

Interview With Francine Shapiro: Historical Overview, Present Issues, and Future Directions of EMDR

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This interview with Dr. Francine Shapiro, originator and developer of Eye Movement Desensitization and Reprocessing (EMDR), provides an overview of the history and evolution of EMDR from its inception to current findings and utilization, as well as future directions in research and clinical development. Dr. Shapiro discusses the psychological traditions that informed the development of EMDR and the Adaptive Information model, as well as the implications for current treatment. The rationale for the application of EMDR to a wide range of disorders is discussed, as well as its integration with other therapeutic approaches. Topics include research on the role of eye movements, the use of EMDR with combat veterans, somatoform disorders, attachment issues, and the distinct features of EMDR that have allowed it to be used for crisis intervention worldwide.

In this interview, the originator of EMDR, Francine Shapiro, helps us understand what led her to her discovery of EMDR and takes us on her journey through the growth and development of this powerful psychotherapy. From the very beginning, research has been the organizing principle for the advances in her work. Dr. Shapiro gives us her perspective on the connections between research on EMDR in the area of trauma and in the field of psychology and underlines how essential it is to make research a part of every clinician's practice.

Luber: We all know about your "walk in the park" in 1987 and how the events of that day led to the genesis of EMDR. You described it in your 1995 and 2001 texts as "a chance discovery" and said that as you were walking, you noticed that some of your negative thoughts disappeared when your eyes moved spontaneously back and forth and that when you tried to recover them, they were not as disturbing as before and this happened without any conscious effort. Then you began using this eye phenomenon deliberately with the same results. Could you tell us what prepared you- prior to that event-to allow you to be open to this discovery?

Shapiro: Ten years previously, I had been diagnosed with cancer, which shifted my attention from my plans to become a university professor in English literature to what caused stress reactions in people because the whole field of psychoneuroimmunology was just emerging. The work of Norman Cousins and Pelletier and others were focusing on the interaction between mind and body. That became fascinating to me, as well as wondering why-as a society-we had so many technological advances but weren't really able to handle these mind-body issues. So I decided to go and look for ways to do that and get them out to the general public.

I closed up in New York and headed out toward California where there were numerous cutting edge workshops going on and I entered into every one that I could find to see what the latest was known and then did the same in a professional psychology program. During those 10 years, the approach was basically to use my own mind and body as a laboratory to see what worked. So, over those 10 years, I had cultivated the ability to carefully self-monitor.

I think when the thoughts came up that were disturbing, I was able to notice them, and then pay attention and notice the saccadic eye movements that occurred when that type of thought arose, and then move on from there.

Luber: Please tell me about the early days of your discovery.

Shapiro: Well, it was fascinating observing how when I brought up a disturbing thought and moved my eyes in a certain way, it allowed it to disappear and dissipate. The question was "What types of thought would it work on?" and so I continued with myself for a while but then wanted to see if it could work with anyone else.

I, basically, gathered every individual I knew and asked them "Bring up something that bothers you" and then I tried to duplicate with them what I had done with myself. I asked them to move their eyes in the same way. I showed them how mine had moved and discovered that most people did not have that type of muscle control and I had to use my hand in order to guide them. The feeling that I had at the time was that I had stumbled on a natural physiological process that we all had, something that I had noticed and was now using deliberately. The feeling was that if it worked for me, then reasonably it should work for everyone else.

I also started thinking in terms of REM sleep-that was where eye movements were mentioned-and the notion of going to sleep feeling disturbed and then waking up and feeling better about something. It made sense that there was some connection between the eye movements and processes that occurred during sleep. Clearly, we all had that in common as well.

Luber: What was the psychological tradition that informed your early thought processes and how do you think it affected your discovery?

Shapiro: I came from a behavioral orientation and it did color my view. Working with individuals and finding that there was almost an immediate effect with everyone in terms of decreased anxiety-because I came from a behavioral orientation-I was really looking at it as a decrease in anxiety and disturbance at that time and nothing more. I noticed that it would start, and then it would stop, and so I would develop procedures around the effects of the eye movement, in order to allow it to keep going, and that became the genesis of what at the time I called EMD. Because I had come into it with a behavioral orientation, I was thinking of it as a desensitization technique á la Wolpe. I thought it was most akin to systematic desensitization. With the concept of reciprocal inhibition, that there was some innate relaxation response that was occurring because of the eye movements that was allowing a desensitization to occur, I named it accordingly.

Luber: With what population did you begin to work, when establishing your basic understanding of your work?

Shapiro: The initial use of EMD was with normal people, people that I knew in general or with classmates, colleagues, or friends, working with anything that might be disturbing. After that, I wanted to see if it would work on a diagnosed population because, at that point, I was finishing up my PhD in psychology and I needed to do a dissertation and this seemed like a worthy subject for it.

I'd realized that old memories were the easiest to work with. If you look through the DSM, the folks most troubled by old memories seemed to be trauma victims, rape victims, et cetera. Not knowing if it would work with a diagnosed population, I approached a veterans outreach center and asked them if I could work with some people there. They allowed me to first demonstrate it with a counselor-a Vietnam vet-who was still greatly troubled because of an incident from the war. After a few moments, the memory was fading and changing and was quickly resolved. Since it clearly worked, I launched into a controlled study with a group up in northern California made up primarily of sexual assault victims, and that study was published in the Journal of Traumatic Stress (JTS).

Luber: Where was that? Was that in a Mental Health Center?

Shapiro: Actually, there were two sexual assault counseling centers and a veterans outreach program. Then the counselors saw what was happening, and independent therapists also sent referrals. The intriguing thing, again, was to see years worth of trauma disappear in such a short period of time.

