Basic Training Curriculum Requirements

OBJECTIVE: The purpose of the EMDRIA Basic Training Curriculum is to assist providers in meeting the minimum standards for EMDRIA Approved Basic Training in EMDR therapy. The goal is to create a complete integrated training program that provides the clinician with the knowledge and skills to utilize EMDR therapy, a comprehensive understanding of case conceptualization and treatment planning, and the ability to integrate EMDR therapy into their clinical practice. At a minimum, the Basic Training Curriculum requires instruction in the current explanatory model, methodology, and underlying mechanisms of EMDR therapy through lecture, practice, and integrated consultation. It is recommended that the syllabus present the strengths and limitations of Shapiro's EMDR therapy model including up to date research.

While the EMDRIA Approved Basic Training Curriculum outlines the minimum requirements which need to be met, the developer of a specific curriculum can enhance or expand any portion as they see fit.

REQUIREMENTS:

- **I.** Three sections with a minimum time and content requirement
  - **A.** Instructional (20 hours)
  - **B.** Supervised Practicum (20 hours)
  - **C.** Consultation (10 hours)
- **II. Faculty:** EMDRIA Approved Consultants, as specified. Consultants in Training can also be used under consultation of an EMDRIA Approved Consultant.
- **III. Required Text:** Shapiro, F. (2001). *Eye Movement Desensitization and Reprocessing, Basic Principles, Protocols and Procedures.* (2nd ed.). New York: The Guilford Press.
- **IV.** Syllabus must be consistent with the above listed text and EMDRIA's definition of EMDR therapy.
- **V. Supplemental material:**
  - **A.** Access to the EMDRIA definition of EMDR therapy can be found online at www.emdria.org/resource/resmgr/Definition/EMDRIADefinitionofEMDR.pdf
  - **B.** Access to a current list of EMDR related research citations can be found online at http://www.emdria.org/?page=EMDRResearch
  - **C.** Contact information for EMDRIA Approved Consultants can be found online at http://www.emdria.org/search/custom.asp?id=2337
- **VI.** Trainees are required to complete the entire basic training program to receive a certificate of completion.

SECTION ONE: INSTRUCTIONAL

The goal of the Instructional Section of the training is to provide information and understanding in each of the following areas. Although EMDRIA is not regulating the amount of time spent on any one portion, it is expected that the majority of time will be spent teaching the Method section as well as case conceptualization and treatment planning. The curriculum developer may determine the order in which the material is presented.

Minimum Required Time: 20 hours

- **I. History and Overview**

The goal of this section is to review the historical evolution of EMDR therapy from its inception through validation by randomized controlled studies. This includes, but is not limited to:

A. Origin:

1. Shapiro's chance observations which led to empirical observations and the development of EMDR therapy methodology.

2. The publication of Shapiro (1989) pilot study through the validation of EMDR therapy's effectiveness through controlled studies.

3. Current inclusion in Treatment Guidelines

B. Switch from EMD to EMDR therapy: Understanding the significance of the shift in name and model from EMD to EMDR therapy, both in terms of revised theoretical model and procedure.

1. Switch from Desensitization model to Adaptive Information Processing (AIP) model

2. The effect of EMDR therapy is not desensitization in and of itself, but includes the multifaceted impact of reprocessing all aspects of negative, maladaptive information to adaptive, healthy, useful resolution (e.g., change of belief, elicitation of insight, increase in positive affects, change in physical sensation, and behavior).

C. Current EMDR therapy-related Research: The Provider must include information about the representative studies to give the trainees a general grasp of the EMDR therapy literature.

1. A current annotated bibliography of EMDR therapy-related theory and research supporting your program's content that you deem foundational to your students' understanding of EMDR therapy's efficacy, model, mechanism, and method should be included in the handouts. This list need not be exhaustive. It should be reviewed no less than yearly, and updated when needed.

2. Resource sites where this material can be located and updated on the internet should be provided – with website addresses verified and updated no less than yearly.

II. Distinguish Model, Methodology, and Mechanism

This section of the curriculum explains these three aspects of EMDR therapy and distinguishes among them. The Adaptive Information Processing model (AIP) is the underlying explanatory **model** of EMDR therapy. It is important that trainers have a full understanding of this model as outlined in Shapiro (2001). The AIP model provides the theoretical foundation of EMDR therapy. The **methodology** section includes the eight-phase treatment procedures of the basic EMDR therapy protocol, plus safeguards, ethics, and validated modifications for specific clinical situations. The **mechanism** section includes current hypotheses regarding how or why EMDR therapy works on the neurobiological level, plus current research exploring mechanisms of action. Although hypotheses regarding the mechanism of action are speculative at present, an introduction of these hypotheses is important. With a clear understanding of the AIP model, the specific aspects of the method, and current thinking regarding mechanism, the participants should be well informed regarding the study and practice of EMDR therapy.

