: 10

With TABS being utilized during the desensitization phase, SUDS were reduced to 5 but further processing appeared stuck. At that point Julia was invited to visualize being a child in her protected, healthy home with her ideal mother and to visualize being in her back yard on a hot summer day. Julia visualized enjoying a pool and being able to choose when to go inside for air-conditioned relief from the heat with the reminder given that her present experience as an adult is one in which she can exercise choices that she could not exercise as a child. This visualization was installed with TABS, and the reprocessing of traumatic material continued until SUDS were reduced to 0 and then the installation phase was begun and continued until the VoC was reported to be 7. Imagery was then further installed in which Julia imagined being able to experience enjoyable walks on the beach and bicycling trips during hot summer days with her husband. These experiences were installed as future templates using TABS. Julia subsequently reported being free of fear and being able to enjoy outdoor activities even on hot summer days. A modification to the standard EMDR protocol was made in this case that emphasized the installation of positive, corrective imagery to rescript the memory. In Julia's case, this modification was necessary in order to help her to maintain affect regulation and to simultaneously address the significant attachmentrelated themes related to not being protected by her caregivers as a child in conjunction with reprocessing the sexual abuse trauma.

Another behavioral target identified by Julia was that she continued to experience anxiety and panic attacks every day at approximately 2:00 p.m. Because she was not able to identify the origin of this behavior pattern, exploratory hypnosis and ideomotor signaling were again utilized and in this case revealed that Julia had experienced acute anticipatory anxiety during childhood as the school day would draw to a close and as she would anticipate having to encounter her abusive stepfather waiting for her at home. Julia reported a SUDS of 10 associated with this memory. It was suggested to Julia that she instead visualize her surrogate mother waiting for her at her safe home and being interested in hearing about what Julia has learned and experienced in school. This corrective imagery was installed with TABS. Then with further EMDR processing and desensitization targeting her anxiety and panic, SUDS were reduced to 1 and Julia reported no longer having recurring anxiety symptoms at that particular time in the afternoon.

Finally, Julia identified that she would like to reduce a heightened startle response to her husband

when he comes up from behind her or is standing in a doorway. Using a *split-screen* imagery, Julia visualized memories of her stepfather coming up from behind or standing in a doorway on a screen which she then shrank in size while simultaneously visualizing her husband on a screen that was increasing in size. As she subsequently reported that her SUDS were incrementally dropping from 8 to eventually 0, TABS were used to install the new safe imagery of her husband. Following the installation of the positive imagery, a PC of "I am safe" was also installed resulting in a VoC of 7. Julia reported 6 months afterwards that she no longer experienced the startle response in these instances.

This case illustrates the use of clinical hypnosis as a medium during long-term, phase-oriented treatment of complex PTSD that incorporating EMDR, psychodynamic, and cognitive-behavioral approaches. Hypnosis and EMDR were blended throughout the treatment, both during stabilization and resource development and during trauma reprocessing. Rather than progressing in a sequential manner from one phase to the next, there is often a need to return to stabilization strategies while intermittently moving into trauma reprocessing when and if such trauma work is indicated. EMDR strategies were incorporated primarily for the installation of hypnotic resource imagery and then for reprocessing of trauma when appropriate or necessary.

Hypnotic ego-state work, exploratory hypnosis, resource development imagery, developmental repair imagery, and hypnoprojective strategies were all hypnotic approaches utilized selectively in each of the cases. TABS was also incorporated as an EMDR installation procedure theoretically strengthening cortical connections with regard to the acquired resources. The different resources that had been acquired and developed within a hypnotic medium were also incorporated into both the desensitization of traumarelated phobias as well as into trauma reprocessing work. Any modification to the eight-phase EMDR protocol was made in order to adjust treatment to the special needs of the patient, and was not required simply because hypnosis was incorporated.

Discussion

In each of the cases presented, clinical hypnosis was utilized either to assist with the accessibility of imagery used in the development of self-capacities and ego resources during the *preparation* phase of EMDR or to assist with the identification and accessibility of targeted memories during the *desensitization and*

reprocessing phase of EMDR. The case vignettes were provided to illustrate the hypothesis that combined treatment with EMDR and clinical hypnosis may enhance treatment efficacy for some patients and under certain conditions as both approaches provide complementary functions. It is hypothesized that hypnosis engages the *attentional* system of the brain in a manner that accentuates the desired effects of imagery-based resources or that assists the patient in identifying and focusing upon targeted memories and associated beliefs requiring reprocessing. It is also hypothesized that EMDR further activates prefrontal mediation of dysfunctional limbic activity associated with PTSD, in theory stimulating the AIP and thereby processing dysfunctional traumatic memory as it becomes linked with adaptive neural networks.

Cases in which hypnosis might enhance the use of EMDR include the patient who has difficulty identifying and accessing resources and targets using established EMDR protocols. Cases in which EMDR might enhance the use of clinical hypnosis include the patient who accesses resource imagery and traumatic material but does not evidence movement toward resolution of trauma-related affective states and beliefs. Contraindications to the integrative use of EMDR and hypnosis would be no different than contraindications to the use of either approach independently. Patients who are uncomfortable with formal hypnotic approaches might be more comfortable with guided imagery or with naturalistic approaches that would not highlight hypnosis as a separate state but incorporate trance work naturally into the therapeutic dialogue. Patients unable to attend to inner experience without becoming emotionally dysregulated would require significant alternative stabilization work before being a candidate for either EMDR or hypnosis and would likely first benefit from a cognitive-behavioral approach emphasizing skills building such as Dialectical Behavioral Therapy (Linehan, 1993).

Anecdotal case vignettes do not present evidence that perceived therapeutic outcomes are related to specific treatment variables, although the identification of treatment approaches that are eventually deemed to be evidence-based often begins with the use of clinical anecdote. Nevertheless, a limitation to this article is that the cases provided do not include the use of standardized and established pre- and posttreatment measures. Studies incorporating valid outcome measures and the use of control groups would be necessary to determine whether there are valid and consistent advantages to the integrative use of EMDR and clinical hypnosis as compared to each approach used independently. Studies are needed to determine whether there are valid and consistent advantages to the use of ABS to install resource imagery, such as whether or not the use of ABS results in greater utilization of a particular resource. Another limitation to this article is that the three case examples all describe highly hypnotizable patients, and the article does not explore the potential benefits of, or whether modifications are needed to, the combined treatment with patients on the low end of the hypnotizability spectrum. A final limitation to this article is that the case vignettes illustrate the integrative use of EMDR and hypnosis to adults abused as children and not to other populations. Further study of the application of the combined approach to other adult populations as well as to children, couples, and families might further elucidate the potential benefits. Areas for further study might also include problems with which EMDR and clinical hypnosis are already used independently, problems such as single-event, adultonset PTSD, child PTSD, anxiety disorders, depression, chronic pain, chronic illness, depression, grief and loss, and addictive behavior.

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