THREE CO-RESEARCHERS' EXPERIENCES DURING THEIR FIRST SESSION
OF EYE MOVEMENT DESENSITIZATION AND REPROCESSING

by

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ABSTRACT

Eye Movement Desensitization and Reprocessing (EMDR; Shapiro, 1989a, 1989b, 1995) is a relatively new procedure used primarily for treating posttraumatic stress disorder (PTSD).

This study is the first to systematically investigate the moment-to-moment experiences of PTSD victims during their first treatment session.

Using variations of Interpersonal Process Recall (Elliot, 1994), and Colaizzi’s (1978) phenomenological research methodology, findings confirmed many of Shapiro’s (1995) descriptions of experience, with nothing of a disconfirming nature being discovered.

Three distinct patterns of co-researcher experience were identified, with one co-researcher reaching full in-session resolution of her baseline measures.

Further, three broad categories of experience were discovered (Participant Experiences and Spectator Experiences [Cochran, 1990]; and Treatment Specific Effects); each of which was further found to consist of four dimensions, or components, of experience. Movement from the Participant to Spectator realm was consonant with co-researchers’ working through, contextualizing and making meaning of trauma-related memories.
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To my father, past and present;

for his gracious, unending support

and love.
CHAPTER ONE: INTRODUCTION TO THE RESEARCH PROBLEM

That we should die is inconceivable. That we should suddenly, without warning, be forced to touch the dark face of annihilation and remember, intolerable. For in such a case, to survive death is not to escape it, but to awaken an ineluctable shadow.

I begin this introduction to trauma and its treatments with a reference to death, as any encounter—even vicarious—with a profoundly traumatic event, forces one to encounter one’s own annihilation, frequently with severe psychological repercussions.

Whether the traumatic event is rape, war, natural disaster, or simply a witnessing thereof, as Janoff-Bulman writes all "traumatic events involve perhaps the most basic of threats, that to our very survival" (1992, p. 56).

According to the Comprehensive Textbook of Psychiatry (Andreasen, 1985) the commonality between all psychological trauma is an experience of "intense fear, helplessness, loss of control, and threat of annihilation" (p. 921).

The word "trauma" was originally derived from Greek verbs meaning "to pierce," or "wear out," and was used to denote a "wound," or "object damage" (Wernik, 1969). Freud (1888) extended this meaning to include psychological damage. "For him, trauma, particularly in the developmental phases, was the core of all subsequent psychopathology such as hysteria, melancholy and obsessive-compulsive disorder" (Benyakar et al., 1989, p. 432). He believed trauma to be a
consequence of an extensive breach being made in the psychological "protective shield" against stimuli (Freud, 1920).

This "breach" is the result of a sudden psychological assault on the self too great to incorporate or withstand (Freud, 1920; Benyakar et al., 1989) and results in the symptoms of posttraumatic stress disorder (PTSD; APA, 1994) and the concomitant "shattered assumptions" (Janoff-Bulman, 1992) and loss of meaning (Frankl, 1963).

Just as in the Greek myth of Persephone, in which the protagonist, abducted from a state of relative naivete and raped in the Underworld, henceforth must return repeatedly to the dark site of her trauma, so too, many victims of trauma are "forced" by their intrusive symptoms to experience a frequent, unpredictable descent into their own private "underworld."

The symptoms of PTSD (recurrent nightmares; flashbacks; anxiety; hyper-arousal; avoidance of reminders of the original trauma; APA, 1994) are notoriously difficult to treat (Kleinknecht & Morgan, 1992; Spector & Huthwaite, 1993); with traditional trauma treatments such as flooding, (Stampfl and Levis, 1967); systematic desensitization, (Wolpe, 1959, 1990); hypnosis, (Janet, 1919; Spiegol Hunt & Dondershine, 1988; Stutman & Bliss, 1985); group therapy, (Yalom & Yalom, 1990); and pharmacotherapy, (Bleich et al. 1986; Epstein, 1989;) being generally regarded as only partially effective (Janoff-Bulman, 1992; Shapiro, 1995).
Hence, with the advent of Eye Movement Desensitization and Reprocessing (Shapiro, 1989a; 1989b; 1995), comes new hope for victims of PTSD. Proponents have claimed that the normally treatment resistant symptoms from a single-event trauma can be eradicated in one to three sessions of EMDR (Shapiro, 1989a; 1989b; 1995). Further, some have declared it effective in the treatment of a variety of other diagnoses as well (Shapiro, 1995; Marquis, 1991).

Since its inception in 1989, research into EMDR has escalated to the point where "there are at present more positive controlled studies on EMDR than on any other method used in the treatment of psychological trauma" (Shapiro, 1995, p. x). Yet no in-depth descriptive study focusing on the phenomenology of EMDR has been undertaken; and is, hence, tacitly suggested by the "gap" in the literature. Such a study might provide relevant information to researchers, therapists and future clients, and help elucidate the "EMDR experience," and the meaning individuals ascribe to it.

PURPOSE OF THE STUDY

It was not the intent of the author of this study to affirm or deny the claims of EMDR treatment efficacy; such an undertaking would require a controlled experiment beyond the scope of a Master's thesis. Rather, as some of the extant EMDR literature claims use of the technique often leads to profound experiences of insight; memory retrieval; the emergence of affectively or semantically related
associations; and dramatic and swift alleviation of symptoms (Kleinknecht & Morgan, 1992; McCann, 1992; Shapiro, 1989a, 1995), it was hoped a close-up investigation of subjects' first session experiences of EMDR would help shed light on these phenomena (should they occur), and on what, exactly, occurs for subjects during their EMDR experience(s).
CHAPTER TWO: LITERATURE REVIEW

The Effects of Trauma

Shattered Assumptions

When it occurs to a man that Nature does not regard him as important, and that she feels she would not maim the universe by disposing of him, he at first wishes to throw bricks at the temple, and he hates deeply the fact that there are no bricks and no temples.

—Stephen Crane, "The Open Boat"

Evil has come though I expected good;
I looked for light but there came darkness. . . .
When I stop to think, I am filled with horror,
and my whole body is convulsed.

—Job

In Stephen Crane’s short story, "The Open Boat" (1960), a ship has sunk in the open sea, leaving only four survivors in a tiny dinghy. Exhausted and terrified, they are tossed mercilessly by an endless procession of "snarling" waves, which threaten, with each thrust, to capsize and devour them, while a shark—equally hungry for their death—circles repeatedly.

Their sudden realization of the randomness and meaninglessness of their situation, and Nature’s profound indifference to it, is intolerable. That there should be no
God, no benevolent Creator to save them at such a moment, or at least provide some meaning to their plight, is overwhelming, and, in their eyes, inexcusable.

They, in frustration and anger, want to complain and appeal their case to a higher authority; and, barring a favorable ruling, "throw bricks" at the Temple of Justice; but are even more distraught and demoralized upon realizing that "there are no bricks and no temples." So, attempting to restore order, and assuage their anxiety, they personify and blame Fate; as if, by threatening or pleading with her, they might regain some control over their lives, and still affect the outcome of their drama. In various ways they are trying to find order and meaning in, and make sense of, that which is inherently random, bizarre and meaningless.

Similarly, the Bible's Job, renown as a "blameless and upright" man, "the greatest man in all the East," cannot, despite the rationalizations of his visitors, understand why the God he loves and respects, and before whom he has behaved most piously, has visited upon him the slaughter of his children, the loss of his livestock and shepherds, and smote him with "running sores from head to foot."

He could well be in the same boat with Crane's characters. For all are in the process of experiencing one of the most profound effects of trauma: A shattering of one's basic assumptions about the self and world.
According to Janoff-Bulman (1992), such individuals, in the presence or aftermath of trauma, may suffer the "shattering" or loss of three basic assumptions:

1. **The world is benevolent and good**; and those who inhabit it, "basically kind, helpful and caring" (p. 6). Events affecting us will turn out well. Though we understand the principal of bad things occurring in the world, we expect they will not happen to us.

2. **The world is meaningful**. We can assure our ample receipt of good things by our just behaviour: Bad happens only to those who behave badly. One gets what one deserves.

Our fundamental assumption about meaning involves not simply beliefs about why events happen in our world, but, more specifically, why these events happen to particular people. We seek to understand the "distribution" of good and bad outcomes, and in the service of meaning we recognize or impose seemingly natural contingencies between people and their outcomes (p. 8).

We are deeply disturbed by the possibility that negative events could occur **randomly** to us (Lerner, 1970). We prefer to believe that she who was raped was deserving or wonton; he who is ill did not take care of himself; she who
was in an automobile accident should have been more aware; and that if we take the necessary precautions, we will be safe from these evils and live healthily until our death (a concept in which we never really believe; Becker, 1974).

3. **Self-Worth.** The third of the basic pre-trauma assumptions is that we are inherently good, moral and capable. Therefore, we believe, we are worthy of the rewards which we believe will come to us. Our reasoning is circular: We get rewarded and live prosperously because we are good; and we must be good because our prosperity proves it.

In sum, the assumptions are as follows:

> My world is benevolent. Even in such a good world negative events happen, even if relatively infrequently. Yet when they occur they are not random, but rather are meaningfully distributed. They happen to people who deserve them, either because of who they are or what they did or failed to do. I am a good, competent, careful person. Bad things couldn't happen to me (p. 19).

When such core assumptions, developed during infancy and childhood (Ainsworth, 1979; Bowlby, 1969; Marris, 1982) are "shattered" by the "shock" of trauma, the victim is left
feeling, among other things, vulnerable, helpless and confused (Janoff-Bulman, 1992; Herman, 1992); and through various defensive means, sets about to reconstruct the self amid the rubble—to make sense out of the senseless; meaning out of the meaningless.

Victor Frankl (1963), who suffered greatly while a prisoner of war at Auschwitz, emphasized the importance of finding or creating meaning in the face of trauma. According to Frankl, one can withstand almost any degree of suffering if meaning can be ascribed to it, and he writes that "suffering ceases to be suffering in some way at the moment it finds a meaning. . . " (p. 179). So important is it to us as human beings to ascribe meaning to events (put them in emotional and intellectual perspective) that, as Benyakar, Kutz, Dasberg and Stern (1989) write, "certain people will choose to give up their lives rather than . . . [surrender] . . . their ideas and beliefs, which, for them, is incompatible with existence" (p. 438).

However, as Spiegel (1988) writes, the very essence of trauma is that "it is in some sense meaningless," and this intolerable senselessness or absence of meaning "sets victims on a search for some framework in which to give the otherwise meaningless experience some sense of importance in their life" (p. 21), a task which can prove profoundly difficult.

If it is true, as interpersonal and object relations theorists claim, that "we are our others"
(Cashdan, 1988, p. 47)—that is, who we believe ourselves to be is the result of our having incorporated and "metabolized" relational experiences and values, then it follows that an encounter with, and incorporation of, the malicious "other" would lead to a profound disorientation of self. Hence a shattering of our assumptive world is mirrored by a sense of shattering, or fragmentation of the self.

This notion of a fractured or divided self is not new to psychology. From at least as far back as Freud and Janet, the predominant metaphors used to describe psychopathology and its symptoms are those of fragmentation. Terms such as "repression," "denial," "compartmentalization," "splitting," "dissociation," "disintegration," "schizophrenic," "schizoid," "multiple personality," all imply associations between health and wholeness, illness and fragmentation. Further, the goal of many forms of psychotherapy has traditionally been conceptualized as the re-integration of that which has become disintegrated.

That we equate health with wholeness, and a lack thereof with fragmentation, is reflected in our language. According to Metzner (1986), the English words "whole" and "wholesome," as well as "holistic" and "holy," have their origins in Old English hal, which meant "healthy," "sound" as well as "complete." He writes that "wholeness, in the sense of integration, overlaps considerably with the concept
of health" (p. 89). Further, our modern "crazy" comes from
Middle English crasen, meaning "to break": "Insanity and
psychosis, therefore, are related in common language and
thought to the notion of psychic fragmentation" (p. 91).
Hence, when one is "crazy", (suffering mental distress) one
is "broken" or fragmented; and conversely, when one is
healthy—emotionally and spiritually—one is whole, or as
the modern vernacular might put it, "together."

Intrusion, Hyperarousal and Constriction

The shattering or fragmentation of self and one’s
assumptive world have three concomitant mental and physical
manifestations recognized by The Diagnostic and Statistical
Manual of Mental Disorders, Fourth Edition (DSM IV; APA,
1994), which have become the defining criteria for the
diagnosis of PTSD: Intrusion, hyperarousal and
constriction.

Intrusion. Unfortunately for those suffering from
PTSD, the traumatic cognitive and affective information
which the victim reflexively attempts to expel from
awareness, does not remain in exile. Those meeting a DSM
IV diagnosis of PTSD experience one or more of the
following: (a) "recurrent and intrusive distressing
recollections of the event, including images, thoughts, or
perceptions"; (b) "recurrent distressing dreams of the
event"; (c) a re-experiencing of the trauma, as if it were
occurring in the moment (flashbacks); or (d) "intense
psychological distress at exposure to . . . cues"—be they
intrusive or external—"that symbolize or resemble an aspect of the traumatic event" (APA, 1994, p. 209).

Intrusive, traumatic memories are unlike our normal "narrative" memories—those which can be put into a story, and understood within a specific context. Rather, they are often encoded in the form of vivid sensations and mental images, which possess a "frozen and wordless quality" (Herman, 1992, p. 37; Janet, 1919); and often break spontaneously into consciousness, "both as flashbacks during waking states and as traumatic nightmares during sleep" (p. 37).

According to van der Kolk (1988), in states of high sympathetic nervous system arousal experienced during trauma, the normal linguistic encoding of memory may become inactivated and replaced by sensory and iconic forms of memory (similar to those found in children) which then intrude into waking and dreaming states. Dreams related to trauma often include exact replications of the original traumatic event, and can occur outside of rapid eye movement (REM) sleep (Herman, 1992; Ross, Ball & Sullivan, 1989).

The intrusive re-experiencing of traumatic memories Freud (1958) termed a "repetition compulsion," which he conceptualized as an attempt to master that which was experienced as overwhelming and overpowering. Similarly, Janet (1919) believed that because the trauma victim experienced a protracted sense of trauma-induced
helplessness, a sense of what we would now call self-efficacy is seen as the antidote (Seligman, 1975).