But, at the point that I published the study in JTS , I was viewing it primarily as a desensitization technique and so what I was looking at was the removal of primary responses like fear and anxiety-and then looking at the most obvious attendant behavioral symptoms.

Luber: Could you tell me about the study that you published for JTS and its connection to the field of trauma?

Shapiro: The study began in 1987. At the point that I started it, there was only one published randomized study on PTSD, which evaluated biofeedback-assisted desensitization with eight combat veterans. When my paper was published in 1989, three other studies also appeared, and I think that this combination really launched the field of trauma. Those studies were significant because, even though PTSD had been accepted as a diagnosis in the DSM in 1980, there were no validated treatments for trauma at that time. The controlled research did not really begin on the PTSD treatments widely used today until the publications in 1989.

Luber: What do you think was the cause of that?

Shapiro: Well, treatment outcome studies in general were scarce. Exposure therapy and systematic desensitization were the primary accepted behavioral interventions at that time. Two of these early 1989 studies were with exposure therapy with in-patient combat veterans. They were a secure population to work with. The results of the research indicated that there was a 30% success rate, and a 30% drop-out rate; but PTSD was considered extremely difficult to treat and so any positive effects were looked at happily. In general, there were not a lot of treatments backed by research at the time.

If you look at the report of the APA Division 12 Task Force that was published in 1998, it evaluated the entire field to identify the treatments that were validated for different disorders.

Even though there were hundreds of treatments and hundreds of disorders, there were only about 12 that were on the empirically validated list as "well-established," such as exposure therapy for specific phobias or another one for headaches. Most of the complaints that clinicians work with daily were not getting validated treatments. There were two lists. One was considered "fully validated" and that was with two comparative studies from different research teams, and, even after decades of use of different forms of psychotherapies, only 12 made that list. Then, there was another list that was "probably efficacious" and that was the list EMDR and exposure therapy appeared on for the treatment of PTSD.

Luber: What year was that? What did we learn from these findings?

Shapiro: That was in 1998 and it was across the board. The notion was dispelled that the field was actually working with validated procedures. What we really needed to look at was the fact that research was simply not being done. If you looked at a list of NIMH-funded studies at about that time, you would see that most of them were epidemiological or internal process evaluations. There was very little done on treatment-outcome studies and that was because they are very hard to do. Needless to say, it is important for it to be done, but it simply did not exist back at that time.

Luber: Could you reflect on the evolution of EMDR as a methodology?

Shapiro: Well, in 1988, in the process of writing up the dissertation, I began to do additional reading in the field and came across a statement by Pavlov where he talked about an excitatory-inhibitory balance in the brain and that when that became disrupted, processing would cease. And that just rang a bell (laughs), or, let's say, struck a chord because it seemed to parallel what I was seeing in some of the responses of my subjects, and it just seemed to make sense.

I realized that rather than thinking in solely desensitization terms, I should start thinking in information processing terms. I read the work of Lang, who incorporated the notion of memory networks, and I started thinking about the effects of the treatment in an information processing way rather than in a desensitization way. I started looking at the processing of cognition and emotion rather than just the reduction of arousal and fear and anxiety.

Over the next few years, with those lenses of information processing principles that I was developing, I started changing the procedures I was using in order to facilitate the processing. So, instead of returning to the same image and thought repeatedly as I had been with EMD, I allowed these cognitive and emotional shifts to continue. I dropped the repeated cognition, as it felt like it was cluttering up the channels of association, and started to let the process move more freely. The different procedures that emerged over that time were the result of these information processing lenses and the principles. In 1991, I officially changed the name from EMD to EMDR because of this shift to the reprocessing perspective. I felt constrained to keep the "EMD" because it was already widely known by that name.

When I wrote the first text, in 1995, I called the model the accelerated information processing model and then changed its name for the publication of the book in 2001 to the adaptive information processing model. Because, whereas in 1995, I was concentrating on the speed and efficiency of EMDR effects, what became clear was that the term "accelerated" was limiting the model. The concept of "adaptive" was really the issue because the information processing system itself would be moving the dysfunction toward adaptive resolution. And it

also became apparent that the model's principles were able to explain the phenomena that we see in any form of psychotherapy whether it is progressing rapidly or not. So, the name adaptive information processing seemed to be more on the mark.

Luber: It is clear from the very beginning of your work that research has been a guiding principle. Can you talk about your understanding of the importance of research in psychology?

Shapiro: Well, the fascination with psychology started during the time I was working towards the PhD in English literature. The notion of lives unfolding on the page and being able to see these various connections were part of this fascination with any of the great literature and it actually became a great training for my work as a clinician later.

The predominant vantage point at that time was psychodynamic therapy and, though the notion of the internal world has great richness and importance, this was also the time when behavior therapy came into the field. The notion of being able to go in and do a focused intervention with predictable and repeatable results seemed extremely important to me. Of course, the only way of being able to know whether you do have a valid and predictable treatment is through research.

I think that the primary contribution of the field of behavioral therapy and cognitive therapy, besides the utility of the different techniques that have been offered, is the accent on the importance of research and making sure that what we are seeing is not simply a subjective response or wishful thinking but rather something that can be duplicated.

Luber: When you started to instruct practitioners in EMDR and its use, what were some of your concerns?

Shapiro: After bringing EMDR into the world, I felt it was important to make sure that it was validated by research. That was also the reason for publishing the controlled study and all of the presentations that I did after that; it was in order to encourage research. The trainings that I gave in different VAs and research groups were for that purpose. I expected that research would come out in very short order that would validate it clearly or not.

It was important to make sure that people understood that until it was validated, it needed to be considered experimental. That is why we had people sign agreements early on stipulating that fact. Even though there was not very much in the field that could be considered validated, it was important to make sure that clients were protected. And, I guess that maybe the reason for it was my coming into it from a clinical perspective.