A. Model – Adaptive Information Processing (AIP):

Shapiro adapted and applied the Adaptive Information Processing (AIP) model as the underlying explanatory model of EMDR therapy. EMDR therapy is based, therefore, on a distinct information processing model which incorporates specific principles and treatment procedures. The AIP model guides history taking, case conceptualization, treatment planning, intervention, and predicts treatment outcome. (See Appendix A for information about antecedent information processing models.)

1. Basic hypotheses concepts of AIP:

- **a.** The neurobiological information processing system is intrinsic, physical, and adaptive
- **b.** This system is geared to integrate internal and external experiences
- **c.** Memories are stored in associative memory networks and are the basis of perception, attitude and behavior.
- **d.** Experiences are translated into physically stored memories
- **e.** Stored memory experiences are contributors to pathology and to health
- **f.** Trauma causes a disruption of normal adaptive information processing which results in unprocessed information being dysfunctionally held in memory networks.
- **g.** Trauma can include DSM 5 Criterion A events and/or the experience of neglect or abuse that undermines an individual's sense of self worth, safety, ability to assume appropriate responsibility for self or other, or limits one's sense of control or choices
- **h.** New experiences link into previously stored memories which are the basis of interpretations, feelings, and behaviors
- **i.** If experiences are accompanied by high levels of disturbance, they may be stored in the implicit/nondeclarative memory system. These memory networks contain the perspectives, affects, and sensations of the disturbing event and are stored in a way that does not allow them to connect with adaptive information networks
- **j.** When similar experiences occur (internally or externally), they link into the unprocessed memory networks and the negative perspective, affect, and/or sensations arise
- **k.** This expanding network reinforces the previous experiences
- **l.** Adaptive (positive) information, resources, and memories are also stored in memory networks
- **m.** Direct processing of the unprocessed information facilitates linkage to the adaptive memory networks and a transformation of all aspects of the memory.
- **n.** Nonadaptive perceptions, affects, and sensations are discarded
- **o.** As processing occurs, there is a posited shift from implicit/nondeclarative memory to explicit/declarative memory and from episodic to semantic memory systems (Stickgold, 2002)
- **p.** Processing of the memory causes an adaptive shift in all components of the memory, including sense of time and age, symptoms, reactive behaviors, and sense of self

2. **Clinical Implications: The AIP guides case conceptualization, treatment planning, intervention, and predicts treatment outcome**
   - **a.** Clinical complaints that are not organically based or are caused by insufficient information are viewed as stemming from maladaptively stored and unprocessed information which has been unable to link with more adaptive information.
   - **b.** Earlier memories which are maladaptively stored increase vulnerability to pathology including anxiety, depression, PTSD, and physical symptoms of stress and may interfere with healthy development of an individual's sense of self worth, safety, ability to assume appropriate responsibility for self or other, or limits one's sense of control or choices
   - **c.** The information processing system and stored associative memories are a primary focus of treatment
   - **d.** Procedures are geared to access and process dysfunctional memories and incorporate adaptive information
   - **e.** The intrinsic information processing system and the client's own associative memory networks are the most effective and efficient means to achieve optimal clinical effects
   - **f.** Targeted memories must be accessed as currently stored so the appropriate associative connections are made throughout the relevant networks
   - **g.** Unimpeded processing allows the full range of associations to be made throughout the targeted memory and the larger integrated networks
     - **i.** Interventions to assist blocked processing should mimic spontaneous processing
     - **ii.** All interventions change the natural course of processing and potentially close some associated pathways
     - **iii.** Following any intervention, the target needs to be reaccessed and fully processed in the original form
   - **h.** Processing shifts all elements of a memory to shift to adaptive resolution

3. **Differentiate from other models:** Highlight how pathology and treatment are viewed differently from other orientations (see Appendix B).