One former Vietnam veteran described his intrusive experience this way:

At least twice a week for . . . years I had sustained the same recurring nightmares . . . [of being] back there facing the same dangers, witnessing the same incalculable suffering, waking suddenly alert, sweating, scared. [At a meditation retreat] the nightmares did not occur during sleep, they filled the mind's eye during the day . . . . Horrific wartime flashbacks were superimposed over a quiet redwood grove at the retreat center. Sleepy students in the dormitory became body parts strewn about a makeshift morgue on the DMZ (Kornfield, 1993).

Horowitz (1976), believes that the repetitive, intrusive thoughts and memories which haunt the trauma victim are an attempt by the mind to resolve the discrepancies between the new trauma-related information and incompatible existing schemata. The intrusive re-experiencing could be viewed as a biproduct of "active memory's" attempt to integrate troubling information which is outside the realm of previously held beliefs or schemata; that is, to reconstruct "shattered assumptions." Completion (i.e., an abatement of intrusive symptoms) occurs when the
new disturbing information has been integrated into, or made compatible with, existing schemata; or conversely, when old schemata have been adjusted to allow for the integration of the new information. This latter idea is similar to Kuhn's (1962), notion of a paradigm shift in science, or Piaget's (1952) concept of accommodation.

**Hyperarousal.** Whereas the mental components of trauma are partially reflected by the shattering of assumptions and self, and the intrusion of disturbing memories, the physiological aspects are manifested by hyperarousal. And two or more of the following will be experienced by the PTSD victim: (a) difficulty falling or staying asleep; b) irritability or outbursts of anger; (c) difficulty concentrating; (d) hypervigilance; (e) exaggerated startle response (APA, 1994).

As a result of his work with World War II soldiers, Abram Kardiner (1947) coined the term physioneurosis to describe the continuously high levels of autonomic nervous system stimulation he witnessed. It appeared to him that these symptoms were indicative of the body's almost chronic preparedness for what may be termed "fight or flight." Similarly, Grinker and Spiegal (1945) observed that traumatized soldiers suffered from what seemed like a "chronic stimulation of the sympathetic nervous system" (p. 219). More recently, researchers have been able to confirm extensive and enduring psychophysiological changes resulting from trauma.
According to van der Kolk (1987) due to prolonged or repeated exposure to traumata, the body's use of catecholamines (the neurotransmitters norepinephrine, epinephrine and dopamine) may exceed production, and a depletion may occur, leading to a neuronal hypersensitivity to later stimulation by these same neurotransmitters. The result is that subsequent to trauma, even minor stressors or stimulation may trigger overarousal of the autonomic nervous system.

Janoff-Bulmann writes that

there is now some evidence that a single case of overwhelming terror may be capable of changing brain chemistry such that some survivors are more sensitive to adrenaline surges even decades later (1992, p. 68).

Hyperarousal can persist during the waking state, affecting concentration, causing hypervigilence, increased startle response or angry reactions, etc.; as well as during sleep, resulting in sleep disturbance. Those suffering from PTSD take longer to fall asleep, awaken more frequently (Herman, 1992) and may experience a dysregulation of rapid eye movement REM sleep (Ross, Ball & Sullivan, 1989). Further, it now appears that chronic, high levels of stress can result in structural changes to the brain, i.e., neuronal death and subsequent compensation (Ver Ellen & van Kammen, 1990).
Constriction. Symptoms in this category involve "a persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness" (APA, p. 210). A PTSD victim will exhibit one or more of the following: (a) an avoidance of thoughts or feelings associated with the trauma; an avoidance of (b) activities, places or people that arouse these feelings or thoughts; (c) amnesia for certain aspects of the trauma; (d) a diminished interest in participating in significant activities; (e) feelings of detachment; (f) restricted affect; or (g) a sense of foreshortened future (p. 209).

In the months following a traumatic event, as the intrusive and hyperarousal symptoms tend to diminish somewhat, constrictive symptoms may begin to predominate (Herman, 1992, p. 48).

The victim may begin to avoid people, places or things which he or she associates with the traumatic event, in order not to experience potentially overwhelming related thoughts and feelings (Janoff-Bulman). In an attempt to gain control over what is experienced, the victim may severely limit his or her actions, thereby affecting "the entire field of purposeful action and initiative" (Herman, p. 46).

Just as a change in victims' catecholamine production and sensitivity may occur after trauma, leading to heightened anxiety states; so too may a dysregulation of endogenous opioids lead to similar feelings of anxiety and
emotional discomfort (Pitman, van der Kolk, & Orr, 1990). This in turn may encourage those without the capacity for dissociation to self-medicate through the use of drugs or alcohol in order to constrict their range of negative affect.

However, neither drugs nor conscious avoidance of negative stimuli can ward off the persistent emotional and psychological post-trauma distress. Hence, the victim may utilize the "automatic denial process" (Janoff-Bulman, p. 97) of denial, which helps in "turning off awareness of the event or its implications . . . [or] . . . shutting down the capacity to feel" (p. 97).

Denial may serve a healing function in helping the victim pace his or her recovery, by not allowing the organism to be overloaded with too much negative information at one time (Janoff-Bulman, 1992).

However, as noted by Janet (1919) late in the last century, a trauma victim can isolate traumatic information more or less completely from conscious awareness, in what we today describe as fugue states, dissociative identity disorder (APA, 1994; previously known as multiple personality disorder, APA, 1987), or amnesia. In such dissociative states, although the traumatic information is split from conscious awareness, it does not disappear completely from the organism. Hence, the victim retains a tendency to react to subsequent stressors in inappropriate ways, as if the trauma were recurring. Van der Kolk and
Kadish (1987) write that PTSD victims may experience "the emotional intensity of original trauma without conscious awareness of the historical reference" (p. 7).

These observations bring us full circle to the notion of the fragmented or divided self; and lead us to the question of what therapeutic agent the psychotherapist might apply to return the trauma victim to a state of relative wholeness.

Current Treatments for the Effects of Trauma

Humpty Dumpty sat on a wall
Humpty Dumpty had a great fall.
All the King's horses and all the King's men
Couldn't put him back together again.

—Traditional Nursery Rhyme

As stated in Ecclesiastes, there is no new thing under the sun. Centuries before the advent of modern psychology, traditional healers, known as shamans were attempting to heal the trauma victim through reintegration of fragmented parts of self. They, however, unlike most modern therapists who concern themselves with the "mental" health (i.e., mind) of the victim, treated the soul, which they believed had at least partially left the victim's body during the traumatic experience (Ingerman, 1991). Healing was accomplished by the Shaman's venturing into the spirit world in an exercise known as "soul retrieval." To this end, he employed such
tools as rattles, "soul catchers," drums and hallucinogenic
drugs (Ingerman, 1991; Achterberg, 1985).

Although the tools of the modern "shaman," or
psychologist, may seem to us less fanciful, they are not
necessarily any more consistently effective in relieving all
of the symptoms of PTSD than those of the Shaman. That is,
the concurrence of psychological literature can be found in
the above nursery rhyme of Humpty Dumpty: No prescriptive
treatment is able, in itself, or even in combination with
other treatments, to alleviate consistently, all of the
symptoms of PTSD (Herman, 1992; Shapiro, 1995), and put the
client "together again."

The three treatments most frequently referred to in the
extant literature, and generally regarded as most effective
in treating trauma are flooding, systematic desensitization,
and hypnosis (Herman, 1992; Shapiro, 1995).

**Imaginal Flooding**

Imaginal flooding (or implosive therapy—a variation
incorporating hypothesized cues) is a technique whose
rationale borrows from the seminal work of Pavlov (1927).

Just as a dog--conditioned to salivate at the sound of
a bell (a conditioned stimulus [CS]) after that bell is
repeatedly followed by food (the unconditioned stimulus
[US])--can be taught to no longer do so in the repeated
absence of the US; so too can a trauma victim learn to
respond to mental or tangible cues (the CS) with relative
neutrality, in the repeated absence of real threat (the US). Stampfl and Levis (1967) write

the fundamental hypothesis is that a sufficient condition for the extinction of anxiety is to re-present, reinstate, or symbolically reproduce the stimuli (cues) to which the anxiety response has been conditioned, in absence of primary reinforcement (p. 499).

Pitman et al. write, "The treatment is no rose garden; it is stressful by design" (1991, p. 17). That is, the clinician deliberately tries to elicit a client’s anxiety, through a mental re-experiencing of a trauma-related event. Because this re-experience occurs in the absence of real threat, it is deemed safe— even necessary—and is repeated using increasingly anxiety-provoking cues, until anxiety is significantly diminished.

Criticism of imaginal flooding. Pitman et al. (1991) write that although flooding has been proven efficacious in the treatment of phobias and obsessive compulsive disorder, PTSD is a more complex condition, often accompanied by comorbid mental disorders.

Whereas the emotional disturbance in phobias is typically limited to anxiety, PTSD patients often also suffer from sadness, anger, guilt, and/or shame
associated with the trauma . . . . It is not clear whether these emotions obey the same law of extinction as does anxiety, upon which the rationale for flooding is traditionally based (p. 17).

They further suggest that if a client's emotional distress involves negative posttraumatic appraisals, repeated flooding may in fact be exacerbating "the feelings of anger, shame, guilt, self-accusation, feelings of failure, and "What if?" (p. 19). They present cases in which flooding led to worsened depression, relapse of alcohol abuse, and the advent of panic disorder. As one PTSD client is reported to have said in reference to his treatment, "There was a lot of flooding, but there wasn’t much mopping up" (Pitman et al., p. 19).

A further weakness is that the elicitation of extremely high levels of anxiety must be repeated over several to many sessions (Stampfl and Levis suggest between 1 and 15, 1-hr. sessions, "with total treatment time rarely exceeding 30 implosive hr." (1967, p. 502).

Further, flooding is of limited therapeutic benefit. Although the most notable amelioration of symptoms occurs within the realm of intrusion symptoms, numbing and social avoidance tend to remain unaffected (Lyons and Keane, 1989; Herman, 1992). According to Shapiro, (1989a) lacking are the cognitive elements necessary to complete treatment.
Hypnosis

Use of hypnosis for the treatment of trauma dates at least as far back as Freud (1958), who believed that the catharsis or abreaction induced during such altered states was sufficient for resolution of difficulties. This concept proved too simple (Spiegel, 1987), and he found that such abreaction alone could sometimes lead to the demoralization of the patient (p. 26), due to perceived lack of control over the traumatic material: The clients were simply overwhelmed by, and powerless in the face of, their emotion. Janet (1919) emphasized the need to help the patient not only re-experience but integrate traumatic information which had become split off from consciousness. Van der Hart, Brown and van der Kolk (1989) write

Janet considered the inability to integrate traumatic memories as the core issue in post-traumatic syndromes: Treatment of psychological trauma always entailed an attempt to recover and integrate the memories of the trauma into the totality of people's identities (p. 380).

To this end Janet pioneered particular hypnotic techniques, variations of which are still in use today (van der Kolk & van der Hart, 1989). Under hypnosis, traumatic memories which the client had repressed were retrieved and transformed or replaced by neutral or positive images and
feelings (a technique anticipating the later work of Milton Erickson, 1980). The "frozen," intrusive images which PTSD victims experience out of context and in lieu of "verbal" memory, were transformed into meaningful narratives. Presaging later flooding techniques, Janet employed a stepwise process of having the client incrementally re-experience and express their traumatic feelings. Hypnotic age regression was also used where deemed appropriate.

Since the time of Janet many authors have noted the similarities between dissociative states occurring during and after trauma, and the hypnotic state. Bruer (1958) described dissociation as a "hypnoidal" state. Spiegel et al. (1987) describe hypnotizability as "the fundamental capacity to experience dissociation in a structured setting" (p. 302). In fact, authors of recent studies (see Spiegel et al., 1988) have found a high correlation between hypnotizability scores and the diagnosis of PTSD. Noting the dissociative nature of many PTSD symptoms, and the dissociative nature of hypnosis itself, Spiegel et al. speculate that either the experience of trauma may enhance hypnotizability; or, conversely, highly hypnotizable individuals may be more susceptible to the after effects of trauma (p. 304). It is further speculated that those individuals who cannot spontaneously dissociate in the face of trauma, may induce dissociation through the use of drugs or alcohol (Spiegel, 1988).
An advantage of using hypnosis over other standard techniques is that, due to the effects of state-dependent memory (see Bower, 1981) the isolated, dissociated traumatic memories may more easily be accessed in a similar, artificially induced dissociative state (hypnosis).

Although, as Freud found, simple abreaction under hypnosis (without integration) can prove counterproductive, a modulated re-experiencing can help foster in the client a sense of efficacy and control (Smith, 1989). This perceived sense of control can arise when the client—with the therapist's help—realizes he or she has the power to slow down recall of the event(s), and re-experience only portions of the trauma, "drawing on the heightened capacity for physical and emotional control that the hypnotic state can provide" (Smith, p. 130).

One hypnotic technique, called the "affect bridge" (Watkins, 1971) is used to help the client retrieve previous traumatic information which is similar in affective content to that of which the client is currently aware. In the "split screen" technique (see Spiegal, 1987) the client simultaneously imagines the traumatic events appearing on one screen, while on another, what he or she did at the time to cope, thereby aiding the client in gaining a bigger, more integrated picture of the trauma and his or her role in it.

Criticism of hypnosis. Although hypnosis facilitates access to, and control over, dissociated states, as Spiegel writes, "There is nothing that can be done with hypnosis
that could not be done without it" (1987, p. 30). Further, despite the tendency toward increased hypnotizability among PTSD victims, not all are hypnotizable. As noted by Janet (1919), some traumatized subjects take weeks or months before they can enter into a hypnotic state (presumably due to a fear of re-experiencing the trauma-related emotions), if they enter at all. Spiegel (1987) notes the danger latent in hypnotic transference: Patients may have the sense of being reassaulted (by an insensitive therapist) during the hypnotic procedure.