I did not come in to the field of psychology from an academic perspective, but rather asking what tools and techniques were out there that could be gotten out to the general public. That was the original incentive for doing it. Then, with the discovery of what EMDR potentially had to offer, of making sure that it was validated and that it was disseminated in the right way. This became very obvious when I discovered that people were getting hurt because some clinicians I trained early on had begun to teach the procedures to lay hypnotists and massage therapists. The training restrictions were needed to prevent that as well. Once it was established as a validated clinical intervention it would be patently illegal to do that. But until then, nothing but the training restrictions could prevent it.

Luber: Did things go as you expected?

Shapiro: No, I was mistaken in thinking research would come out rather quickly. It turned out that was not true. The first randomized EMDR studies that emerged 4 years later were within the VAs where, again, this was a captive population. The problem with that was, because of my initial study, which was published with one session where I was identifying the treatment effects via the SUD (subjective units of disturbance) and VoC (validity of cognition) levels, and looking at the decrease in anxiety and fear, it was wrongly assumed that the entire treatment could consist of a very short amount of time. Unfortunately, the VA studies that were done concentrated on only one memory with these multiply traumatized combat veterans. Instead of just looking at the subjective responses to that one memory, they looked for global changes in PTSD measurements, which of course you are not going to see; because, if you only treat one memory in multiply traumatized combat veterans or give them only two sessions, particularly on one memory, you are not going to see substantial changes on global measures.

So given this fact and the controls that were used, the early VA studies that came out appeared not to validate EMDR as highly effective, despite the fact that the researchers, such as Boudewyns and Pitman, stated in their articles that for a variety of reasons, based on their results, they preferred EMDR as a treatment for vets to exposure therapy, which they had previously studied. For instance, they reported that the patients and clinicians preferred it as it was less-anxiety producing, with fewer negative complications. However, because of the same research design problems, the data that they reported also did not seem to support the eye movements, since most of these early studies were component analyses. It took until 1995 for the first study to be published with civilian PTSD, and that was the Wilson, Becker, and Tinker research that showed the highly positive effects. At that point, it was clear that EMDR was not doing harm. And, given the clinical reports world-wide that it was useful, combined with the Wilson study and the others that were also in the pipeline that had not yet been published, it became clear that it was now safe to take the experimental label off. That is when I published the book in 1995 with the detailed procedures and standards of practice and cancelled the restricting training agreements.

Luber: How has EMDR and its relationship to research evolved over these past 20 years?

Shapiro: Well, it took 3 years after the publication of my text for a randomized study with a full course of EMDR treatment with combat veterans to appear. The Carlson VA study in 1998 showed that 12 sessions with vets resulted in 77% no longer having PTSD. However, to this day, the waters are muddied by the earlier studies that only addressed one memory, since, despite being called out as delivering insufficient treatment doses in both ISTSS (The International Society for Traumatic Stress Studies) and DoD (Department of Defense)/DVA (Department of Veterans Affairs) practice guidelines, they are still included in metaanalyses, which unduly pulls down the effect sizes.

There were numerous problems with the earlier research. For instance, there was one early study that was published in 1994 that was a vet study with two sessions. It was published by interns who had never worked with vets before, and they received fidelity checks on how well they were doing the procedures. It was published despite the fact that there was a negative fidelity check. That is, the person they had chosen to supervise them told them that they were not doing the treatment well enough, but, despite this, it was published. I turned to a long-

term researcher in the field and said, "How is this possible that a study gets published with a negative fidelity check?" and his response to me was, "Well, it is because we never use them."

In other words, in the whole field of research that existed-even though it was sparse in terms of treatment outcome-there was no universally accepted standard that the treatment be evaluated to make sure that the researcher was actually doing it effectively! It basically meant that we had no idea what we knew, and that became an issue in terms of EMDR research to try to have the standard adhered to so that if someone was evaluating EMDR at the time, or the earlier EMD, it was being done appropriately.

Luber: How did this lack of competence affect the research in EMDR? What do we need to do now?

Shapiro: I think that one of the things that was very telling to me came from the early agreements that we had people sign saying they would not train or teach the procedures before the experimental label came off and they were authorized. So we really had a database of everyone who had been trained. However, even though APA standards stated that researchers should be trained in the methods that they were evaluating, I would continue to see these studies published where the researcher had not been trained. For example, they were using the procedures that I had published in my original articles, which were outdated; it was EMD and we weren't using it anymore, but they were calling it EMDR. They were not trained, and yet their results entered into the literature, indicating in many instances that EMDR supposedly did not work, even though they were not doing it properly.

Since then, when we have done research, we have tried to make sure that the people who are doing the clinical work were evaluated on an expert level before they ever engaged in data collection. I think that is one of the issues that still needs to be pushed because the field has not necessarily evolved in that regard. There are fidelity checks that are part of a gold standard of treatment, but there is no mandate that the people be evaluated prior to the research in order to make sure that they are on an expert level-or sufficiently adequate level-before the actual data are collected.

So you can have people improving as they get feedback during fidelity checks, and perhaps by the end of the research they are doing it reasonably well, but you have the data collected from all of the previous sessions that might potentially cause a procedure to be negatively evaluated when, in fact, it wasn't being done correctly.

I think the attention and controversy surrounding EMDR pushed issues of research and clinician training to the forefront of the field-because of the initial article and the questions about it. After all, the pervading sense was that PTSD was extremely difficult to handle and yet you have this study with one-session effects in JTS that naturally caused eyebrows to rise.