4. **Applications:** It is well documented that trauma can contribute to a wide range of presenting problems, not just PTSD. The curriculum provides an understanding of the wide range of applications for EMDR therapy, when the overall clinical picture (i.e., presenting problems, symptoms, and character structure and life stressors) is framed within the AIP model. This section also provides another opportunity for teaching how the AIP model guides case conceptualization, treatment planning and overall clinical practice.
   - **a.** Scientifically-validated applications
   - **b.** Non-validated applications still needing research

B. Methodology – The curriculum explains and teaches the method of EMDR therapy. Although the Basic EMDR therapy protocol is taught, other such issues surrounding the practice and professionalism of EMDR therapy are to be included in the curriculum.

1. **8-Phases:** EMDRIA requires that the latest edition of the Shapiro text and the EMDRIA Definition of EMDR therapy guide the teaching for all 8 Phases of EMDR therapy. EMDRIA also requires that participants must have exposure to all 8 phases through lecture, demonstration, and practice. It is imperative that trainees understand how case formulation and treatment planning are incorporated into each of the 8 phases.

   a. **History Taking, Case Conceptualization & Treatment Planning (Phase 1):** The curriculum provides instruction on what information is gathered from the client and how this information is used. That information with the evaluation of current level of functioning, character structure, and treatment goals are used to assess appropriate client selection, client readiness, target selection based on the three-pronged protocol and treatment planning.
      - **i.** Focus on areas of history taking unique to EMDR therapy practice/processing
      - **ii.** Offer variety of ways to take a history of traumatic events, abuse, neglect, or thematic negative cognitions
      - **iii.** Offer an understanding of the impact of trauma and neglect on healthy development and assessment of potential developmental holes or maladaptively stored information that underlies current problems or symptoms
      - **iv.** Introduce three-pronged approach and methods to identify appropriate targets as treatment planning methodology
      - **v.** Explain the treatment planning aspect of the selection and ordering of memories to be processed
      - **vi.** Introduce appropriate techniques used to identify earliest associated memories
      - **vii.** Introduce case conceptualization issues, such as degree of stabilization, affect intolerance, assessment of adequacy of skills and resources, duration of issues/dysfunction
      - **viii.** Client selection criteria and indications of client readiness.
      - **ix.** Client's ability to sustain Dual Attention
      - **x.** Explore issues that might impede or interfere with processing and readiness, such as:
        a) Secondary gain issues
        b) Present-day stressors (personal, work-related, medical)
        c) Timing issues (e.g.,. unavailability of clinician)
        d) Medical concerns
        e) Legal issues, (e.g. impending testimony)

   b. **Client Preparation (Phase 2):** The goal of this section of the curriculum is to assure that the client is informed about EMDR therapy, prepared for EMDR therapy, and to help the client establish the necessary ability to maintain a Dual Awareness during processing and the ability to manage affective reactions between sessions. These activities include but are not limited to:
      - **i.** Education about EMDR and its effects

ii. Assess/develop therapeutic rapport
iii. Address client's concerns
iv. Explain the details of the EMDR therapy procedure
a) Seating arrangement
b) Dual Attention Stimulus in the form of bilateral eye movements, taps, or tones (e.g., different types, testing speed & distance)
c) Accurate observation and reporting
d) Setting expectations and utilization of the "Stop" signal
v. Client Safety and Stability:
a) Assess/develop client's stabilization skills
b) Knowledge of commonly used procedures to enhance safety and self-control for issues related to safety and stability.
c) Appropriate use of Safe Place, containment skills and Resource Development
vi. Review client selection criteria and precautions

c. Assessment (Phase 3): All aspects of the assessment of targets are taught. The curriculum explains and teaches the function and importance of each component of the assessment, and how to obtain them, (e.g., distinguish between appropriate and inappropriate cognitions), and the rationale for the order of the assessment.
i. Image
ii. Negative Cognition (NC)
iii. Positive Cognition (PC)
iv. Validity of Cognition (VOC)
v. Emotions
vi. Subjective Units of Disturbance Scale (SUDS)
vii. Sensations

d. Desensitization (Phase 4): In this section, the curriculum provides instruction on all aspects and expectations of what and how the processing occurs and evolves.
i. Explain channels of processing
ii. Explain the application of all forms of Dual Attention Stimulus (DAS), provided in the form of bilateral eye movements, taps, or tones (offered) in discrete intervals, and circumstances when alternatives to eye movement may be necessary
iii. Note types of processing to expect (e.g., visual, emotional, sensations)
iv. Emphasize the importance of therapist maintaining empathic connectedness while allowing the client to process without unnecessary therapist intrusion
v. Emphasize the importance of following the client's processing in determining the length of DAS sets.
vi. Reinforce the three-pronged approach
vii. Note themes and plateaus or difficulties in processing such as self worth, appropriate responsibility for self and other, safety, and choices