Systematic Desensitization

Developed by Joseph Wolpe (see Wolpe, 1959, 1990), systematic desensitization is based on the assumption that because an anxiety response is learned or conditioned, "it can be inhibited by substituting an activity that is antagonistic to the fear response" (Kanfer & Goldstein, 1991, p. 163). Hence, a therapist using this technique exposes the client, in small graduated steps, to the disturbing memory, while having the client experience emotions incompatible with anxiety (i.e., relaxation and calmness). An associative link is then formed between relaxation and the previously anxiety provoking memory. In other words, the client learns to remain calm in the face of that which once was disturbing.

Criticism of systematic desensitization. Although there is some support for using systematic desensitization in the treatment of PTSD (Russel, 1991), several authors
(Lyons & Kean, 1989; Shapiro, 1989a; Spector & Huthwaite, 1992;) are critical of this procedure for several reasons. First, systematic desensitization requires a hierarchical ordering of anxiety related material (Wolpe, 1959) which is inappropriate and often impossible to attain with PTSD symptoms (Shapiro, 1989a; Spector & Huthwaite, 1992). Second, it tends to address only intrusive, and not constrictive, symptoms or inappropriate cognitions (Shapiro, 1989a). It also has been criticized due to length of treatment required (Shapiro, 1989a); and for subject non-compliance (Lyons & Kean, 1989).

Eye Movement Desensitization and Reprocessing

The Original Protocol

As the reader is possibly unfamiliar with this relatively new procedure, a brief description will be given (see Shapiro, 1989a, 1995 for complete details).

In the original protocol, treatment begins by having a traumatized client focus on the troubling memory or image from which he or she wants relief. For example, if the client is suffering from PTSD from having been in an automobile accident, he or she would picture the most anxiety provoking image of the accident and would covertly rehearse the concomitant cognitive belief, i.e., "I’m going to die," or "I should have done something," etc. Then, he or she rates the level of anxiety experienced in doing this, using the Subjective Units of Discomfort Scale (SUDs; Wolpe, 1982), an 11-point Likert scale, with 0 being no anxiety,
and 10 representing extreme panic. The client then imagines a preferred cognition, such as "I'm safe now," etc., and rates its validity using the Validity of Cognition Scale (VOC; Shapiro, 1989a), a seven-point Likert scale. The SUDs and VOC scores serve as baseline measures, against which any changes will be compared. Then, while once again experiencing the disturbing image, feeling and cognition, the client follows the therapist's index finger, which he or she moves horizontally, back and forth, across the client's line of vision, from extreme right to extreme left, at a distance of 12-14 inches from the client's face. Each back and forth movement of the finger (a saccade) is repeated 12-24 times (one set). After each set of saccades, the client relaxes and blanks out the picture. They then generate the picture and cognition once again and a new SUDs level is taken. The procedure is repeated until SUDs ratings reach one or zero.

According to most published studies, after one to several sets of saccades, the disturbing image changes or disappears, and the concomitant anxiety also dissipates. Sometimes, before or after the first image is desensitized, a different, but semantically or affectively related image will appear, and the above procedure is used to desensitize it. The procedure ends when all traumatic images have been desensitized.
The Revised Protocol

As with most therapeutic techniques, the original EMDR protocol has undergone an evolution which has led to alterations in the procedure.

Most noticeably, in the current protocol the clinician no longer has the client remain focused only on the original disturbing image throughout treatment, while instigating eye movements, but more gently follows the client's evolving processing. For example, at the end of a set, the clinician will ask the client, "What do you get now?" (Shapiro, 1995, p. 37) and will have the client hold the new image, feeling, thought, etc., in mind through the next set of saccades (p. 37). Shapiro writes

No matter how the information subjectively emerges, as long as processing has continued, the client should simply be directed for the next set with the global statement "Think of it." In other words, the clinician needs to address the targeted memory in whatever form it arises (1994, p. 77).

Further, the revised EMDR protocol (see Shapiro, 1995, for details) includes a complete treatment plan consisting of eight phases: (a) Client history and treatment planning; (b) preparation; (c) assessment; (d) desensitization (generally eye movements); (e) installation of positive cognition; (f) body scan; (g) closure; and (h) re-
evaluation; and an 11-step standard procedure which includes the following:

1. Client accesses an image which represents the entire traumatic event.

2. Client develops the negative "I am" self-statement, which conveys an underlying limiting belief.

3. Client creates a desirable positive self-statement which (when possible) incorporates an internal locus of control.

4. Client determines the validity of the positive self-statement (the Validity of Cognition; VOC), on a scale of 1 to 7.

5. Client identifies the disturbing emotion which linking the image and negative cognition produce.

6. Client uses SUDs to determine the subjective level of disturbance when the memory of the traumatic event is stimulated.

7. Client locates where the concomitant physical sensations in the body are felt.
8. Client processes all disturbing information (using clinician-instigated eye movements, etc.)

9. Clinician installs the positive cognition.

10. Client mentally scans body for any residual physical sensation, while holding event and positive cognition in mind.

11. Clinician ends session, insuring client is relatively relaxed.

Variations on the above standard protocol also exist for the treatment of phobias (simple and complex); excessive grief; and illness and somatic disorders (Shapiro, 1995).

Shapiro (1995) notes that since 1990 those teaching EMDR have instructed students in the use of not only eye movements, but hand taps and auditory cues; and that others have made use of flashing lights as well. She writes, that despite apparent efficacy, "further investigation may find that eye movements have a unique status as a stimulus that is also an observable inherent physiological manifestation of some types of cognitive processing" (p. 24).

Healing Mechanisms

In her seminal article (1989a) Shapiro cites Pavlov's (1927) speculation that "traumatic overload" leads to pathological neural changes which keep the traumatic
information in a "frozen state" (p. 220). Wolpe writes that if excitation and inhibition come into conflict with each other at a given locus of the cortex, "the neural elements concerned may be unable to bear the strain and so undergo a pathological change . . ." (Wolpe, 1959). The EMDR technique (repeating eye movements while holding the memory in awareness) purportedly facilitates processing of this "frozen" information (p. 220), thereby restoring neurological balance.

Several early authors, noting the superficial physiological similarities between EMDR eye movements and those found in rapid REM sleep, speculated that EMDR may provide an information processing function similar to the putative processing mechanism of REM sleep (Shapiro, 1989a; Ross et al. 1994).

To make sense of EMDR's rapid healing effects Shapiro's working hypothesis makes use of an "Accelerated Information Processing" model (Shapiro, 1995, p. 28).

According to this model, the information, which has become "frozen" due to traumatic overload, is isolated in the nervous system in its "distressing, excitatory state-specific form" (p. 30), and intrudes into consciousness in the form of the intrusive symptoms discussed above. Shapiro (1995) writes

In effect, the information is frozen in time, isolated in its own neuro network, and stored in its originally
disturbing state-specific form. Because its biological/chemical/electrical receptors are unable to appropriately facilitate transmission between neural structures, the neuro network in which the old information is stored is effectively isolated. No new learning can take place because subsequent therapeutic information cannot link associatively with it (p. 40).

Hence, one may glean new, contradictory information from years of therapy or new life experiences, but this information may prove ineffectual, as it is stored in its own neuro network, separate from the traumatic information. EMDR’s eye-movements (or alternative stimuli) "trigger a physiological mechanism that activates the information-processing system" (p. 30), thereby linking previously isolated disturbing information with currently held adaptive beliefs (p. 31).

For now, the healing mechanisms of EMDR, remain speculative. Shapiro writes that "the actual neurological concomitants may not be discovered within this generation" (1994, p. 3).

Previous Research into Eye Movement Desensitization and Reprocessing

In evaluating research into EMDR, the reader must keep in mind that there exist several extraneous variables which render evaluation difficult. First, there are, at present, a number of versions of EMD, or EMDR, currently being used
and tested. Those include Shapiro's original EMD protocol (1989a, 1989b); the EMD originally taught by Shapiro in 1990; the revised protocol taught by Shapiro since 1991 (see Shapiro, 1995); as well as therapists' own creative variations of the procedure (Greenwald, 1994).

**Controlled Studies**

The seminal study in EMDR was done by Shapiro (1989a). After serendipitously observing that she could desensitize herself to disturbing thoughts and feelings by rapidly moving her eyes from side to side (Herbert & Mueser, 1992), she engaged in clinical experiments with the eye movement procedure on approximately 70 clients and volunteers (Shapiro, 1989b). A systematic study was then undertaken involving 22 rape/molestation victims and Vietnam combat veterans, all of whom were diagnosed by their counsellors as having PTSD. Subjects were divided randomly into a treatment group, which received EMDR, and a control group, which received a modified flooding procedure. For ethical reasons, EMDR was administered to the control group after having participated in the placebo condition.

The results were as follows: In the treatment group, the mean SUDs score dropped from 7.45 (pretest) to 0.13 (post-test); and the mean VOC score (representing an increase in subjects' belief in their positive cognition) rose from 3.95 to 6.75. In the placebo group, the mean SUDs actually increased from 6.77 to 8.31, until subjects received EMDR, after which their SUDs level dropped to a
negligible level within several sets of saccades. Mean VOC scores in this group dropped from 2.95 to 2.36, and later increased from 2.36 to 6.77 after EMDR was administered. All subjects reported either a decrease or total elimination of their primary presenting problem, the effects of which were maintained at a three month follow-up.

Marquis (1991) undertook a study to "... explore the range of problems amenable to eye movement desensitization" (p. 187). There were 78 subjects in his study, 16 of whom suffered from PTSD. Some, but not all, of the other conditions treated in the study included eating disorders, agoraphobia with panic disorder, simple phobias, relationship problems, substance abuse, learning disabilities, and personality disorders. His results proved similar to Shapiro's: Seventy-three subjects were apparently cured or had improved, and only five were unimproved. Four of those suffered from severe self-esteem and self-efficacy problems. The fifth was a woman who had been desensitized to her husband's "fetishistic activity," and whose aversion to him was quickly re-established. Marquis reports that, "In general, sources of distress that are in the past and isolated were easily desensitized. Themes that were diffusely connected or highly generalized, or that represented mood-dependent states or addictions in the broadest sense, were less successfully treated" (p. 189). The "overall improvement rating" for PTSD was 2.9;
for agoraphobia, 2.8; and for simple phobias, 2.6 on a 0-3 scale.

Sanderson and Carpenter (1992) compared EMDR to image confrontation (IC) in a group of 58 phobic subjects (as compared to subjects suffering from PTSD). EMDR and IC (flooding) were used in a single-session crossover trial. Each procedure was given for seven sets of 20 seconds. Their results showed that both EMDR and IC significantly reduced SUDs scores, but that there was no significant difference between the groups. The authors conclude that benefits of EMDR do not come from eye movements, but from exposure to the feared image (flooding/IC).

Wilson, Covi, and Foster (1993) treated 18 individuals suffering from traumatic memories in a single session. Three groups (n = 6 each) included an EMDR treatment group, a group in which thumb-taps were substituted for eye movements, and another group in which eye movements were omitted. Besides SUDs and VOC scores, physiological measures were taken. The treatment group showed large and significant improvements which were maintained at 3, 9 and 12 months.

Recently, Boudewyns et al. (1993) utilized both physiological and standardized assessments for twenty Vietnam war veterans treated with either EMDR, imaginal exposure, or milieu therapy. The Clinician Administered PTSD Scale (CAPS); the Mississippi Scale; the Impact of Event Scale (IES); therapist ratings of treatment
responsiveness; and SUDs were implemented, along with physiological assessments of heart-rate; electromyographic response (EMG); electrodermal response (EDR); and skin temperature.

Interestingly, there was a greater reduction of SUDs levels for the EMDR group than for the exposure condition during treatment; yet no differences were found between groups, on SUDs or physiological ratings, during post treatment exposure to subject’s initial audiotaped description of the traumatic memory, nor on standardized post-treatment measures of PTSD.

Wilson, Tinker and Becker (1994) undertook research on 80 individuals who had been traumatized by a variety of experiences, including combat, rape, as well as physical and mental abuse. The traumatic event(s) had occurred from between three months and 54 years before the study began. Subjects were randomly assigned to one of two groups: One received the EMDR procedure; the other received no treatment of any kind for 30 days, after which time, they too received EMDR. Following treatment, the EMDR group showed immediate, significant improvement as measured by the Impact of Events Scale (Horowitz, Wilner & Alavarez, 1979), SUDs (Wolpe, 1956), and the Anxiety dimension of the Symptom Check List (SCL-90-R; Derogatis, 1992); whereas the delayed treatment group showed no improvement until EMDR was administered, at which time they too showed significant improvement.
Using Shapiro's (1989a, 1989b) original EMD protocol, Vaughn (1993) treated 10 individuals with a dual diagnosis of PTSD and substance abuse during 4 sessions. Significant and sustained improvement was found at post-treatment, and 4 month follow-up; yet the arousal subscale on the Hamilton anxiety scale, returned to near pre-treatment levels by four months. Vaughn (1993) also reported a study in which he placed 36 PTSD subjects into one of three treatment groups (with members of each of those group either receiving treatment or being placed on a waiting list), in which they received either EMD (Shapiro, 1989a, 1989b), Anxiety Management Training (AMT; a relaxation technique), or Image Habituation Training (IHT; an exposure technique). All treatment groups showed greater improvement than wait-listed groups; with the EMD group showing most improvements. This group was followed by the AMT and IHT groups, respectively.

Finally, regarding the sometimes contradictory findings of EMDR efficacy research, Greenwald, (1996) writes that discrepancies are due to "the substantial information gap between those who have and those who have not undergone the formal, supervised [EMDR] training" (p. 67); and that "the critical variable appears to be fidelity to the EMDR protocol" (p. 69).

Case Studies

Greenwald writes that "as controlled studies begin to be reported, case studies play a diminished role in the
evaluation of EMDR's efficacy" (1994, p. 21). He goes on to note that

while many of the case reports do include . . .
standardized measures, behavioral indices, and long-
term follow-up, most fail to meet the design standards
expected of single-subject investigations (p. 21).