I remember arguments in the Behavior Therapist newsletter with people saying that there was no reason for people to be trained in a method, that they should easily be able to do it from a manual or from written procedures. That was the goal of behavioral therapies at that time: to remove the clinician as much as possible and be able to have procedures that were fully manualized. But EMDR is too complex to be handled in that way, a fact that would be attested to by most clinicians who have been trained in it. There is a need for training and appropriate fidelity checks, and again they should be done before any research data are actually collected.

I think, in a way, the tension generated about the EMDR studies assisted the field to come up with more rigorous standards in order for treatments to be researched. Foa and Meadows certainly contributed to that through the gold standards that they published-I think it was in 1997- setting out certain standards of research that needed to be achieved for it to be considered a well-run study. But again, even though these standards include fidelity checks, I think that we also need to go further in the way that I mentioned. It is clear that all the major EMDR organizations support ongoing research and that it continues to be a primary focus in the evolution of clinical applications.

Luber: I know that there have been a number of questions about the role of the eye movement in EMDR. What are your thoughts about this?

Shapiro: Well, as I said previously, the earliest randomized studies of the eye movements used multiply traumatized veterans, and didn't support them. I think that part of the problem with those, and others, was the inaccurate belief that it would be a zero sum game, meaning that the eye movements would be the only thing that would have an effect, and the rest of the procedures viewed as practically inert. That's the best way I can figure it because, as pointed out in the 2000 ISTSS Practice Guidelines, all the component studies are flawed in using inappropriate populations, insufficient treatment doses and fidelity, and not enough subjects. For instance, although accepted research standards, such as those set by Kazdin, are clear on needing a large number of subjects in each condition for component analyses, some studies used only seven or eight people in a cell. So, in one study, even though the eye movement condition resulted in 85% remission of PTSD diagnosis compared to less than 60% without, and took less time, there weren't enough subjects to achieve statistical significance. Then you get a meta-analysis of this flawed research and, despite finding marginal statistical significance for diagnosed populations, it leaves a negative impression.

Fortunately, in the last decade many international memory researchers have evaluated the eye movements, and there are about a dozen controlled studies that demonstrate clear effects of eye movements on arousal, imagery vividness, memory retrieval, and so forth. These are hypothesis-driven studies by researchers who are also trying to determine whether the effects stem from disrupting working memory, the orienting response, or REM processes. Since the eye movement is studied in isolation, the effects of the rest of EMDR's procedures don't confound the results. I hope when new component analyses of diagnosed traumatized populations emerge, they follow the parameters set out in the 2000 ISTSS Guidelines, which specifically evaluated the designs. I also explore the issue in my text. It's not easy to do component analyses, but it's really about making sure that the studies are rigorously done.

Luber: What is the current state of EMDR in the field of psychology from your perspective?

Shapiro: Well, it certainly is accepted worldwide as an empirically supported trauma treatment. The only exception, in recent years, has been the Institute of Medicine (IOM). When the initial draft was published, many of the researchers that had done EMDR research wrote to them pointing out the flaws in the way their studies were described. Hopefully, the second draft will reconsider those opinions. The ISTSS guidelines that emerged subsequently rejected the IOM report and validated EMDR at the top level of effectiveness and efficiency.

But the research has primarily accumulated in the area of PTSD. And, though EMDR is a psychotherapy used for so many other diagnoses and so many other clinical complaints as, of course, is cognitivebehavioral therapy and psychodynamic therapy, the research has not

accumulated at all on these different diagnoses. There are published individual case studies with measurements-with anxiety, personality disorder, addictions, depression and chronic pain, et cetera-but the randomized controlled studies needed for full validation have not yet been done. So, that's the next thing that needs to happen; each of these different diagnoses needs to be evaluated with rigorously controlled research, and that's going to take more time.

Luber: Do you have any suggestions for clinicians who would like to incorporate research into their practices?

Shapiro: Well, I think it is extremely important to remember that all clinicians should be using standardized measures in their treatments of clients. As clinicians, we are all fallible in terms of what we see, in terms of what we concentrate on, in terms of what the client is inspired to talk about at any given session. But, by giving standardized measures that are appropriate for whatever their diagnosis, that's where the therapist can get much more comprehensive feedback on how the work is going .

Research is just systematic data collection in a rigorous manner. Every clinician can incorporate the best of the measures into their practice, and that would ensure that clients are given the best possible treatments. This is the same as in the field of cognitive behavior therapy, which has provided a great service in the research that it has done. Whether someone is thinking of conducting formal studies, or clinical work in a specialty area, they should begin by looking at the most recently published articles by respected researchers so that they can identify the most widely used validated measures and then incorporate them in their clinical work or research. I think that it is extremely important to make sure that every clinician is following best practices as well, by being meticulous in their work.

Luber: In terms of EMDR, how might that help further exactly what you were talking about in terms of gathering the primary data concerning these different diagnoses?

Shapiro: Well, there are so many local meetings and regional organizations of EMDR clinicians throughout the country and there are so many study groups and supervision groups throughout the world, that if the clinicians used these measures, the data could be collected, combined, and evaluated.

These real-world clinical studies can be invaluable. The thing about research is that it is not just about "proving" things, but it is also about guiding us. The early research that was done that indicated that a single rape or a car accident or something that clearly was an isolated event could be effectively processed within three sessions certainly began the process of proving that EMDR was an effective treatment, but it also helped to guide the EMDR field. For those clinicians who were consistently taking 10 sessions to process a single memory with all their clients, it was an indication that they might be doing something wrong and need to upgrade their skills. Clearly, more complex clients, including those with personality and dissociative disorders can take longer to process. However, for those clinicians with a general practice, if their outcomes don't jibe with the published research, it indicates a need for further consultation. Meaning that fidelity in clinical work is just as important as fidelity in research.