viii. Explain working with abreactions

ix. Note how to work with the emergence of new memories that spontaneously occur during processing which may need additional targeting

x. Identify the selection of appropriate clinical interventions for ineffective or blocked processing which include but are not limited to: change of DAS, return to target, maximize or minimize assessment components

xi. Explain Cognitive Interweave

xii. Identify methods to link to early events that are blocked or not conscious, such as the use of the Affect Bridge, Float Back or Touchstone events

xiii. Explain timing of re-accessing and reassessing the target

xiv. Explain therapist characteristics or responses that may interfere with adequate processing

xv. Explain client perceptions of therapist characteristics or responses that may interfere with adequate processing

e. Installation (Phase 5): The curriculum instructs when, how and why the Installation phase is completed.

f. Body Scan (Phase 6): The curriculum instructs when and how to conduct the Body Scan, as well as the importance of the information gained during the Body Scan.

g. Closure (Phase 7): The curriculum instructs the purpose of closure for both a single therapy session as well as closure to the processing of a given EMDR therapy target. Rationale and methods to ensure client stability in the event of incomplete processing of a specific target must be emphasized.

h. Reevaluation (Phase 8): The curriculum instructs on the rationale of "checking your work" of the previous session. It provides information on the status of a fully processed memory. A fully processed memory needs to have processed the past memory, present triggers, and future template. If the memory is not fully processed phase 8 instructs on how to reengage the target for continuing processing. A re-evaluation of all targets occurs at the conclusion of therapy.

2. Three Pronged Model – Future Template

The curriculum includes instruction on the Three Pronged Model. To achieve comprehensive treatment effects a three-pronged basic treatment protocol is generally used so that past events are reprocessed, present triggers desensitized, and future adaptive outcomes explored for related challenges. The timing of addressing all three prongs is determined by client stability, readiness and situation. There may be situations where the order may be altered or prongs may be omitted, based on the clinical picture and the clinician's judgment.

3. Advanced Methodology: Procedural modifications are shown to produce better outcomes in specific situations. The curriculum must include the rationale for any

modifications of the EMDR therapy basic protocol. This also provides another opportunity to discuss case conceptualization and treatment planning from the framework of the AIP. (**Please Note:** Details on procedural modifications which are adequately researched and substantiated by EMDRIA will be incorporated into the curriculum as they are made available. Upon approval, updated information will be forwarded to providers.)

a. Protocols and Procedures for Special Situations
- **i.** Recent events
- **ii.** Anxiety and Phobia
- **iii.** Illness and somatic disorders
- **iv.** Grief
- **v.** Self-use

b. The curriculum introduces working with specific populations and encourages additional training for those who work in these areas
- **i.** Children
- **ii.** Couples
- **iii.** Addictions
- **iv.** Sexual Abuse Victims
- **v.** Complex PTSD or DESNOS
- **vi.** Dissociative clients
- **vii.** Military

4. Professional, legal, ethical issues: This curriculum provides an opportunity to remind trainees of the general principles and issues necessary for excellence in practice. It can also provide information about EMDRIA, the need for ongoing continuing education and other professional or practical issues (e.g., insurance reimbursement).
- **a.** Scope of practice: Within their competency level (i.e., education, training, and professional experience) and licensure status.
- **b.** Standards of practice of your professional discipline.
- **c.** Issues of informed consent.

C. Hypothesized Mechanisms of Action and Neurobiological aspects of EMDR therapy (see Appendix C).

1. The curriculum must provide the most current information in these or any emerging explanatory models.

SECTION TWO: SUPERVISED PRACTICUM

The goal of Supervised Practicum is to facilitate the demonstration and practice of the EMDR therapy methodology as outlined above in the Shapiro text, and the EMDRIA Definition of EMDR therapy.

Time Requirement: 20 Hours

The supervised practicum should be appropriately scheduled to allow adequate teaching time for

the full explanation of the component to be demonstrated and practiced.

Faculty Requirement: EMDRIA Approved Consultant or Consultant in Training under the consultation of an Approved Consultant. The ratio of practicum supervisor to trainees should not exceed 1:10 to allow for direct behavioral observation of each trainee.