Puk (1991) reports treating a 23-year-old woman having disturbing dreams and social anxiety as a result of being raped, as well as a 33-year-old woman suffering from frequent, intrusive images of her dying sister, for whom she had cared during the final stages of cancer. Presenting symptoms for both women were eliminated after one session of EMDR, and benefits maintained at 12 months after treatment. Wolpe and Abrams (1991) also successfully treated a rape victim, after 15 sessions of traditional therapy had failed to alleviate her fear of leaving her home. Lipke and Botkin (1992) used EMDR with five hospitalized Vietnam combat veterans. Of the five, two showed dramatic improvement. A third did not improve due to therapist error in using the procedure. A fourth subject had willfully not complied with therapist's instructions; and the fifth, who suffered from bizarre thinking and temporal lobe epilepsy, asked to stop the procedure for fear that losing the image would result in harm to his family. Kleinknecht and Morgan (1992) successfully treated a 40-year-old male who had suffered
PTSD symptoms for eight years after having been shot and left to die. Similarly, McCann (1992) claimed success with a 41-year-old burn victim who also had displayed PTSD symptoms for eight years. Wernik (1993) reports having successfully treated 21- and 45-year-old males for premature ejaculation and impotence, respectively. Pellicer (1993) reports having successfully treated a ten-year-old girl who had suffered most of her life from recurring nightmares of having snakes crawling in her bed. She, as most subjects in the above studies, was successfully treated in only one session.

Cocco and Sharpe (1993) report having used an auditory variant of EMDR with a four year, nine month old boy, "Sam," who had been experiencing nightmares, intrusive thoughts and bedwetting, after having witnessed an armed robbery in his home. The authors report that, after one session, the subject "no longer evidenced any of the symptoms thought to be associated with intrusive thoughts", and that "there was a dramatic reduction in the behavioural symptoms immediately following the session" (p. 375). Although asymptomatic at three month follow up, the child had returned to sleeping in his parents' bed, and was afraid to go to the toilet alone late at night.

Kleinknecht (1993) reports treating a 21-year-old woman suffering from an injection and blood phobia in four thirty-minute sessions. Self-report and physiological measures
(blood pressure and heart rate) showed significant improvement, which was maintained at 1, 14 and 24 weeks.

Acierno Tremont, Last & Montgomery (1994) write of a 42-year-old female suffering from multiple simple phobias of images related to dead bodies (i.e., hearses, funeral homes, etc.) and darkness. EMDR was compared with a technique which was identical in all aspects, except that it did not implement the normally prescribed eye movements. The two treatment conditions were administered "cumulatively and sequentially in multiple-baseline design fashion across fear areas" (Acierno et al., 1994, p. 295).

A tripartite evaluation of (a) motoric assessment (avoidance behaviour), (b) physiological responses and (c) standardized self-report measures (see Acierno et al., 1994 for details) showed a slight EMDR performance advantage regarding avoidance behaviour related to dead bodies, but neither group proved superior in any other measures, including SUDs.

Criticism of EMDR Research

Herbert and Mueser caution clinicians against the uncritical acceptance of EMDR, noting that the "research conducted in this area has serious methodological flaws, precluding definite conclusions regarding the effectiveness of the procedure" (1992, p. 169).

Some of these flaws include (a) lack of standardized measurement used in gathering baseline data and establishing a PTSD diagnosis (Lohr et al., 1992); (b) subjects'
concurrently receiving treatment other than EMDR, which brings into question the causal relationship between treatment and outcome (Page & Crino, 1993); (c) therapist demand characteristics (Page & Crino, 1993; Acierno et al., 1993); and (d) possible unintentional experimental bias (Acierno et al., 1993; Herbert & Mueser, 1992).

**Ethical Considerations**

Page and Crino write "[EMDR] stands to challenge many fundamental beliefs held by clinicians about the nature and treatment of PTSD, and may represent yet another technique about whose mechanism we must plead ignorance" (1993, p. 293). They go on to explore the ethical implications should such a simple and potentially rapid treatment prove to be widely effective:

Firstly, what are the implications for claims for damages following traumatic events? For example, if the psychological effects of rape can be rapidly removed, will the case for the prosecution be weakened? Secondly, should everyone be treated immediately? . . . Finally . . . if [EMDR] were to successfully ameliorate grief, should the distress of bereavement be removed? (p. 293).

Continuing in this vein, should a therapist attempt to relieve a 10-year-old of her recurring nightmares, if they are a reflection of a disturbed home life (Pellicer, 1993)?
Descriptive Accounts of EMDR Experiences

As mentioned in the introduction, although several authors (see Greenwald, 1994; Kleinknecht & Morgan, 1992; McCann, 1992, for example) have noted particular phenomenological experiences described by their clients during EMDR therapy, there has as yet been no systematic study in this area.

In her book, Eye Movement Desensitization and Reprocessing: Basic Principles, Protocols and Procedures (1995), Shapiro lists some of the patterns of responses which she and other EMDR therapists have observed thus far. She writes, "Clinical observation indicates that approximately 40% of the time clients experience a continual, progressive shift toward a resolution of the target event" (p. 76).

Processing is always assessed in relation to the target memory or memories. Because during treatment new memories may surface, or the client may simply stay with the original target memory, Shapiro divides such processing effects into two categories: Single-memory processing effects; and Multimemory processing effects.

Single-Memory Processing Effects

In cases where the attention does not shift from the target memory, there may still be changes in any of "five distinct aspects of the memory: image, sounds, cognition, emotion, or physical sensations" (p. 81).
Changes in the Image

The image may fade or shift to a different aspect of the target event; and may even change its content or appearance (see also Kleinknecht & Morgan, 1992; O'Brian, 1993; Puk, 1991; Spector & Huthwaite, 1993). Shapiro gives the example of a face which the client remembers as "leering" changing to a "smiling one" (p. 81). She also notes that items such as weapons can "disappear" (p. 81), and that the "scene" can expand to include more details of things the client has forgotten, as the processing of the predominant affect which occurred at the time of trauma allows the client to finally see the event in its larger context (p. 81). Hence, the more self-affirming information such as "I did all I could," which has remained blocked in the nervous system since the trauma, can now become integrated.

Changes in Sounds

Shapiro writes that sounds may become louder or softer, or may completely disappear from the memory. Remembered dialogue may shift; and clients may begin to spontaneously assert themselves with the remembered persons. Also, dialogue which was completely forgotten may emerge with changing images (p. 83).

Changes in Cognitions

Shapiro notes that client's level of insight will often increase from one set to another, with the client's cognitions becoming "more adaptive as the information is
processed" (p. 83). "Polar responses"—dramatic shifts from a negative to a positive cognition—may occur early on in treatment (p. 83). For example, Shapiro writes that "a client may start with the cognition "There is something wrong with me: in relation to social situations and after a single set may start thinking, "I'm fine" (p. 83).

Changes in Emotions

According to Shapiro, many clients describe a change in the emotion they are experiencing (see also Klienknecht & Morgan, 1992). That is, they may begin feeling sad, and then become angry. Emotions may also diminish, or may become more profound before subsiding. She writes,

The client will often report a progressive shift toward more ecologically valid, or appropriate, emotions. This shift will manifest itself as movement through different "layers" of emotion (e.g., from guilt to rage to sorrow to acceptance). Once again, each client reacts uniquely . . . (p. 84).

Further, some clients may overtly manifest these emotions in abreaction, others will show little overt display.

Changes in Physical Sensations

According to Shapiro, "When a memory is being processed, most clients experience some manifestation of the information on a somatic level" (p. 84). There may be a release of physical sensations, leading to a decrease in
intensity with each set; or conversely, there may be a temporary increase of somatic experiencing. The physical sensations experienced during the trauma may be re-experienced in the same part of the body as if they were occurring in present time. Particular sensations may move through the body, from one location to another (p. 85).

Multimemory Associative Processing

Shapiro writes that although memories may emerge during EMDR treatment, "no memory will emerge that is not in some way associated with the target" (p. 78). As in the above section, the following categories are hers (Shapiro, 1995).

The Major Participant or Perpetrator

The emergent memory may be linked by the common denominator of who the assailant or perpetrator was. For example, if the target memory is of an abusive parent molesting the client, a related memory of the same father beating him or her may occur (p. 79).

The Pronounced Stimuli

For this category, Shapiro gives the example of a Vietnam veteran processing the memory of an earthquake, who "may suddenly recall a combat experience if the sounds of falling objects or loud rumbling dominated both events" (p. 79). The dominant thread here may be the sensory experiences themselves, or the meaning which the victim ascribes to them (e.g., I am going to die).
The Specific Event

Here, "emerging memories may be linked to the targeted memory by the nature of the event itself" (p. 79). Hence, when the target memory is a rape, memories of other rapes or molestations may occur.

The Dominant Physical Sensations

Because physical sensations are stored in the nervous system at the time of each traumatization (p. 79), memories in which the client experienced related sensations may emerge during treatment. For example, Shapiro writes of one client who reported having her hands tied to a bed while she was beaten with a broomstick by her mother. During processing, the sensations in her hands brought to mind the memory of her hands being forced on her father's penis, and later again, of a rapist holding her hands together during the attack (p. 80).

The Dominant Emotions

Memories may be linked not necessarily by context or sensations per se, but by the emotion(s) felt by the victim at the time of traumatization. Shapiro gives the example of a client despairing at the memory of a failed business venture who may recollect a time in which he or she was abandoned by a parent and felt the same subsequent emotion (p. 80).

To reiterate, although the above descriptions of client experiences are helpful, having been gleaned from many hours of therapists' involvement in EMDR treatment, still lacking
in the literature is any systematic, in-depth phenomenological investigation into individuals' moment-to-moment EMDR experiences.
CHAPTER THREE: METHOD

Rational

In order to document co-researchers' moment-to-moment in-session EMDR experiences, the researcher combined variations of two established research protocols: the phenomenological research protocol of Colaizzi (1978), which attempts to glean meaning from co-researchers' experiences; and Interpersonal Process Recall (IPR; Elliot, 1994), a procedure used to cue co-researchers' memories, and document their in-session therapy experiences.

Phenomenological Research

Phenomenological research attempts to ascertain the meaning individuals ascribe to their experiences (Colaizzi, 1978; van Manen, 1992). The researcher investigates descriptively, in order to gain insight into the way individuals "experience the world pre-reflectively, without taxonomizing, classifying, or abstracting it" (van Manen, 1992, p. 9). Subjects are seen by the researcher as partners, or "co-researchers," in the research endeavor, and given respect, trust and empowerment, that they may better tell their story; thereby helping the researcher to glean a truer picture of the experiences being investigated (Mishler, 1988).

According to Colaizzi, what is needed in the investigation of human experience is a method which
neither denies experience nor denigrates it or transforms it into operationally defined behavior; it must be, in short, a method that remains with human experience as it is experienced, one which tries to sustain contact with experience as it is given (1978, p. 53).

To assist in the endeavor, Interpersonal Process Recall was also used.

**Interpersonal Process Recall**

Interpersonal Process Recall (IPR; Elliot, 1994) is an interview procedure in which the therapist audiotapes the conversation between him- or herself and the subject (or "informant") and plays it back immediately for the informant during a second interview. During what becomes a second interview, the informant is asked to describe his or her moment-to-moment experiences, as remembered, of the first interview.

Elliot writes that play back of the original conversation acts as a cue to assist the participant in retrieving memory traces which would otherwise be lost in the welter of interfering information generated during any communication episode (p. 505).
Interpersonal Process Recall was chosen to help the researcher gather information about participants' "subjective impressions which are missing from even the best transcriptions or recordings of therapy sessions" (Elliot, 1994, p. 505).

The researcher deviated from the standard IPR protocol by playing back the in-session tape to the co-researcher, not immediately, but approximately 24 to 48 hours after the initial taping. This was because immediate play back of the therapy session, as prescribed by IPR, would have been inappropriate; for, according to EMDR literature (Shapiro, 1995), some subjects experience extreme distress and fatigue during (and sometimes after) treatment. Hence, had the researcher directly followed a 1 1/2 hour EMDR session with a second interview, he would have risked taxing the emotional and physical resources of the co-researchers, which might have ultimately lead to a poorer quality interview. As research into memory suggests that cued recall is optimal within approximately 48 hours of an event (Elliot, p. 504), this time interval was deemed appropriate.

Overview of the Research Method

To reiterate, researcher and co-researchers in this study were seen, by the former, as "partners" in the endeavor; and interviews were conducted in a context of respect, trust and empowerment of the co-researcher, in order to best glean their experiences, and the meaning they make of them.
Meaning, as it is used here, may be of broad or narrow import (Marris, 1982). It may denote one's simply making sense of something (a sensation in the stomach area may mean one is hungry); or it may have the broader definition of one's ascribing importance to something (as in, "My wife means a lot to me"). Both "types" of meaning were of relevance to the present investigation.

The first step of inquiry into co-researchers' EMDR experiences involved the attending psychologist's tape-recording, followed by the researcher's transcribing of, the EMDR session. Subsequent to this, the second, or "clarification interview" occurred, during which the researcher asked co-researchers to elaborate upon their in-session EMDR experiences. This interview was also tape recorded. A transcription was made and compared to the first, in order to gain the clearest possible picture of each co-researcher's experiences. The researcher performed analysis of the data according to the procedure described on page 55 of this thesis.

Selection of Co-Researchers

Selection Criteria

In order to qualify for participation in this study, each co-researcher had to meet several criteria, the first being a DSM IV (APA, 1994) diagnosis of PTSD, as determined by the attending psychologist. The criterion of a single diagnosis was imposed to limit the number of possible confounding variables which a differentially diagnosed population might
introduce. As EMDR was originally developed for, and tested on, a PTSD population (Shapiro, 1995), this population was chosen. Second, co-researchers were required to be willing to have their initial EMDR session audio-taped by the participating psychologist, and to be interviewed by the researcher within 48 hours of its occurrence. Third, co-researchers were required to possess sufficient verbal skills to adequately communicate their experiences. All co-researchers met these criteria.

Demographic Information

All co-researchers were female, Caucasian, of the middle class, and in their early thirties. Two of the three were married, with the third having been recently separated from her husband.

Procedure

Each co-researcher, having already entered therapy for PTSD, was informed of the study by her attending psychologist.

The consent form (see Appendix A) required for participation, fully informed each of the nature of the study, and that, should they decide not to participate, neither the therapeutic agenda, nor relationship, would be affected in any way.