Since members of consultation groups are constantly being evaluated and guided in best EMDR practices, using large group data collection on a wide range of diagnoses that currently have widespread positive anecdotal, and preliminary published, reports can set the stage for future randomized studies. With appropriate informed consent, data could be evaluated by

both supervisors and researchers to help determine where EMDR is most effective, where protocols need to be changed because they are not effective, or where other approaches should be used instead. So, for instance, a study group could collect data using the Beck Depression Inventory or the Hamilton Inventory for clients who have depression, giving tests not only pre- and posttreatment, but ongoing during the treatment as well. This would let us see how successful EMDR is in treating depressions of various etiologies, how many sessions it might take to be fully treated, what types of targets are being successfully addressed, and when or if medication needs to be part of the picture. All that is really important to guide us. These are often done best with large-scale, randomized studies. But every clinician can participate, and groups of clinicians can participate by simply incorporating these measures into their clinical practice, which again is the best way to serve their client and, cumulatively, it is the best way to guide our practice overall.

Luber: What are the unique contributions that EMDR has given to the field?

Shapiro: Well, unique is kind of a loaded word. What we have seen is a repetition of the history of psychotherapy. There was a great resistance to psychodynamic psychotherapy when it came on the scene, and then great resistance to behavioral therapy when it entered, and then again the fights that went on between the behaviorists and the cognitivists when cognitive therapy came along, and again between the CBT people and EMDR when it came on the scene. So, we keep seeing history repeat itself, and, hopefully, because of research and the fact that EMDR has been validated by numerous studies, we, perhaps, can stop that continued battle that goes on when each new treatment arrives and welcome newcomers with the notion that if it does turn out to be empirically validated, that is something to celebrate. Because, Lord knows, we have enough suffering to go around and all effective treatments are needed.

What EMDR and, I think, the adaptive information processing model (AIP) also offers the field is a redefinition of trauma. The use of EMDR with PTSD targets an undisputed "trauma," but AIP also recognizes that trauma is not confined to the events that are necessary to diagnose PTSD. Any disturbing event can have a lasting negative effect on self or psyche and appears to be stored in memory in fundamentally the same way as the Criterion A events. What we call the "small t" traumas appear to be the foundation for many forms of pathology, many kinds of clinical complaints, and by directly accessing those memories and processing them, we see the overt symptoms decreasing and becoming eliminated. The published cases indicating the elimination of diagnosed body dysmorphic disorder or olfactory reference syndrome after only one to three EMDR processing sessions of childhood humiliations are good examples of that. So are the cases of depression eliminated after processing childhood memories of parents arguing or circumstances around their divorce. The enhancement of personal growth, the emergence of a positive sense of self, which appears to consistently accompany EMDR treatment seems to result from the memories being rapidly transformed into constructive learning experiences. Recent research has begun to explore this issue, including plans to develop standardized measures for more systematic evaluation.

Again, the notion that what we are doing is stimulating the inherent information processing system- which is the foundation of learning-and allows the assimilation of the memory, allows resilience to occur, allows new insights to emerge, and allows a redefinition of self. I think that is what EMDR, at this point, can offer the field. Other forms of therapy view the causes of pathology and the change agents differently. The belief, or the emotion, or the behavior is seen as the cause and addressed directly to change the symptom picture. AIP sees the dysfunctional belief, emotion, sensation, and behavior as the symptoms and guides the use

of EMDR accordingly. The cause is the unprocessed memory, and changes in symptoms are seen as byproducts of the reprocessing. That's why published cases have shown that EMDR memory processing can eliminate phantom limb pain. The phantom pain is actually a manifestation of the physiologically stored memory.

The only way of making sure that this is recognized as a contribution, and, indeed, evaluating the worth of its contribution is to get the randomized research done on the many diagnoses for which EMDR is being used by clinicians. Clearly, we also see this in PTSD research studies when we are using multiple measures, and we see attendant pain, we see attendant depression, and a wide range of other symptoms reduce and fall away with EMDR treatment. That has been documented in different studies and also in the larger EMDR studies that have used PTSD and non-PTSD participants and the comparison of the treatment effect and the effect sizes has been equivalent whether it is a Criterion A events or not. Independently, a recent survey by Mol and his colleagues has indicated that life events can cause as many or more trauma symptoms than these Criteria A events.

Luber: What about the possibilities of EMDR's use for issues other than trauma treatment?

Shapiro: EMDR is not simply a trauma treatment. It is a form of psychotherapy distinct from CBT or psycho-dynamic approaches. So, when we are looking at it across the board, we can see that fear, anxiety, a sense of helplessness or lack of safety, or "I am not lovable," the depression, the anxiety, the anger, the shame-all of these things-are attendant to many types of unprocessed memories, and I think that that is something that EMDR has to offer the field. It is a simple AIP formulation that the diverse unprocessed memories are the actual cause of the wide range of symptoms, including negative beliefs, emotions, sensations, behaviors that make up most of our diagnoses.

Consequently, EMDR has been embraced by numbers of clinicians using family therapy, for instance, in order to open up clinical impasses by processing the earlier memories that are causing the individuals not to be able to connect, or to react continually in anger, pushing certain behaviors, preventing other behaviors and attitudes. It is the processing of these earlier memories that allows an integration with many of the other forms of psychotherapies because, for instance, if one has a psychodynamic orientation, it informs the use of what memories need to be accessed and processed to liberate the client. Some psychiatrists who worked at the old Menninger Clinic said to me, "EMDR allows me to use what I know." So, rather than psychodynamic principles being maintained primarily as theoretical perspectives or demanding interactions that need to take place over many months or many years, they were able to use their understanding of intrapsychic dynamics and defenses to use EMDR accordingly to process the memories that were the root of the dysfunction. The same is true of those with a CBT background. The shift to EMDR allows a redefinition of the source of the pathology but doesn't denigrate the insights of other orientations.