I. Practice Exercises

A. To achieve the goals of the Supervised Practicum, practice may be done in dyads or triads.

1. The role of the clinician is required.

2. The role of clinical recipient is required.

3. The role of "observer" is preferred but not mandatory. EMDRIA recognizes that it is not always possible to fill the role of Observer during the supervised practicum.

B. It is imperative that trainees receive direct behavioral observation and feedback.

C. Whenever appropriate, trainees practice with real life experiences.

D. Ample practice is recommended before introducing/teaching the Cognitive Interweave.

E. Practice should be included for each phase of the procedure as outlined in the Instructional Section. Special attention should be given to the following:

1. Phase One: History taking

a. Case conceptualization

i. Appropriate techniques are used to identify the earlier associated targets

ii. Target identification is associated with primary presenting complaints

b. Treatment planning

i. Selection and ordering of targets to be processed

ii. Three pronged approach

4. Phase Four: Desensitization

a. Application of all forms of DAS, provided in the form of bilateral eye movements, taps, or tones (offered) in discrete intervals, and circumstances when alternatives to eye movements may be necessary.

b. Types of processing to expect (e.g., visual, emotional, sensations)

c. Importance of allowing the client to process without unnecessary therapist intrusion.

d. Note the emergence of new memories that spontaneously occur during processing that may need additional targeting

e. Timing of re-accessing and re-assessing the target

f. Working with abreactions

g. Selection of appropriate clinical interventions for ineffective or blocked processing which include, but are not limited to:

i. Change of DAS, return to target, maximize or minimize assessment components

ii. Cognitive Interweave

iii. Affect Bridge or Float Back technique to identify earlier disturbing memories that need to become the focus of processing

iv. Re-accessing the target and processing in undistorted form.

h. Each trainee practices the basic elements of EMDR therapy (Target

Assessment, Desensitization, Installation, Body Scan and Closure) – including closing off incomplete sessions – during the practicum sessions. It is understood that trainers will have different ways of implementing this practice, but it is recommended that every effort be made to include each aspect of the three pronged protocol – Past, Present and Future. In addition, it is recommended that trainees work on their own issues to the extent consistent with participant safety.

k. Additional areas that may be explored when they arise:
  i. Therapist characteristics or responses that may interfere with adequate processing
  ii. Client perceptions of therapist characteristics or responses that may interfere with adequate processing

SECTION THREE: CONSULTATION

Consultation is a required content area which has to be added into the Basic Training curriculum. By having consultation, trainees will be able to safely and effectively integrate the use of EMDR therapy into their clinical setting. Consultation provides an opportunity for the integration of the theory of EMDR therapy along with the development of EMDR therapy skills. During consultation trainees receive individualized feedback and instruction in the areas of case conceptualization, client readiness, target selection, treatment planning, specific application of skills, and the integration of EMDR therapy into clinical practice. Ethical and professional guidelines already call for clinicians to obtain consultation when incorporating new methods into their clinical practice. Requiring Providers to include consultation as a component of Basic Training will raise the professional stature of EMDR therapy training and assure consistent adherence to this guideline. A variety of mechanisms can be employed by different Providers to include consultation. Consultation increases the use of EMDR therapy by those who have received training, reduces the formation of bad habits and the risks of problematic use of EMDR therapy. It also allows the clinician to develop and integrate EMDR therapy skills creatively into their other skills in a way that enhances clinical efficiency and effectiveness in helping a wider range of clients meet their goals for change. If a behavioral sample of a trainee's work with actual clients is required by the Provider, consultation provides an excellent forum in which that activity can take place.

Time Requirement: 10 hours of consultation are required and are provided in developmental increments to extend over the course of the training.

Faculty Requirement: EMDRIA Approved Consultant or Consultant in Training under the consultation of an Approved Consultant. The ratio of consultant to trainees should not exceed 1:10 (smaller consultant to trainee ratios are encouraged).

I. Consultation addresses, but is not limited to, the following content:
  A. Use of EMDR therapy within a structured treatment plan
  B. Application of the standard EMDR therapy procedural steps
  C. Case conceptualization and target selection
  D. Client readiness including inclusion, exclusion and cautionary criteria for EMDR therapy
  E. Client safety and effective outcomes using the standard EMDR therapy procedural

steps

F. Integration of EMDR therapy into their existing clinical setting or in an alternate clinical setting

G. Specific application of skills

H. Consultation is about real cases and not experiences that occur in practicum

II. Consultation provides opportunity for the faculty to assess the strengths and weaknesses of each trainee's overall understanding and knowledge of EMDR therapy and the practice of EMDR therapy skills and the opportunity to tailor further learning experiences to address deficits.