Because the structure of the standard EMDR protocol (Shapiro, 1995) requires the therapist to follow each set with a question (i.e., "what did you get?"; 1995, p. 37); and requires the client to answer (describe her experience),
it may be said to constitute an interview. Hence, the audiotaped EMDR session is here termed the "in-session interview." This was followed by the "clarification interview," during which the researcher interviewed the co-researcher about her moment-to-moment experiences, while playing her a tape recording of the first session to cue her memory. This second interview was also audio-taped. Each interview was conducted within 48 hours of the initial EMDR session, with the exception of the interview with "C," which occurred after an interval of approximately 72 hours, due to logistical problems.

The EMDR In-Session Interview

Treatment was conducted exactly as it would have been under non-research circumstances, except that the entire session was audio-taped by the psychologist, with the awareness and approval of the co-researcher. A microphone was placed between the therapist and client, in order to record both of their voices; and the client was alerted when actual taping began and ended.

The Clarification Interview

The second interview was conducted to clarify information gathered from the first.

Following the EMDR session, the participating psychologist telephoned the researcher to confirm that a session had taken place, and to provide information about how to contact the co-researcher. The researcher then contacted the co-researcher, and scheduled an appointment
for the clarification interview.

Each co-researcher was encouraged to choose a meeting place in which she would feel comfortable, under the condition that it be private enough to allow for undisrupted play-back and discussion of the audio-tape recording.

Co-researcher "A" was interviewed at her home; "B," at a local beach of her choosing; and "C," at the home of the researcher.

The researcher began the interview by requesting (a) particular demographic information; (b) information about the nature of the trauma experienced; (c) post-trauma symptoms; (d) information about current medications used; (e) post-session condition or experiences; and (f) any comments, of any sort, the co-researcher might like to make about her EMDR experiences.

The researcher then presented a transcript of the EMDR session to the participant, and began play-back of the audio-tape. Both researcher and co-researcher had the opportunity to stop play-back at any time, in order to ask questions, comment or elaborate upon what was being heard.

The researcher asked mostly open-ended questions, such as, "could you tell me what was happening here?" or "could you tell me more about that?" as well as more specific questions relevant to particular co-researcher experiences.

Due to relative inexperience, during the first interview with co-researcher "A," the researcher asked more pointed questions than, in retrospect, seems desirable.
However, as information gleaned from the second interview was used to clarify the first, it did not prove detrimental to the integrity of the study.

Analysis of the Data

Following the verbatim transcription of the clarification interview, transcriptions were analyzed phenomenologically, beginning with a variation of the research protocol outlined by Colaizzi (1978).

Each in-session transcript was read several times in order for the researcher to get a general feeling for each co-researcher's overall EMDR experience (Colaizzi, p. 59). Following this, the in-session transcripts were clarified through examination of the "clarification interview" transcripts. Because, each co-researcher had, by this point, offered two accounts of her EMDR experiences, little inference was required by the researcher.

Once established, "moments of meaning" were placed on a time line—a straight line divided into even segments indicating movement through time. Therapist involvement was also tracked and placed at the appropriate places on the line. The purpose of this was for the researcher to gain a better sense of the overall patterns of experience, both between, and among, the three co-researchers. Categories that were immediately evident, such as physical sensations, emotions, and cognitive experiences were colour-coded, to make them more readily discernible to the eye.
Following this, the laborious process of refining and categorizing the meaning of all experiences began. Some elements, as mentioned, seemed to lend themselves readily to categorization; others remained uncategorized until a conceptual framework was discovered within which they could be understood. Descriptions which appeared superficially redundant were eliminated in favour of a deeper commonality. For example, many of the physical sensations experienced by the co-researchers involved the common theme of tightening of the musculature; others, loosening. Hence, rather than merely listing all such experiences taxonomically, those such as "knot in the stomach," or "tension in the shoulders" were placed in one category; and those denoting a loosening or disappearance of such sensations, under another. Eventually, these became part of the dimension of experience entitled "heightened physical awareness."

In short, progressive attempts were made, through laborious and methodical contemplation, questioning, and trial and error, to achieve a fitting organization of co-researchers' experience.

Once completed, transcripts were re-read several times in light of the above categories, to check for inconsistencies, errors or oversights.
CHAPTER FOUR: RESULTS

Categories of Experience

Using the above methodology, it was found that co-researchers' experiences could be grouped into one of three broad categories: Participant Experiences, Spectator Experiences or Treatment Specific Effects.

Participant and Spectator Experiences

Participant Experiences

According to Cochran (1990), individuals can experience life's dramas from the perspective of either a Participant or Spectator (also see Britton, 1970).

In the role of a Participant, an individual is actively engaged with the affairs and events of the world; and focus is limited to the present moment.

Cochran (1990) writes

[The Participant] decides, plans, acts, and evaluates, all from the limited perspective of one who is taking an active part in the immediate situation . . . "

(p. 46; my emphasis).

For the PTSD victim, the Participant role emphasizes the individual's involuntary re-experiencing of the immediate situation of trauma from what is his or her extremely limited perspective; although lacking may be the same degree of intensity experienced during the original
traumatic event (possibly due to the dual focus of past and present; Shapiro, 1995, p. 90).

As already stated, some of the cardinal symptoms of PTSD include the intrusive reliving of, or preoccupation with, particular aspects of the traumatic event (APA, 1994). The victim's nightmares, flashbacks, anxiety and reactions to otherwise neutral objects or events which have become emotional "triggers" for the victim, suggest he or she still experiences continually--or at least re-experiences continuously--the "immediate situation" of her traumatic event.

The constractive PTSD symptoms (APA, 1994) are mirrored by the Participant's limited emotional and cognitive movement--her inability to see from anything but her "limited perspective." As an unwilling player in an unfolding drama, she can gain no insight into the nature or significance of her drama, any more than a novice actor could gain a broad perspective on the historical or artistic significance of a play in which she participates merely from reading her lines. To acquire such a perspective, some distance is required. The distance of a Spectator.

Spectator Experiences

Whereas the Participant is engaged, or caught-up in the action of an event, and thereby limited in breadth of her perspective, the Spectator enjoys a freedom of mental movement not afforded the Participant. The Spectator can "play" and be creative with ideas integral or peripheral to
the actions of "the player." That is, she is able to see herself and her actions considerably more objectively than she can as a Participant.

As a Spectator she is freer than as a Participant to experiment with or manipulate her thoughts and feelings. In her mind, she may turn over the original shape of her experience; toss it about; reshape it; or juxtapose it to, or join it with, other "shapes" of experience. The Spectator can "imaginatively re-enact the experience, interpreting, adjusting expectation, altering vision, savoring potential, and gaining insights" (Cochran, p. 47).

Through such manipulations, the Spectator's relationship to the problem or event changes, and so too, her concomitant feelings and reactions. Cochran writes

... as a participant, one could be terrified, yet as a spectator upon one's experience, ... find it to be extremely humorous. We can laugh at our own folly, misery, and hardship, but not ordinarily as a participant. Similarly, we can be saddened by our own gaiety, exuberance, or venturesomeness, but not ordinarily as a participant. We need perspective to do this, and breadth of perspective is what the spectator role offers (p. 46).

From a narrative point of view, this "breadth of perspective" involves the victim's contextualization of her
traumatic memory. No longer a frozen, wordless "prenarrative," (Herman, 1992, p. 36), it becomes a story; and in the process, imbued with meaning. Conceptually, the co-researcher is able to separate the author from the actor; that is, the I, or witness, from the Me, or witnessed. Hermans and Hermans-Jansen (1995) write that, as a Spectator, or I, the co-researcher

is able to describe . . . herself as an actor. In this configuration, the I can imaginatively construct a story with the Me as the protagonist. . . . Such narrative construction is possible because the I can imagine the Me in the future and can reconstruct the Me in the past (p. 8).

Inherent in the structure of the new story, built from the wordless rubble of the victim's "shattered assumptions," are the pillars and beams of a new, more appropriate paradigm, which can now house the integrated trauma-related information (Britton, 1970; Horowitz, 1976; Janoff-Bulman, 1992).

Treatment Specific Effects

Treatment specific effects are experiences which belong to neither the classification of Spectator nor Participant (although they can occur simultaneously with either of these experiences). They are, as the name suggests, particular to the treatment itself, and would not, in all likelihood, be
occurring, were it not for the subject’s undergoing EMDR. This is not to say that each such effect is necessarily exclusive to EMDR, in that it could not, or does not, occur during other psychotherapeutic procedures. Rather, it is the frequency and context in which these experiences occur which identify them as EMDR Treatment Specific Effects. Such experiences have both physical and cognitive manifestations.

Dimensions of Co-researchers’ Experiences

The categories of Participant Experiences, Spectator Experiences and Treatment Specific Effects were found to contain a total of 12 subcategories, or dimensions, of co-researchers’ experiences. Some dimensions contain items which arguably would be appropriate for more than one subcategory. In such cases, the researcher has chosen what he believes to be the most appropriate subcategory for the particular item.

Participant Experiences

Within the category of Participant Experiences, the following four dimensions of experience were identified: (a) passive endurance of trauma; (b) narrowness of perspective; (c) immediacy of focal image; and (d) intensity of (relived) emotion;

Passive Endurance of Trauma

This category emphasizes the co-researcher’s passive relationship to her intrusive re-experiencing. Lacking is a sense of agency to act upon her remembered experiences--
whether physical, emotional, cognitive or visual. Hence, she is as if their passive instrument, used at their will.

Narrowness of Perspective

Awareness is limited to the co-researcher's recollections or reliving of the original traumatic experience(s), including emotions, cognitions, physical sensations and images. The traumatic information remains unintegrated into a broader perspective or context. The event is experienced through the co-researcher's "own eyes." As the Me has not yet emerged, she remains unable to see herself in the picture.

Immediacy of Focal Image

The "focal image," (the picture imagined by the co-researcher) appears relatively clear, vivid, and close in proximity. The co-researcher may remember forgotten details of the image, such as a person's clothing or hair colour, as if looking at a photograph or watching a film. However, the nature of the new detailed information does not broaden the co-researcher's perspective, and does not lead to a cognitive or conceptual shift in relation to the trauma. One is not looking at a new photograph, taken from a different perspective, as it were, but simply noticing the forgotten detail of a familiar photograph.

Co-researcher "C" described her experience this way:

I remember . . . everything around me, the detail, her gold earrings, what her face looked like, what the
people looked like. I probably didn't remember it so intensely or so well until I was doing [the treatment].

Intensity of Emotion

The co-researcher re-experiences the emotions present at the time of traumatization. Although this primarily involves fear, other relived emotions may also be present. For example, "C" re-experienced the guilt she had felt upon realizing she might have caused an automobile accident; and she again experienced the anger she had felt when a woman at the accident scene became hysterical.

Whatever the emotion experienced by co-researchers, the level of emotional intensity is high (although not necessarily as high as during the original event). Concomitant physical manifestations (Treatment Specific Effects), involve tightening of the musculature, (such as a knot in the stomach; tight shoulders; difficulty breathing; nausea; as well as "fight or flight" tingling).

Spectator Experiences

This category contains four dimensions of experience: (a) active alteration of experience; (b) broadening of perspective; (c) distancing of focal image; and (d) variety of emotional experience.

Active Alteration of Experience

Whereas the Participant is the passive instrument of her traumatic re-experiencing, the Spectator becomes an agent, acting upon the trauma-related information, and
putting it into a larger context. However, a paradox exists; for the co-researcher is not a willful agent of these processes, but ironically, a passive one, in much the same way a dreamer is both the agent and instrument of his or her own dream.

For example, when "B" imagines herself attacking her assailant in a role reversal (suggesting agency), this brief drama of revenge appears to her spontaneously, but not willfully. She regards it with as much delight and surprise as if watching a clever television advertisement for the first time. Although at one level, her "mind"—in the broadest sense—is actively engaged in the process of understanding and integrating disturbing, novel information, her "ego," or sense of "I" is passively experiencing it.

Fantasies or memories may arise; or the content of the focal image may spontaneously change, or "morph," either in whole or in part. For example, a historically accurate facial expression, such as one expressing fear, may change to one that is calm and smiling.

Broadening of Perspective

The co-researcher begins to move outside the narrow spotlight of her trauma. No longer the actor, compulsively replaying her traumatic scene, she becomes an audience member—a Spectator—able to muse and philosophize about the drama in general, and the significance of the various players' roles within it. From various new perspectives, she critiques and evaluates the drama in ways she could not
as a Participant-Actor who lacked relative objectivity. In practical terms, she may see herself in the picture for the first time, as if a third party watching the incident from a distance. She may experience insight, or a cognitive shift, identifying with others who have suffered similarly. Or she may feel compassion for her assailant.

**Distancing of the Focal Image**

The quality of the focal image is diminished, as if the co-researcher is herself becoming emotionally distant from the event. Lost is the "living" vividness found in the Participant experience of the focal image. The image may appear faded; may alternate between being clear or close, and being distant or faded; may appear momentarily, as if in a flash; or not appear at all, despite the co-researcher's effort to retrieve it.

**Variety of Emotional Experience**

Whereas high intensity of relived emotions characterizes Participant experiences, greater variety (of both intensity [high and low] and type) defines those of the Spectator.

The co-researcher is able to step outside the narrow spotlight of trauma-related feelings, allowing for new emotions to emerge. She may grieve that which is lost; feel rage at an assailant for the injustice of an assault; or feel a sense of joy or euphoria at the absence of disturbing emotions and cognitions. Lacking are the emotions experienced during traumatization.
Whereas Participant emotional experiences are accompanied by a tightening of the musculature, emotions in the Spectator category tend to be accompanied by a loosening; by alternating tightening and loosening; or by shifts in the location of physical sensations.

Treatment Specific Effects

Four dimensions of experience were identified: (a) momentary cognitive impairment; (b) heightened physical awareness; (c) change in energy level; and (d) meta awareness of the process.

Momentary Cognitive Impairment

In this dimension of experience, the co-researcher undergoes a momentary alteration of her more familiar cognitive state. For example, the speed at which she processes material may seem greatly accelerated; several or many thoughts may "race" through her mind, to the point where she can only retain a fraction of their content in memory. She may also experience a momentary, general confusion, or slight disorientation, as if mildly intoxicated. For example, one co-researcher felt as if drugged on morphine or Valium.