I think that EMDR will allow clinicians of any orientation to utilize-in a very focused and efficient manner-the wisdom of the education that they have gotten in their field. That is its strength as an integrative psychotherapy approach.

Luber: During the early stages of EMDR, the EMDR protocol went through a number of changes as we learned more through the experience of EMDR-trained clinicians. Now that EMDR is world-wide and there are many EMDR associations, how can we incorporate what

we have learned from our accumulated wealth of experience so that the protocol is as up-to-date as possible?

Shapiro: Well, I think that is occurring through the conferences and the different clinical reports, and also through the EMDR journals. For instance, one EMDR journal is starting in Japan, and there is the EMDRIA journal with an international readership.

Sharing experiences from the very beginning has been very important. In the early days of the EMDR we had a nonprofit EMDR network and newsletter to make sure that the clinicians that were trained were able to come back, meet, and share their experiences, and it is the same at this point. What is important, however, is to use the research process to ensure that the protocols and any procedural changes that are suggested are able to produce the effects that are at least equivalent, if not superior, to the effects that are currently derived.

Things can get diluted from a haphazard changing of procedures simply in the name of creativity. We have to remember that each individual brings their own unique characteristics to the party. So what might work beautifully for one individual clinician can be caused by elements outside their consciousness.

Indeed, when I was using EMD at that first vet center, I was videotaping sessions, and the other clinicians were observing the tapes. I remember saying to them, "All I am doing is the eye movements." And, they turned to me and said, "No, you are not. You are doing much more than that." I had to really pay attention to all of the other elements that were involved, and that was wonderful to have that feedback from other people because it did open my awareness to all of the things that I was bringing into it that was simply natural for me. It was simply who I was.

Stepping aside, and seeing all of the different aspects that were contributing, for instance, the incorporation of elements of what is now termed "mindfulness" in psychotherapy. From the very early days, EMD and EMDR clients were given the instruction to "Simply notice and let whatever happens, happen." Currently, that would be considered an active integration of an aspect of mindfulness training, which is now used and emphasized in therapies such as DBT [dialectic behavior therapy]. However, 22 years ago that was not something that I was aware was unique or different or special because it was simply how I viewed what they should be doing and didn't realize that it was an active ingredient. Even to this day, there are many aspects of EMDR that simply haven't been evaluated because it all works synergistically. In my textbook, there is a list of the different elements contributing to effects along with the different protocols and procedures that contribute to treatment outcomes, but if anything is offered as a change or replacement, there needs to be some research and evaluation to show that it is actually truly bringing more to the party.

Luber: What are your thoughts about the enormous contribution of practitioners using EMDR with individuals and/or groups after man-made disasters and natural catastrophes?

Shapiro: Well, I think it is immensely important that this is happening. The research is clear about the effects of trauma on men and women. Women have more of a tendency to get depressed. Men have the tendency to get angry. What we are seeing in so many of these countries is the ongoing intergenerational effects because the women are too depressed to bond with their children and we know the negative effects of lack of bonding on individuals, and the anger promotes more violence.

So, whether it is having HAP (EMDR-Humanitarian Assistance Program) projects or the individual responses of clinicians who are working in environments of ethnopolitical violence or others going in and working after man-made disasters or natural disasters, you are liberating the individual adults and children who have been traumatized, and you are ensuring that the proper bonding and connections are able to take place with others in the subsequent years. You are also stopping the knee-jerk violence that emerges within the family and community.

There is no separation between individual, family, community, global. At this point, we are interconnected worldwide. It is extremely important that no nation, no community, no group is left behind. So, the work that the HAP organizations are doing and individual clinicians are doing in underserved communities, with returning combat veterans, with individuals around the world that have been traumatized by events or vicariously through family members or direct service, all of that is extremely important in order to prevent ongoing emotional damage.

Luber: What are your hopes for EMDR in the future?

Shapiro: In the U.S., I would like to see it incorporated more strongly within the Department of Defense (DOD) and the Department of Veterans' Administration (DVA) in working with combat veterans. There seems to be an underutilization of EMDR in many areas.

The research and the effect sizes don't necessarily tell the whole story. Except for a one-session process analysis, there have been no randomized studies directly comparing EMDR and CBT treatments with U.S. combat veterans. In fact, there have been no DVA treatment outcome studies with EMDR and veterans since the 1998 Carlson study demonstrated a 77% remission of PTSD diagnosis. Although there have been a number of comparisons of EMDR and exposure therapies in outcome studies with civilians, and in meta-analyses, the findings of comparable effect sizes should not be extrapolated to work with veterans, nor do they paint the whole picture. For instance, the recent VA studies indicate that both PE (prolonged exposure therapy) and CPT (cognitive processing therapy) show only a 40% remission of PTSD diagnosis with vets, and we know they do better with civilian populations.

Meta-analyses also don't reflect the fact that with EMDR, you do not have to describe the trauma in detail, that there is no homework and, as shown in the process analysis, there is an immediate drop in the first session in SUD level in comparison to the exposure therapy where you have an increase in SUD levels. So, potentially, you would have more likelihood of veterans being willing to be treated and staying in treatment. There are a number of possible benefits for the treatment of combat veterans, and I would like to see it better utilized in that area. There are already published reports of its use near and on the front lines. Since EMDR does not use homework, I would like to see controlled research investigating its use on consecutive days so that it can be incorporated more on the battlefield. In fact, the ability to use EMDR on consecutive days should be investigated for disaster response, and the ability to speed up the treatment time for all diagnoses. For instance, it can potentially help to maintain greater stabilization for our most debilitated clients by moving through the processing of difficult memories in days rather than weeks. Other treatments, which need daily homework to achieve their effects, necessitate weekly treatment. EMDR does not, and that can have important treatment implications in many time-limited settings.