III. Consultations sessions are appropriately scheduled to allow adequate time for teaching, practicum and clinical use of EMDR therapy, to maximize the discussion of case conceptualization, client readiness, target selection, treatment planning, specific application of skills, and the integration of EMDR therapy into clinical practice.

IV. Consultation may be integrated into an extended training format or consultation may be provided by local Approved Consultants and reports of completion sent to the Provider. In the latter case, the Approved Consultant must furnish the Provider with written documentation that the Consultation requirement has been met (i.e., feedback may be in the form of a simple feedback form which is completed and submitted to Provider).

V. Acceptable Consultation Formats

A. Individual: One-on-one time between participant and consultant.

B. Group: Group consultation could involve discussions of issues that have a generic interest, but should not replace the intimate formats that allow for individualized feedback. As a general guideline, groups should allow a ratio of 15 minutes per individual participant. A group of four would meet with at least one consultant for no less than one hour; a group of eight would meet with at least one consultant for no less than two hours. Participants would receive credit for the total time spent in the group.

C. Combinations of Individual and Group: Any combination of Individual Consultation and Group Consultation that meets the time guideline suggested above and provides a total of ten hours of consultation time.

Appendix A

I. Antecedent, historical models of emotional information processing:

A. Peter J. Lang (1977, 1979, 2000)

B. Stanley Rachman (1980)

C. Gordon Bower (1981)

D. Edna Foa and Michael J. Kozak (1986)

Appendix B

I. Differentiate from other models: Highlight how pathology and treatment are viewed differently from other orientations. The trainer should be prepared to highlight and/or to answer questions regarding how EMDR therapy and the Adaptive Information Processing Model contrast and compare with other psychotherapeutic approaches. This might include the view of pathology and health, case conceptualization, and how change occurs. Examples would include:

A. Cognitive—

1. Irrational thoughts are the basis of pathology
2. Cognitions are changed through reframing, self-monitoring, and homework exercises

B. Behavioral—
1. Cannot see within the "black box" (the brain)
2. Learned behavior is changed through conditioning, exposure, modeling, etc. (learning processes)

C. "Third wave" of CBT—
1. Suffering is inevitable
2. Change is through acceptance, commitment, and Mindfulness exercises

D. Psychodynamic—
1. Explores the impact of Family of Origin, Object relations
2. Change is created by insight or "working through"
3. Goal is to make the subconscious conscious

E. Family Therapy—
1. Problems and solutions are interactional
2. Exploration and evaluation of family dynamics
3. Change through education and role realignment

F. Experiential –
1. Facilitates client self-healing
2. Affect and body are central
3. Uses relationship, "two-chair," "meaning bridge"

Appendix C

Hypothesized Mechanisms of Action: Access to the Hypothesized Mechanisms of Action can be found online at http://www.emdria.org/?page=Mechanism

Neurobiological aspects of EMDR therapy: Access to the Neurobiological aspects of EMDR therapy can be found online at http://www.emdria.org/?page=Neurobiological

References

Bower, G. (1981). Mood and Memory. *American Psychologist, 36*(2), 129-148.

Foa, E. B., & Kozak, M. J. (1986). Emotional Processing of Fear: Exposure to Corrective Information. *Psychological Bulletin, 99(1),* 20-35.

Lang, P. J. (1977). Imagery in therapy: An information processing analysis of fear. *Behavior Therapy, 8,* 862-886.

Lang, P. J. (1979). A bioinformational theory of emotional imagery. *Psychophysiology, 16,* 495-512.

Lang, P. J., Davis, M., & Ohman, A. (2000). Fear and anxiety: animal models and human cognitive psychophysiology. *Journal of Affective Disorders, 61(3),* 137-159.

Rachman, S. (1980). Emotional processing. *Behaviour Research and Therapy, 14,* 125-132.

Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress, 2,* 199-223.

Shapiro, F., (2001). Eye movement desensitization and reprocessing: Basic Principles, Protocols and Procedures. (2nd Edition) New York: The Guilford Press.

Stickgold, R. (2002). EMDR: A putative neurobiological mechanism of action. *Journal of Clinical Psychology, 58,* 61-75.