Heightened Physical Sensations

Co-researchers experiences physical sensations of varying intensity and type. These sensations do not remain constant, but shift at various times throughout the treatment session.
When occurring with Participant Experiences, these physical experiences tend to involve a tightening of the musculature (tension in the shoulder area; a "knot" in the stomach; nausea), as if the co-researcher were resisting painful emotions. Conversely, as a Spectator, the musculature tends to loosen and relax, as one might expect, given that the co-researcher has, by definition, gained emotional distance from the perceived traumatic threat. The degree of tension may change throughout the session; as may its location. The co-researcher may feel warmer, or experience tingling, as if in "fight or flight" response mode.

Change in Energy Level

The co-researcher may feel fatigued or energized at various times during the treatment session, or may feel alternately fatigued and energized. This change in energy level may be general, and include the entire body, or may be felt in only one specific location, such as one side of the skull.

Meta Awareness of the Process

In this dimension of experience, the co-researcher watches her own experience and has feelings or thoughts about it. For example, if she experiences her mind as racing, she may be surprised at this process, wonder if it should be occurring, and worry about it. Or the sudden, unexpected absence of fear may lead her to suspect that she is blocking her feelings. She may wonder how her dramatic
cognitive and emotional changes could be occurring; that is, she may ask herself, as one co-researcher did, what neurobiological changes are taking place in the moment, to facilitate such unexpected changes. She may also experience thoughts and feelings about the therapist, in relation to her treatment.

Co-Researchers’ Experiences

In order to help the reader better understand co-researchers’ in-session EMDR experiences, a brief synopsis of pre-treatment condition, as well as the nature and origin of the traumatic experiences, is provided in the following section.

Co-Researcher "A"

While working as a cashier at a liquor store 27 months prior to treatment, "A" was robbed by two men wearing ski masks, one of whom carried a shot gun. The armed man, whom "A" described as "crazy," removed his mask, started kicking the counter, and put his gun to the back of her head. Terrified, "A" refused to look at either of the men, choosing instead to stand "scrunched up" with her eyes closed and fists clenched; believing that, at any moment, the "crazy" gunman would pull the trigger and kill her.

Nineteen months later, while "A" was working in the same store, a man entered, carrying a large knife in the back of his pants. Again understandably terrified, "A" had to serve him after he began to "scream" for service. Although no robbery or assault ensued, her previous assault
had left her sensitized to the possibility of danger, and she afterward found herself "sobbing like a baby."

Her symptoms after the first trauma included nightmares of being chased by loud people with guns; and after the second, of being stabbed and sliced by assailants wielding knives. The frequency of the nightmares was from 1 to 3 nights per week. Further, she experienced fear at work whenever a customer entered. Similar public situations, such as standing in a bank line-up, also evoked strong feelings of anxiety. "A" also experienced recurring depression and anger that "someone had taken away [her] life"; and her anxiety profoundly affected her young daughter, who subsequently became afraid to sleep alone.

At the time of the clarification interview, the co-researcher felt tired, and slightly ill, as if she had "the flu." She described having had a dream in which, for the first time, she turned and attacked her attacker.

EMDR Experiences of Co-Researcher "A"

Co-researcher "A" manifested a clear, unwavering movement toward in-session resolution of her baseline measures. Quite literally, her only Participant experiences were those she brought with her into the therapeutic session (fear, narrow perspective of the event, physical tightness, etc.) which ended during the first set of eye movements. In other words, the fear, "knot" in her stomach, and clarity of the disturbing focal image, with which she began treatment, started to deteriorate within the first set of eye
movements. Half way through the set, she began to feel "relaxed" and "warm," as if "wrapped in a blanket," which seemed to protect her from the assailants who had, until this point, been haunting her memory. This relief came with a momentary sensation of dizziness, and stayed with her "throughout the entire session."

By the second set, her fear had significantly diminished; and by the third, the focal image was more distant, and fading in and out. As "A" described her experience,

... I just couldn't believe what was happening. ...
I just felt like laughing. I didn't feel frightened anymore. I didn't feel anxious. ... It just seemed funny to me.

The quality of the focal image continued to diminish, sometimes appearing in "flashes"; at other times, fading in and out. Although she occasionally saw seldom-remembered aspects of the traumatic event, this new information was fleeting, and of a surreal quality, evoking in her no emotional response but a sense of relief, and the impulse to laugh.

At times, during the remaining sets, no image appeared to her, only the therapist's fingers:
I would just see the fingers. And I would concentrate on the fingers. And, you know, I saw his ring on his hand. . . . The image just disappeared. It was just gone.

When a fleeting, faded image would appear, she had difficulty remembering or focusing on it, "almost like [the event] didn't happen."

Several times the content of the focal image changed. For example, at one point the assailant disappeared from behind her; at another, the worried face of her co-worker took on a calm, smiling demeanor.

At times, "A" tried to force the original focal image to mind, despite the therapist's instructions to "go with" whatever her experience happened to be. She also became preoccupied with the positive changes which were occurring, and wondered about them.

By the end of the session, her SUDs level was at 0, and her cognitive attribution, "I feel safe; he can't hurt me"; rated a 7 on the Validity of Cognition scale, indicating the highest measurable belief in this attribution.

**Sequential Experiences by Category**

In this, and similar sections to follow, Participant Experiences (PE), Spectator Experiences (SE), and Treatment Specific Effects (TSE) are presented in the sequence in which they occurred.
Set | Classification and Description of Experience
---|---
01: | SE: Feels safe, as if wrapped in a blanket. 
TSE: feels dizzy and warm
02: | SE: Decrease in fear.
03: | SE: Image diminished; comes and goes. Sees therapist's fingers instead of focal image.
04: | SE: Image faded; sees therapist's fingers.
TSE: difficulty concentrating.
05: | SE: Sees image without fear; new information revealed; wants to laugh; feels relief.
06: | SE: Sees image without fear; content of image changes.
TSE: Has difficulty believing her experience.
08: | SE: Wants to laugh.
TSE: Thinks urge to laugh is "strange"; has difficulty concentrating.
09: | SE: Image is reduced to flashes. New information revealed.
10: | SE: Feels calm; sees a brief picture.
TSE: Has difficulty believing her experience; wonders if she is "blocking."
Set  Classification and Description of Experience
11:  SE: Increased difficulty seeing image; increased relaxation.
     TSE: Knot moved from stomach to upper chest; feels "drained."
12:  TSE: Knot disappeared; difficulty concentrating.
13:  SE: Cannot retrieve image; sees only therapist’s fingers; feels calm.
14:  SE: Feels present and safe, without fear.
     TSE: Has difficulty believing her EMDR experience.
15:  SE: Sees herself in picture, without fear; wants to laugh.
     TSE: Wonders about the process (how it works).
16:  SE: No image; incident seems insignificant.
17:  SE: Sees brief image; tries, but cannot bring to mind original focal image.
18:  SE: Content of image changes, then image is gone.
     TSE: Wonders about the process (how it works).

Summary of Experiences by Category

Participant experiences. Co-researcher "A" had no Participant experiences which extended beyond 1/2 way through the first set of saccades.

Spectator experiences.

1. Active alteration of experience: Aspects of focal image change in content.
2. **Broadening of perspective:** (a) New information revealed; (b) feels present; (c) realizes danger is over (she is safe); (d) sees herself in the picture for the first time.

3. **Distancing of focal image:** The image (a) comes and goes; (b) diminishes; (c) does not appear (despite effort to retrieve it); (d) appears in flashes; (e) is replaced by therapist's fingers.

4. **Variety of emotional experience.** (a) Relief; (b) decrease in fear; (c) desire to laugh.

**Treatment specific effects.**

1. **Momentary cognitive impairment:** (a) Dizziness; (b) difficulty concentrating.

2. **Heightened physical awareness:** (a) warmth; (b) tension migrates upwards; (c) musculature loosens; (d) tension disappears.

3. **Change in energy level:** Feels fatigued.

4. **Meta awareness of the process:** (a) Has difficulty believing her experience; (b) judges her urge to laugh; (c) wonders if she is "blocking"; (d) wonders about how her experiences are occurring.
Co-Researcher B

The trauma history of "B" was, perhaps, the most extensive and complicated of the three co-researchers.

Eighteen months prior to treatment, Participant "B" had been sexually assaulted while a patient at a local hospital, by a radiographer employed by the hospital. This was the second such assault she had endured, the first having occurred when she was thirteen. Ironically, both occurred at the same hospital, by a man of the same minority race. Further adding to her traumatized state was her having endured the legal arbitration of the second assailant, during which information about the first assault was made public.

Approximately six months prior to the second assault, "B" had attempted to become pregnant through invitro fertilization. She "lost the baby" and suffered acute depression. Approximately one year after the assault, the participant and her husband separated.

To complicate matters, there existed other repressed traumatic information (revealed in subsequent sessions) not known to client or therapist during the first EMDR session, which might have affected treatment.

Her symptoms included intrusive recollections of the assault (a metaphorical image of the assailant crawling on her back); severe depression and anxiety; diminished sexual desire; and difficulty maintaining normal friendships. Her sense of trust in others had been severely injured; and she
had been unable to work for several months. As "B" succinctly said of the effect of her second sexual assault: "It just basically changed my entire life."

At the time of the clarification interview "B" was physically exhausted, and appeared emotionally fragile.

EMDR Experiences of Co-Researcher "B"

If co-researcher "A" could be said to have moved more or less steadily down a gentle slope toward resolution of her traumatic condition, "B"'s trajectory was closer to that of a ship on stormy waters, as she was tossed dramatically up and down through profoundly different emotional states: Anger, fear, sadness, joy (euphoria), and guilt were all experienced, as were the concomitant physical manifestations of nausea, tightening and loosening of the musculature, extreme fatigue, rejuvenation, tingling, and the experience of feeling as if she were drugged on Valium, a medication with which she was familiar.

She has two Participant experiences, during which she relived the traumatic incident. In the realm of fantasy, "B" imagines gaining revenge from the assailant through role reversal, violence and conviction for his crime. She identifies with three fictional characters: one from literature (Hamlet, whom she sees as tragic); another from a children's story (a very sad girl); and finally, one from film (the protagonist in It's a Wonderful Life). During the latter, she watches herself watching the film in "real time," at a point when the protagonist finds his daughter
Zu Zu's flower petals in his pocket, and realize he has not killed himself. During the clarification interview, "B" realized the significance of this for her: She had survived, and not killed herself.

The several insights she displays, and her new compassion for the assailant, suggest some working through of her trauma occurs; however, complete resolution of her symptoms is not reached.

By the end of her session, "B" is exhausted, and somewhat mentally disoriented. Both therapist and she agree there is more work to be done in future sessions. Her SUDs level, which began at "between nine and ten," is now "sevenish--eight."

**Sequential Experiences by Category**

<table>
<thead>
<tr>
<th>Set</th>
<th>Classification and Description of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:</td>
<td>SE: Anger.</td>
</tr>
<tr>
<td>02:</td>
<td>SE: Anger.</td>
</tr>
<tr>
<td></td>
<td>TSE: Tight chest; difficulty breathing.</td>
</tr>
<tr>
<td>03:</td>
<td>PE: Relives event; feels vulnerable.</td>
</tr>
<tr>
<td></td>
<td>SE: Feels enough distance for sadness.</td>
</tr>
<tr>
<td></td>
<td>TSE: Realizes treatment is working.</td>
</tr>
<tr>
<td>04:</td>
<td>SE: Relief she is safe.</td>
</tr>
<tr>
<td>05:</td>
<td>SE: Anger.</td>
</tr>
<tr>
<td>06:</td>
<td>SE: Anger; sadness.</td>
</tr>
<tr>
<td>07:</td>
<td>SE: Anger.</td>
</tr>
<tr>
<td>Set</td>
<td>Classification and Description of Experience</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------</td>
</tr>
</tbody>
</table>
| 08: | SE: Blank (no image); fantasizes going to safe place (beach).  
     | TSE: Feels exhausted. |
| 09: | SE: Positive insight; believes she is strong. |
| 10: | TSE: Feels energized; body relaxed; feels more in control of body. |
| 11: | SE: Revenge fantasy (assaulting assailant). |
| 12: | SE: Revenge fantasy (role reversal); anger. |
| 13: | SE: Blank (no image).  
<pre><code> | TSE: Frustration at her process; body relaxed. |
</code></pre>
<p>| 14: | SE: Profound sadness and grief; identifies with sad girl in children's story. |
| TSE: Feels negatively effected by therapist's change in direction of finger movements. |
| 16: | SE: Revenge fantasy (assailant being punished). |
| 17: | SE: Revenge fantasy (continuation of above). |
| 18: | TSE: Head feels heavy (&quot;as if on morphine.&quot;); wonders about (neurophysiology of) process; wonders if she is upsetting therapist. |
| 19: | TSE: Right side of &quot;brain&quot; feels energized. |
| 20: | SE: Feels euphoric; wants to laugh. |
| 21: | TSE: Feels fatigued. |
| 22: | SE: Cannot retrieve image; imagines safe place. |</p>
<table>
<thead>
<tr>
<th>Set</th>
<th>Classification and Description of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>23:</td>
<td>SE: Complete mental and emotional peace; feels “wrapped in a cocoon.”</td>
</tr>
<tr>
<td>24:</td>
<td>TSE: Right side of brain feels heavy; increased physical awareness.</td>
</tr>
<tr>
<td>25:</td>
<td>TSE: Tension migrated from chest to skull; feels drugged, sleepy.</td>
</tr>
<tr>
<td>26:</td>
<td>TSE: Fingers feel tingly.</td>
</tr>
<tr>
<td>27:</td>
<td>TSE: Body relaxed.</td>
</tr>
<tr>
<td>28:</td>
<td>TSE: Muscles twitching.</td>
</tr>
<tr>
<td>29:</td>
<td>TSE: Sleepy; angry at self for being sleepy; tightness increases and decreases.</td>
</tr>
<tr>
<td>30:</td>
<td>TSE: Dislikes perceived change in finger movements. Perceives therapist as relaxed.</td>
</tr>
<tr>
<td>32:</td>
<td>SE: Wants to be alone.</td>
</tr>
<tr>
<td>33:</td>
<td>TSE: Fatigued; increased physical awareness.</td>
</tr>
<tr>
<td>34:</td>
<td>TSE: Perceives fingers as &quot;Grim Reaper&quot; pointing.</td>
</tr>
<tr>
<td>36:</td>
<td>SE: Childhood memory of hiding in safe place.</td>
</tr>
<tr>
<td>37:</td>
<td>SE: Sadness; wants to feel safe again. TSE: Nausea; fatigue; embarrassed at own process.</td>
</tr>
<tr>
<td>38:</td>
<td>TSE: Tight chest; difficulty breathing.</td>
</tr>
<tr>
<td>39:</td>
<td>TSE: Tension; exhaustion.</td>
</tr>
<tr>
<td>40:</td>
<td>PE: Anticipates traumatic event.</td>
</tr>
</tbody>
</table>
Set Classification and Description of Experience
41: SE: Anger.
42: SE: Insight (into metaphorical focal image).
43: SE: Self blame (she couldn’t stop incident).
TSE: Tight chest.
44: SE: Anger.
45: TSE: Feels tingly (fight or flight feeling).
46: SE: Sadness; believes she is helpless.
47: TSE: Tightness; fatigue; no longer feels drugged; needs to rest; wonders about process (how it works).
48: SE: Compassion for assailant.
49: SE: Despair at recovering; vague flashback or fantasy of a stalker.
PE: Relives traumatic incident.
51: SE: Anger.
TSE: Reluctant to look left ("too much pain.")
52: SE: Despair she won’t recover; identifies with tragic figure (Hamlet).
53: SE: Blank; wants session to end.
TSE: Exhaustion; nausea; tightness.
54: TSE: Fatigue.
55: TSE: Mental confusion; difficulty following fingers; pressure on chest.
56: SE: Sadness for self and world.
57: SE: Thinks of suicide.
Set Classification and Description of Experience

58: SE: Guilt for having disclosed.