I would also like to see more of a recognition of the impact of "small t trauma," or perhaps better phrased as "etiological disturbing life experiences," throughout the field. For instance, use EMDR more in the school systems for those children who are being ostracized, bullied, isolated. These types of experiences can have long-standing negative effects, and the fact that we minimize events that are ubiquitous because, in childhood, there are numerous types of disturbing events that occur, does not mean that they are not damaging. I would certainly like to see wider recognition of memories of these types of events as the basis of pathology and EMDR more widespread to help liberate children so they don't need to carry the pathology needlessly for years.

I would like to see it available in every community worldwide simply because of the need to recognize that damage is done not only by physical deprivation but the mental health effects of any of these man-made and natural disasters which are going on globally. I would like to see the research done in all of these different areas of diagnosis so that we evaluate the treatment effects appropriately-not only of overt symptoms, but indicators of personal growth-and use it where it is demonstrated to be effective and that it be available for all who can need it.

Luber: What pitfalls can we be looking for as EMDR evolves? What can we do to prevent them?

Shapiro: I think that the pitfalls fall into excessive orthodoxy and the opposite. Meaning, adhering to something-even when other suggested procedural changes are being shown to be more effective-and, the reverse, which is simply allowing EMDR to be anything anyone chooses to say it is. There was a time that people were calling things EMDR simply by using the eye movement and that is simply not appropriate. The eye movement or any sort of bilateral stimulation is only one aspect of it.

There needs to be coherent and consistent guidelines in terms of what EMDR is, fidelity checks, and supervision to make sure that clinicians are using it appropriately; this needs to be viewed as a service to clinicians and a service to their clients, not something onerous. Protocols and procedures need to be evaluated, and if new suggestions are made and they are found to be superior, they should be incorporated and disseminated through the different organizations and through conferences and journals.

I think that by adhering to rigorous standards of science and making sure that changes are appropriately evaluated that we can avoid those pitfalls. I am talking about not only the procedural elements but the way in which the AIP model is viewed. Models of psychotherapy define how procedures are done and they also define the limits of application. If other models are proposed to guide EMDR treatment, they will, of necessity, be recommending changes in procedures, and those changes in procedures should be evaluated. If the procedures are incompatible with AIP, and yet their effects are found to be greater than those guided by the AIP model, then both the procedures and the new model should be adopted. If they are not, then they shouldn't be adopted. So, I think that it is important to make sure all the way down the line that whatever we are doing is evaluated. In that way, we can make sure that EMDR practice is guided appropriately and patients are given the best standard of care.

Luber: You have always had the power to convey your synthesis about what is going on with EMDR when speaking and through the written word. After your 20- year journey with

EMDR, what are the most important elements that you think practitioners and researchers of EMDR can be taking into consideration when working with EMDR?

Shapiro: I think we need to remember that mental health means more than a lack of suffering. EMDR started as EMD with the concentration primarily on the elimination of overt symptoms. The advent of EMDR and the adaptive information processing model really shifted the focus to internal growth. The reduction of overt symptoms is viewed as a byproduct of the reprocessing as the individual assimilates the new information and expands in terms of awareness and emotional regulation and the development of all of the different factors that we would be using to define a healthy individual. EMDR as a psychotherapy approach views the client systemically and comprehensively addresses the entire clinical picture.

I think that it is important to be interdisciplinary in our approach by bringing in the wisdom of all of the other psychotherapy orientations, as well as the knowledge available in the many scientific areas evaluating human development. For instance, while many originally resisted the notion, there is clear evidence of adult neuroplasticity and new procedures to aid the recovery for those suffering from traumatic physical injuries. That means that there is hope for even those most debilitated from psychic wounds. We know they can improve, but the issue is how far can they go towards optimal health. Research currently in the pipeline is showing the ability, for instance, to use EMDR effectively with those who have had backgrounds of neglect and lack of attachment, those that are evaluated with borderline personality or dissociative disorders. What we are looking for is the most effective and efficient ways possible to rebuild-or build-the psychic infrastructure in order to allow the full development of a healthy human being. This is not short-term therapy, but as a profession, it is our responsibility to seek solutions so that eventually no one is left behind.

Luber: From that perspective, what are the types of concerns and goals we would need to keep in mind when dealing with these most debilitated clients?

Shapiro: I think when we are dealing with those most debilitated, it is most important for us to incorporate the wisdom of other fields. The goal would be to try to systematize and utilize what is known in child development about the stage-by-stage development of a healthy youngster who grows into a healthy, resilient adult able to bond, connect, feel empathy, has a sense of a desire to serve, a greater sense than simply selfinterest, all of those things that we would be looking at along with Maslow. What are the types of experiences that a child has moment by moment that allows that healthy development of that infrastructure?

AIP offers a different way to view the therapeutic relationship, and utilize EMDR as part of the interactive process. In AIP terms, this interdisciplinary investigation would allow a more systematic encoding of new memories through therapeutic interactions and focused processing that would best lay the foundation for healthy future relationships. For instance, once we are able to more clearly understand what types of experiences those are, then a clinician would be able to incorporate them within the therapeutic session. In AIP terms, it is important remember that each of the interactions that the therapist has with the client is encoding new memories in the brain. These memories can then be accessed and further enhanced with EMDR to serve as the building blocks for a healthy internal structure and future relationships.