59 SE: Insight (it was good to disclose).

60: SE: Increased anger; frustration at length of healing process; two insights (she may have saved others; hasn’t killed herself).


62: TSE: Grateful for therapist’s comment.

63: TSE: Sees fingers as tools to recovery.

64: TSE: Exhaustion; difficulty articulating.

65: TSE: Exhaustion.

66: TSE: Thoughts about therapist and process.


TSE: Mental confusion and disorganization.

68: TSE: Fatigue.

Summary of Experiences by Category

Participant experiences.

1. Passive endurance of trauma. (a) Relives event; (b) passively endures intrusive re-experiencing.


3. Immediacy of focal Image. Image appears close and real.
4. **Intensity of emotion.** (a) Fear; (b) vulnerability.

**Spectator Experiences.**

1. **Active alteration of experience.** (a) Fantasizes revenge; (b) fantasizes a peaceful place; (c) imagines watching herself watch a film; (d) has childhood memory of safe place; (e) has vague fantasy or flashback of a stalker.

2. **Broadening of perspective.** (a) Believes she is safe; (b) feels compassion for assailant; (c) wonders why incident happened; (d) contemplates suicide; (e) feels guilty for having disclosed; (f) blames herself; (g) has positive insights (i.e., realizes it was good to disclose); (h) wonders, "why me?"; (i) identifies with various fictional characters.

3. **Distancing of focal image.** (a) Cannot retrieve image; (b) image comes as flash.

4. **Variety of emotions.** (a) Anger; (b) sadness; (c) profound grief; (d) relief; (e) joy (euphoria); (f) desire to laugh; (g) despair at recovery.

**Treatment specific effects.**

1. **Momentary cognitive impairment.** (a) Feels drugged; (b) mental confusion; (c) difficulty following fingers; (e) difficulty articulating her experience.
2. **Heightened physical awareness.** (a) Tight chest; (b) difficulty breathing; (c) pressure on chest; (d) feels relaxed; (e) head feels heavy; (f) right side only of head feels heavy; (g) tension moves from chest to skull; (h) musculature tightens and loosens; (i) feels tingly; (j) muscles twitch.

3. **Change in energy level.** (a) Feels energized; (b) feels exhausted; (c) right side of head feels energized; (d) feels sleepy.

4. **Meta awareness of process.** (a) Realizes treatment is working; (b) frustration at her process; (c) concerned with direction of therapist’s finger movements; (d) aware of feeling reluctant to look left; (e) angry at self for being sleepy; (f) embarrassed at own process; (g) wonders about process (how it works); (h) sees fingers as tools to recovery; (i) worries how she is affecting therapist; (j) grateful for therapist’s comments.

**Co-Researcher “C”**

During an ice storm, approximately 6 weeks prior to her first EMDR session, “C” had stopped her car in order to assist a man and his daughter, whom she believed to be flagging her for assistance.
Immediately prior to exiting her vehicle, another car collided with hers, injuring the man, and killing his daughter.

Although not injured herself, the co-researcher immediately began suffering emotional shock, with which she coped by attending to the injured parties. As she was a nurse, and familiar with emergency procedures, "C" attempted chest compressions on the injured young woman, but eventually realized she could not save her.

Believing she may have caused the accident by stopping her car, "C" had since been plagued with guilt and obsessive thinking about the accident. Especially troubling were intrusive images of the victims' faces, and violent nightmares involving car crashes, serial killers, and dismembered people and animals. Although she had driven a car since the traumatic event, it was always with a strong sense of trepidation as she anticipated another accident. Prior to the EMDR session, she had difficulty sharing her feelings about the event with all accept her husband, who remained supportive.

At the time of the clarification interview "C" felt slightly tired. She was clearly in physical pain resulting from her accident, and showed restrained emotional vulnerability.

EMDR Experiences of Co-Researcher "C"

Throughout the greater part of her EMDR session, "C" re-experienced, largely in sequence, her automobile
accident, and the events immediately afterward. That is to say, her traumatic reliving of the event began at the moment of impact, and progressed, more or less sequentially, forward through time, with each set of saccades moving her a little farther. She described her experience this way:

The first while . . . it . . . almost went in sequence of the actual accident. So, thinking about one thing made me lead to think about the next thing. So, I worked through it--the whole accident.

Semantic and emotional threads link one set to the next. For example, in set four, the anger she felt at a screaming woman, recurred in the fifth set; but this time directed toward the drivers of the accident vehicle. The sixth set again brought an image of the same vehicle, but this time the focus was on the details of the hat the woman was wearing, and so on.

Classification of her experiences of guilt and anger was at first difficult. For, although one would normally think of these as secondary, and hence, Spectator emotions, because they were re-experienced, as if occurring in the moment, they fitted best into the category of Participant Experiences.

Throughout "C"'s first session, she did, by her own admission, resist the urge to emote. Each time she felt the impulse to cry, she stopped herself, by choking back the
feelings, and stopping eye movements, staring straight ahead, as if fixated on something. This impulse to cry she described as more profound and disturbing than mere sadness.

At several points during treatment, "C" had consecutive Spectator Experiences; among them, wondering how and why the event happened; a desire to leave flowers for one of the victims, and a momentary sense of relief at realizing the accident wasn't her fault.

At sessions end, there had been only a slight decrease in her anxiety (SUDs) level, from 7.5 to 6.5.

Sequential Experiences by Category

<table>
<thead>
<tr>
<th>Set</th>
<th>Classification and Description of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>01:</td>
<td>TSE: Difficulty concentrating; not sure what to do, despite instructions.</td>
</tr>
<tr>
<td>02:</td>
<td>PE: Relives moment of impact; panic, fear and guilt. TSE: Surprised at process; many images appear.</td>
</tr>
<tr>
<td>03:</td>
<td>PE: Relives incident: nausea; fear; shock.</td>
</tr>
<tr>
<td>04:</td>
<td>PE: Relives incident: fear; anger. TSE: Difficulty concentrating; eye lids get heavy; embarrassed at her process.</td>
</tr>
<tr>
<td>05:</td>
<td>PE: Relives incident. SE: Anger.</td>
</tr>
<tr>
<td>06:</td>
<td>PE: Relives incident; remembers details.</td>
</tr>
<tr>
<td>07:</td>
<td>PE: Relives incident. SE: Wants to cry (blocks).</td>
</tr>
<tr>
<td>Set</td>
<td>Classification and Description of Experience</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>08:</td>
<td>PE: Relives incident; remembers details.</td>
</tr>
<tr>
<td></td>
<td>SE: Wants to cry (blocks).</td>
</tr>
<tr>
<td></td>
<td>TSE: Knot in stomach.</td>
</tr>
<tr>
<td>09:</td>
<td>PE: Relives incident: remembers details.</td>
</tr>
<tr>
<td>10:</td>
<td>PE: Relives incident: feels helpless and</td>
</tr>
<tr>
<td></td>
<td>vulnerable.</td>
</tr>
<tr>
<td></td>
<td>SE: Increased awareness of remembered</td>
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<tr>
<td></td>
<td>surroundings.</td>
</tr>
<tr>
<td></td>
<td>SE: Increased awareness of surroundings.</td>
</tr>
<tr>
<td></td>
<td>TSE: Confuses past and present tenses; tension in</td>
</tr>
<tr>
<td></td>
<td>stomach feels as if in throat; shaky.</td>
</tr>
<tr>
<td>12:</td>
<td>PE: Relives incident.</td>
</tr>
<tr>
<td></td>
<td>SE: Remembers feeling of relief that she was not</td>
</tr>
<tr>
<td></td>
<td>responsible for accident; wants to cry</td>
</tr>
<tr>
<td></td>
<td>(blocked).</td>
</tr>
<tr>
<td>13:</td>
<td>PE: Relives (post incident).</td>
</tr>
<tr>
<td></td>
<td>SE: Anger.</td>
</tr>
<tr>
<td></td>
<td>TSE: Nausea.</td>
</tr>
<tr>
<td>14:</td>
<td>PE: Relives: guilt and vulnerability.</td>
</tr>
<tr>
<td>15:</td>
<td>PE: Partial relive.</td>
</tr>
<tr>
<td>16:</td>
<td>PE: Partial relive.</td>
</tr>
<tr>
<td></td>
<td>SE: Remembers feeling annoyed.</td>
</tr>
<tr>
<td>17:</td>
<td>PE: Partial relive.</td>
</tr>
<tr>
<td></td>
<td>SE: Wants to cry (blocks).</td>
</tr>
<tr>
<td></td>
<td>TSE: Stomach tight.</td>
</tr>
</tbody>
</table>
Classification and Description of Experience

18: PE: Partial relive.
SE: Wants to cry (blocks).

19: PE: Partial relive.
SE: Wants to cry (blocks).

20: PE: Partial relive: guilt; fear.
SE: Memory of relief it wasn’t her fault.

21: PE: Partial relive.
SE: Memory of relief it wasn’t her fault.


23: SE: Wonders how incident happened; wants closure; anger.

TSE: Mind racing: many thoughts.

24: SE: Fed up with pain; wants closure.

25: PE: Relives incident (from immediately after impact): fear, panic.


27: PE: Relives incident.
SE: Insight into her physical vulnerability.

28: PE: Partial relive.
SE: Anger; insight (she helped others to protect herself).

29: PE: Partial relive.
SE: Wants to be taken care of.

30: PE: Partial relive: re-experiences dissociative quality; vivid detail
SE: Swears she will never forget.
Set | Classification and Description of Experience
--- | ---
31: | SE: Fantasizes leaving flowers for dead woman; wonders if man blames her.
32: | SE: Wonders how man is; wonders if he blames her; guilt; sadness; wants closure.
TSE: Fatigue begins.
33: | SE: Flashes of man’s face; wonders why he waved; image of him on ground; self-coaches: Tells herself she did the right thing.
34: | PE: Partial relive.
SE: Wonders why event happened.
35: | SE: Identifies with other victims; wonders how they cope.
36: | PE: Relives incident; increased detail; fear.
SE: Memory of being surprised at her competence; insight (from psychologist’s question).
SE: Insight (she wasn’t callous).
TSE: Mind racing; many thoughts.
38: | PE: Partial relive (post incident).
SE: Remembers wanting comfort; wonders how others cope.
39: | PE: Partial relive (post incident); details clearer.
SE: Wants to cry (blocks).
40: | PE: Partial relive of incident.
SE: Experiences insight.
Summary of Experiences by Category

Participant experiences.

1. Passive endurance of trauma. (a) Relives event; (b) passively endures re-experiencing of traumatic memories.


3. Immediacy of focal image: Focal image appears vivid and close; detail revealed.

4. Intensity of emotion. Experiences (a) fear; (b) shock; (c) helplessness; (d) vulnerability; (e) guilt (relives); (f) anger (relives).

Spectator experiences.

1. Active alteration of experience. (a) Fantasizes leaving flowers.

2. Broadening of perspective. (a) Increased awareness of surroundings (of trauma site); (b) insight into her role played during trauma; (c) wonders how event occurred; (d) wonders why event occurred; (e) wonders how others cope; (f) identifies with other victim.

3. Distancing of focal image. None.
4. Variety of emotions. Feels (a) anger; (b) wants to cry ("more than sadness"); (c) relief; (d) feels fed up with feeling bad.

Treatment specific effects.
1. Momentary cognitive impairment. (a) Difficulty concentrating; (b) mind races; (c) many images; (d) confuses past and present tenses.

2. Heightened physical awareness. (a) Nausea; (b) eyelids become heavy; (c) knot in stomach; (d) feels as if her stomach is in her throat; (e) feels shaky.

3. Change in energy level. Fatigue.

4. Meta awareness of process. (a) Embarrassed at her own process; (b) surprised at mind racing, (c) surprised at high number of images.
CHAPTER FIVE: DISCUSSION

Review

To briefly summarize, information from a total of six interview transcripts was analyzed and found consonant with three broad categories, or themes, of experience, each of which further contained four dimensions of experience. Two of the three broad categories—Participant Experiences, and Spectator Experiences—were borrowed from the work of Cochran (1990). Participant Experiences emphasize (a) the passive nature of the co-researchers’ intrusive re-experiencing; (b) the narrow perspective or focus; (c) the vivid, immediacy of the focal image; and (d) the high intensity of (relived) emotion(s). Within this category, the client may be said to be re-experiencing, to some degree, the original traumatic material. The notions of narrow perspective, high intensity of emotion, and the helpless nature of re-experiencing, are compatible with the DSM IV (APA, 1994) categories of constriction, hyperarousal and intrusion, respectively.