For example, the initial stages with dissociative disordered clients involves systematic work and myriad procedures to stabilize and then eliminate the overt symptoms such as switching and derealization and depersonalization. However, as we all know, health is more than the lack of overt symptoms. What I am suggesting is evolving a better grasp on what it is that needs to be incorporated, what experiences the clinician needs to engender over the time of the therapy that can encode the sense of the healthy interaction, and develop the capacity for healthy relationships. Therapeutic experiences where they can feel all that was denied to them in childhood such as positive attachment and connection and unconditional love. These therapeutic experiences can then be firmly encoded and enhanced in their memory networks through focused EMDR processing.

The more we learn from other disciplines, the more efficient and effective we can become. With this knowledge, and with the awareness of an attuned and present therapist, the more prepared we are to recognize both the needs, and those moments of internal connection in the client, and to expand the positive networks through focused processing. It also enables us to more fully utilize the future templates, which is an important third step of every EMDR protocol. It is important that clinicians not look simply at the symptoms that define the pathology, but look at the overall personal development of the individual.

Luber: What can we do to support our clients' personal development and successful resolution of the issues often that are underneath the symptoms with which they present?

Shapiro: It is important for clients that clinicians not be seduced by simple decreases in overt symptoms. I have heard too many instances of clients saying, "Well, I never got down to a zero but I felt much better at a two." In other words, they are no longer being hammered over the head but they do not have any realistic expectations of being able to move into a greater sense of awareness or empowerment or of acceptance of what occurred being primarily a learning experience and not something that is going to make them uncomfortable for the rest of their lives. Clinicians can often get seduced into the fact that the client is feeling much better. They need to remember that clients do not have a good basis of comparison in terms of where they might go. We see so often that if the clinician is willing to encourage the client to continue moving and continuing the processing, there is much more that can be gleaned from it. Just as it is important to finish all three prongs of the standard protocol and address past, present, and future-not just the memory processing.

We need to make sure that we are following up with clients in the long term. A strength of research is doing a 6-month follow-up or a year follow-up and is something that clinicians also need to learn from. It is important to check in with their clients on a long-term basis and to see whether there are new perspectives that would need to be addressed or if there are any issues that still need to be resolved, if this is possible within the framework of the program or contracted agreement. It is also essential to keep in mind, if the client has not gotten down to a full adaptive resolution that would be ecological and appropriate for them, there is going to be the potential for a relapse. What we are looking for is a full level of resiliency, not putting the client back to a level of vulnerability. So, for instance, simply getting rid of the PTSD symptoms for an individual client should not be sufficient. Clearly, while we cannot insist that clients do more work, the clinician needs to be able to explain to them clearly that, overall, a minority of individuals is going to develop full-blown PTSD after a trauma, often because of earlier vulnerability. If we simply take care of the PTSD symptoms without attending to the earlier memories that set the foundation for the pathology, then we leave the client vulnerable. I do not believe that that is a sufficient service to the client. We have to make sure that the

client is educated in the different options. I think that that is something that we need more awareness of throughout the field and on an ongoing basis.

Luber: Is there anything else that you would like to add?

Shapiro: I am very gratified at the numbers of people that I have met over the years who have put service to others first and are looking to use EMDR for the benefit of humanity.

I can remember during the early days of EMDR, there were those who said after taking the training, "I can see the potential of this. I really want other clinicians in my community to be able to learn this and to offer it to clients." They are the ones who are responsible for the grassroots efforts that spread EMDR throughout the United States, and then throughout the world. It is continually heartwarming to see all those who have taken the time to share their experiences at conferences and in journal articles, and those who are dedicated to alleviating suffering worldwide through the professional and humanitarian organizations.

I just feel very grateful to have been part of this entire process.

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Dr. Francine Shapiro is the originator and developer of EMDR. She is a senior research fellow at the Mental Research Institute (MRI) in Palo Alto, California, executive director of the EMDR Institute in Watsonville, California, and the founder and president emeritus of the EMDR Humanitarian Assistance Program, a nonprofit organization that coordinates disaster response and supports low fee training worldwide. She has written the primary text on EMDR: Eye Movement Desensitization and Reprocessing: Basic Principles and Procedures (Guilford Press) and co-authored or edited four others: EMDR: The Breakthrough Therapy for Overcoming Anxiety, Stress and Trauma (Basic Books), EMDR as an Integrative Psychotherapy Approach: Experts of Diverse Orientations Explore the Paradigm Prism (American Psychological Association Books), Handbook of EMDR and Family Therapy Processes (Wiley), and Short-Term Therapy for Long-Term Change. She has written and co-authored more than 60 articles and chapters and is an invited speaker at psychology conferences all over the world. Dr. Shapiro is a recipient of the American Psychological Association Division 56 Award for Outstanding Contributions to Practice in Trauma Psychology, the Distinguished Scientific Achievement in Psychology Award presented by the California Psychological Association and the International Sigmund Freud Award for Psychotherapy presented by the City of Vienna in conjunction with the World Council of Psychotherapy. She was appointed one of the "Cadre of Experts" by the American Psychological Association and Canadian Psychological Association Joint Initiative on Ethno-political Warfare. She has served as an advisor to many trauma treatment and outreach organizations and journals. She has three awards bestowed in her honor. Those given by the EMDR International Association and the EMDR-Ibero-American Association celebrate members of the EMDR community who follow in her footsteps of creative thinking, service, and dedication to the standard of EMDR. The EMDR Europe Association presents the Francine Shapiro EMDR-Europe Research Award in order to encourage research in the field. In 2008, a comprehensive electronic resource for scholarly articles and other important references related to EMDR and adaptive information processing was introduced and was named The Francine Shapiro Library in honor of Dr. Shapiro (http://library.nku.edu/emdr/emdr_data.php).

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References

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