Spectator experiences suggest a movement away from the narrow, intense re-experiencing of the Participant, into a realm in which the co-researcher experiences (a) a paradoxical form of agency, vaguely similar to dreaming, in which the experiencer is both agent and instrument of her experience; (b) a broadening of perspective relative to the traumatic event; (c) distancing of the focal image; and (d) a variety of intensity and type of emotion. It is within
this category that the survivor begins to mentally act upon and contextualize her experience; to reconstruct the assumptions that were "shattered" (Janoff-Bulman, 1992) as a result of her encounter with the traumatic.

The category of Treatment Specific Effects, includes those experiences which would not, in all probability, be occurring, were it not for the treatment itself. Various elements of this category were found to occur along with Participant and Spectator Experiences, as well as on their own. They include (a) momentary cognitive impairment; (b) somatic experiences; (c) changes to the co-researcher's energy level; and (d) a meta awareness of the co-researcher's own process.

Each co-researcher manifested a significantly different pattern of experience. "A" was among the previously mentioned "approximately 40%" of individuals who experience a continual, progressive movement toward in-session resolution of the target event (Shapiro, 1995, p. 76). Clearly, the majority of her experiences were of the Spectator and Treatment Specific Effects variety. No Participant Experiences occurred after 1/2 way through her first set of eye movements. Co-researcher "B," although spending much of her time in these same two categories, did have three Participant experiences, during which she relived, to some extent, the horror of her traumatic event. Hers was a stormy voyage of abreaction, drug-like euphoria, fatigue, cognitive insights, and physical tightening and
loosening. Although, resolution was not attained, significant progress was made. Co-researcher "C," on the other hand, spent much of her time in the realm of Participant Experiences, reliving her trauma and the hours that followed, gaining little perspective beyond her narrow Participant focus. However, she did move temporarily into the Spectator realm several times as the session progressed: Among other things, she questioned why and how her traumatic event could have occurred, and imagined paying homage to a woman killed at the site of her trauma. As with "B," resolution was not attained, apparently due to resistance to treatment.

Implications for Theory

The gleaning and classification of experience—especially remembered experience, which is partially of relevance to the present study—is, at best, a tricky endeavor. Not only is the nature of memory itself somewhat creative, and far from the "play back" mechanism we typically imagine (Loftus & Hoffman, 1989); but, any attempt to separate the various components of experience (cognitive, affective, somatic, etc.), is somewhat superficial and short sighted. One need only glance at the current popularity of fluoxetine (Prozac), or the effects of various forms of "body work" (Upledger, 1990) on the mind and emotions to realize the intimate and inseparable relationship (or, perhaps, "unity") of cognition/soma/affect. According to
Damasio, (1994) our belief in purely rational thought is incorrect:

The lower levels in the neural edifice of reason are the same ones that regulate the processing of emotions and feelings, along with the body functions necessary for an organism's survival. In turn, these lower levels maintain direct and mutual relationships with virtually every bodily organ, thus placing the body directly within the chain of operations that generate the highest reaches of reasoning. . . . Emotion, feeling, and biological regulation all play a role in human reason (p. xiii).

Hence, to describe the upward migration of tightness in "A"'s body as somatic, as if devoid of emotional or cognitive concomitants or precedents; or "B"'s abreaction as affective, exclusive of the somatic or rational, is to make the same error as Descartes: that of attempting to divide the indivisible wholeness of the experiencing organism (Damasio, 1994). That to which we assign labels such as "affective," "cognitive," etc., is simply the most salient aspect of a greater wholeness of experience affecting the entire person.

The above caveat being stated, there was much found in this study which confirms Shapiro's (1995) descriptions of client experiences. Although not every experience described
by Shapiro occurred (nor would one expect them to, given the small sample involved), no experiences occurred which her text had not anticipated. In fact, some of the more unusual EMDR experiences, such as physical sensations, changes to the focal image, polarized cognitive shifts and so on, seemed taken almost verbatim from her text. For example, both "A" and "B" experienced the upward migration of physical tightness; "B," from her chest to her head; and "A," from her stomach to her chest, whence it disappeared, "like it didn’t want to be there anymore." Of this type of shifting sensation, Shapiro writes, "a client may initially indicate a tightness in the stomach, but with each set the sensations may seem to move upward (to the chest, throat, or head)" (p. 85). Regarding the focal image, Shapiro writes how "a leering face can change to a smiling one . . ." (p. 81), which occurred when "A" saw the face of her co-worker, which had previously looked worried, appear calm and smiling.

Other (but not all) co-researcher experiences which confirmed Shapiro’s descriptions include changes in cognition (p. 83); less intense reliving of experience (p. 90); and changes in emotions (p. 84).

Micro patterns of experiences were also anticipated by Shapiro, including "C"’s blocking (p. 77), and "B"’s profound abreactions (p. 168).

The present study extends previous EMDR theory by offering a conceptual framework for classifying and
understanding type and movement of co-researcher experience, which is consistent with existing perspectives on PTSD (APA, 1994; Shapiro, 1995; Herman, 1992), "shattered assumptions" (Janoff-Bulman, 1992), and narrative therapies (Hermans & Hermans-Jansen, 1995).

Whereas Shapiro's (1995) accelerated information processing model provides a metaphorical and biological "working hypothesis" (p. 29) of how EMDR brings about changes to the organism, the current study offers a framework for conceptualizing and understanding the significance of these changes themselves.

To describe movement away from the Participant realm, to that of a Spectator is not only to say one is working through the traumatic material, but also to say what the significance and meaning of such movement is. When, for example, "A" sees herself in the picture for the first time, it is not only a sign that "two neuro networks [are linking] up with each other" (Shapiro, 1995, p. 41), but, just as important, it is an indication of what the co-researcher, in her paradoxically agentive/passive role is in the process of doing: contextualizing, narrating, and hence, making meaning of her previously meaningless, wordless, traumatic memory. It is this negotiation and reconstruction of meaning which allows the traumatic episode--now a story--to be removed from "active memory" (Horowitz, 1976) and laid to rest.
The dimensions of experience, (largely bipolar in the realms of Participant and Spectator) indicate the dynamics, or components, involved in the shift from the prenarrative (Herman, 1992) to the narrative (Hermans & Hermans-Jansen, 1995); from stasis (Shapiro, 1995; Janet, 1919) to meaning (Frankl, 1963); from fragmentation (Janoff-Bulmann, 1992) to integration (Janet, 1919).

This conceptualization is offered by the author, not as an alternative to the accelerated information processing model, but an adjunct, adding a greater depth to our understanding of the significance of co-researcher experiences.

Implications for Counselling

There are several points to be made regarding implications for counselling. First, although the findings of this study do not suggest a need for alteration of the standard EMDR protocol (Shapiro, 1995), the conceptualizations offered may be of value to therapists by increasing awareness of the dynamics involved in clients' movement toward resolution and meaning making—the latter being an apparently integral part of the EMDR experience. As EMDR continues to evolve, this awareness may eventually lead to subtle changes in how some therapists approach the overall context of EMDR therapy, placing a greater emphasis on meaning and story.

The second point involves the level of fatigue experienced by all co-researchers (during and after
A therapist's emphasizing to a client in advance that he or she may experience some degree of fatigue during—and especially after—treatment, would seem ethically responsible, in that the client could plan his or her post-session time accordingly. Therapists should be aware that in-session fatigue, cognitive impairment, or the effects of abreaction may require clients to rest briefly, as did "B," when overwhelmed by her experiences.

Third, as two of the three co-researchers were, at some point, unsure of what to do, despite therapist's previous instructions, a re-evaluation of how and what instructions are given might be helpful.

Finally, regarding the therapeutic relationship, it would appear that, as in most therapies, encouragement can play an important role for clients in distress. Given the high level of meta awareness clients displayed, and their feelings of surprise regarding the process, it would seem that therapists should continue to reassure clients that treatment is proceeding well, if such is the case. For some clients, such as "C," who did not yet feel safe emoting in front of her therapist—and, in essence, blocked her treatment as a result—greater time and attention might need to be paid to developing the therapeutic relationship before treatment begins.

Implications for Research

As efficacy research continues to confirm the usefulness of EMDR in the treatment of PTSD and other
conditions (Shapiro, 1995; Greenwald, 1994, 1996), it would seem useful for researchers to begin to conduct further qualitative investigations into co-researcher experiences, especially regarding the dynamics of meaning creation within the therapeutic session(s). To this end, it is hoped the conceptual structures identified in this study will be of heuristic value.

As this was the first systematic investigation of the phenomenology of EMDR, there remains a great deal to be explored. Replication of this study with a much larger sample, might validate the appropriateness, or lack thereof, of the categories and dimensions herein described.

Limitations of the Study

Number of Subjects

Perhaps the most glaring limitation of this study is the inclusion of only three subjects, or co-researchers. Had every co-researcher manifested a similar pattern of experience, it would still have remained difficult to generalize the results beyond this study. The fact that each co-researcher manifested a different experiential pattern renders any such generalization that much less certain. For the three patterns identified do, in all probability, represent only a small sample of the many possible patterns. Generalization is further complicated by the fact that, although all co-researchers shared a common DSM IV diagnosis of PTSD (APA, 1994), "A" was being treated for a single event trauma; "B" for at least two; and "C,"
although treated primarily for a single trauma, was, by her own admission, resisting the treatment, so as not to feel overwhelmed.

Limitations of Verbal Communication

Even with the use of Interpersonal Process Recall to cue co-researchers' memories, it is presumed that not all of the in-session information could be retrieved by the researcher or co-researcher. For such is the nature of memory and verbal communication that, even if one possessed unlimited time to remember and describe one's experience (which co-researchers did not), a precise representation is unlikely. Some experiences may be outside the realm of language. Alan Watts writes that

words can express no more than a tiny fragment of human knowledge, for what we can say and think is always immeasurably less than what we experience. This is not only because there are no limits to the exhaustive description of an event, as there are no limits to the possible divisions of an inch; it is also because there are experiences which defy the very structure of our language, as water cannot be carried in a sieve (1983, p. 3).

Further, the fallibility of memory itself may ultimately render all accounts of remembered experience at least marginally suspect (Loftus & Hoffman, 1989).
**Researcher Bias and Influence**

Despite the researcher's attempt to wade into the large body of co-researcher experience without preconceptions or expectations, it would be naive to assume such a neutral approach to research is possible (Kuhn, 1962; Laing, 1967). For one cannot help but interpret through the filter of one's previous training and experience.

Further, although the author has attempted to investigate each co-researcher's "experience as it is experienced" (Colaizzi, 1978, p. 53), as R. D. Laing writes, it is fallacious to believe we can investigate or interpret the experience of another, without becoming part of, and hence, influencing, the very thing we are attempting to investigate.

Social phenomenology is the science of my own and of others' experience. It is concerned with the relation between my experience of you and your experience of me. That is, with *interexperience* (1967, p. 5).

**Therapist Style**

Both of the psychologists who graciously participated in this study, although following standard EMDR protocol (Shapiro, 1995), manifested slightly different styles in how they interacted with their clients.
The psychologist who treated "B" performed over twice as many sets as the mean number of his colleague, who treated both "A" and "C." The former also placed considerably more emphasis on somatic experiences than the latter, by more frequently asking his client to "scan her body." It is difficult to say how these differences might have affected client experience, if at all.

**Medication**

Use of medications was not consistent across all co-researchers. At the time of the initial EMDR session, "B" was using alprazolam (Xanax; a benzodiazepine); "C," nortriptyline (a tricyclic); and "A" no medication whatsoever. Regarding the effects of medications on treatment, Shapiro writes that "so far, no medications appear to completely block EMDR processing, although the benzodiazepines have been reported to reduce treatment efficacy" (1995, p. 100). It remains difficult to speculate confidently how differential medications might have affected co-researcher experience in this study.

**Summary**

This study is the first to systematically investigate the moment-to-moment experiences of three co-researchers receiving their first session of EMDR.

Using a variation of both Interpersonal Process Recall (IPR; Elliot, 1994) and Colaizzi's (1978) phenomenological research methodology, findings confirmed many descriptions
of experience offered by Shapiro (1995); with nothing of a disconfirming nature being discovered.

Three distinct patterns of co-researcher experience were determined, with one co-researcher attaining full in-session resolution of her baseline measures.

Three broad categories of experience were also identified (Participant Experiences, Spectator Experiences and Treatment Specific Effects) each of which were found to consist of four dimensions, or components, of experience. Movement from the Participant to Spectator realm was found to be consistent with working through and contextualization of trauma-related memories.
References


Dear Client:

I am a Master's student in Counselling Psychology at UBC, inviting you to participate in a research study I am conducting, for my thesis, into Eye Movement Desensitization And Reprocessing (EMDR), a procedure you are about to experience.

I am gathering information about the experiences individuals have during their first session of EMDR. Such information will be useful to future clients, by giving them a sense of what they might expect during their own EMDR treatment. Should you participate, Dr. Wilensky will tape record your initial 90 minute session. Then, at your convenience (preferably within 48 hours), I will arrange to interview you about your experiences using the tape recording to help you remember. A final interview will be arranged at a later date, during which I will show you what I have written, and ask for your feedback as to its accuracy and completeness. The total time required of you (not including your initial session with Dr. Wilensky) will be between three and four hours.

Your identity will remain confidential during and after the study, with your name being omitted and replaced by a numerical code. All tapes will be erased immediately after the project is completed.

Please note that you may refuse to participate in this study, and may withdraw at any time, without, in any way, affecting your therapeutic relationship with Dr. Wilensky. Should you have any questions regarding the project, please contact me at the telephone number below.

Research Title: Six Participants' Experiences of Their First Session of Eye Movement Desensitization and Reprocessing.

Brett Peterson 731-3457
Faculty Supervisor: Larry Cochran, Ph.D. 822-6139

I consent to participate in this study, and acknowledge receipt of a copy of this form.

NAME:_____________________________________

ADDRESS:____________________________________

PHONE NUMBER:______________________________

SIGNATURE:________________________________

DATE:______________________________________