# Applying the Radical Exposure Tapping protocol in the treatment of trauma-related emotional reactivity: A phenomenological case study

**√** pacja.org.au/2019/07/applying-the-radical-exposure-tapping-protocol-in-the-treatment-of-trauma-related-emotional-reactivity-aphenomenological-case-study-2

### Return to Journal Articles

Emil Barna, Master of Counselling and Psychotherapy, counsellor and psychotherapist, Australian College of Applied Psychology, and Denis O'Hara, PhD, Professor of Counselling and Psychotherapy, Australian College of Applied Psychology.

### Introduction

Trauma has been described as an experience that can negatively impact an individual's ability to cope, sometimes leading to a diagnosis of posttraumatic stress disorder (PTSD; American Psychiatric Association [APA], 2013) if left untreated (Siegel, 2012). The experience of trauma is widespread within the general population, with 50–75 percent of individuals reporting at least one potentially traumatic event at some point in their lives (Phoenix Australia, 2013). The APA describes trauma- and stressor-related disorders as those encompassing "exposure to a traumatic or stressful event... listed explicitly [in the] diagnostic criterion" (para. 1) of PTSD within the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*). Criterion A potentially traumatic events are then listed as: "exposure to war... threatened or actual physical assault... sexual violence... kidnap[ping], being taken hostage, terrorist attack, torture, incarceration as a prisoner of war, natural or human-made disasters, and severe motor vehicle accidents" (para. 26).

However, the APA's description of trauma is overly limiting. In providing a definition of potentially traumatic events, Briere and Scott (2015) stated that they are "extremely upsetting" events that overwhelm an "individual's internal resources" producing "lasting psychological symptoms" (p. 10). For Briere and Scott, potentially traumatic events are not confined only to those that appear in the DSM-5, but to any event that is severely emotionally impacting and that results in negative reexperiencing. This notion is corroborated by other researchers who emphasise that traumas are subjective in nature, involving an individual's conscious or unconscious perception that relevant events are life-threatening (Boals, 2016; Levine, 1997, 2008; May & Wisco, 2016). Potentially traumatic events can often lead an individual to perceive ambiguous stimuli as threatening (van der Kolk, 2014), increasing emotional reactivity (Altena et al., 2016; Becerra & Campitelli, 2013; Infurna, Rivers, Reich, & Zautra, 2015). For instance, within the diagnostic criterion for PTSD, a person may experience the exact symptoms listed under Criterion B through E in the DSM-5 (e.g., intrusive and distressing memories, dreams, or flashbacks of the event; avoidance of reminders of the event; negative cognitions relating to the event; and, distressing physiological arousal such as hypervigilance or sense of impending doom), yet rather than these symptoms being resultants of war, assault, or sexual violence, they may have been acquired through "stressful life events such as losses, rejections, humiliations, [and] bullying" (MacKinnon, 2014, p. 246).

In treating trauma, the options are many and varied. However, it has been found that effective treatment approaches share the following principles: 1) treatment is administered in a safe and supportive environment; 2) graded exposure to the traumatic memory is used; 3) trauma-related

somatic sensations are addressed; and 4) cognitive restructuring and reprocessing techniques are used (Gabbard, 2014; Gentry, Baranowsky, & Rhoton, 2017). Successful treatment often allows an individual to come to terms with what happened and proceed to alter negative cognitions, associated schemas (i.e., core beliefs about oneself, others, and the world at large, which are often implicit), and physiological arousal (Foa, Hembree, & Rothbaum, 2007; Siegel, 2010).

One of the most widely researched psychological treatments for PTSD is eye movement desensitisation and reprocessing (EMDR). EMDR was developed by the psychologist Francine Shapiro (1989) and is an eight-phase trauma memory reprocessing treatment that includes affect regulation components and desensitisation of a target memory via bilateral stimulation once somatic, visual, and cognitive cues are ascertained (Bisson, Roberts, Andrew, & Lewis, 2013; Foa, 2009; Monson, Resick, & Rizvi, 2014; Phoenix Australia, 2013; The Australian Psychological Society, 2010; Rimini, et al., 2016).

Since its inception, EMDR has become a frontline treatment for PTSD around the globe, appearing in multiple international treatment guidelines (Foa, Keane, Friedman, & Cohen, 2009; World Health Organization, 2013), and supported by a multitude of meta-analyses (e.g., Bisson et al., 2013; Watts et al., 2013). Despite these impressive feats, EMDR is not without its limitations. For example, there has been considerable debate around the instrumentality of bilateral stimulation—one of EMDR's defining features—in the reprocessing of target memories (van den Hout & Engelhard, 2012). EMDR is said to achieve its reprocessing results through the use of bilateral stimulation (Amano & Toichi, 2016; Kavanaugh, Freese, Andrade, & May, 2001; van den Hout, Muris, Salemink, & Kindt, 2001). However, it has been found that other tasks serving to overload working memory (i.e., the cognitive "space" that retains short-term verbal, visual, and attentional information, allowing manipulation between them; VandenBos, 2007) by maintaining a dual awareness between the past memory and present experience can account for the reduction of affect and subsequent reprocessing (Shapiro, 2001, 2002; Siegel, 2002; van Veen, Engelhard, & van den Hout, 2016). Such tasks can include "copying a complex drawing... attentional breathing... playing the computer game Tetris... and attending to film clips" (van Veen, et al., 2016, p. 2). Therefore, it could be argued that the primary mechanism of change within EMDR therapy is *not* bilateral stimulation in particular (Amano & Toichi, 2016), but another factor: the overloading of working memory through dual-attention stimuli (Gunter & Bodner, 2008; van den Hout & Engelhard, 2012; van Veen, et al., 2016).

Furthermore, as an eight-phase treatment, EMDR is relatively time intensive. For individuals seeking a time-limited therapy, EMDR may not be the treatment of choice, as, according to EMDR protocol, clinicians must engage in all eight phases of treatment (i.e., history taking, client preparation, assessment, desensitisation, installation, body scan, closure and re-evaluation of treatment effect; Menon & Jayan, 2010), or be at risk of breaching protocol (EMDR Institute, 2014). In contrast, other relatively nascent psychological therapies such as the emotional freedom technique (EFT)—a therapy that also incorporates dual-attention techniques in the treatment of PTSD—do not have this apparent limitation.

EFT was created by Gary Craig in 1995 (Ortner, 2013) and has been nicknamed "emotional acupuncture" (Lynch, 2007) due to its focus on reducing affect via "tapping" on various meridian points purportedly located throughout the human body. In EFT, a target issue is selected and scored using the subjective units of distress scale (SUDs; Wolpe, 1969), and then a self-affirmatory statement is pronounced while tapping various points throughout the body. This process can be completed sufficiently in as little as a single session (Church, Piña, Reategui, & Brooks, 2012).

Although not as empirically supported as EMDR, EFT has also undergone various randomised controlled trials and has been found effective as a treatment for a variety of psychological and physiological conditions, including PTSD (Church, 2013; Feinstein, 2012; McCaslin, 2009). However, "energy psychology" techniques in general, and EFT in particular, have been critiqued due to their speculative claims that psychological and physiological change is achieved through the purposeful tapping of meridian points purportedly located throughout the body's "energy field" (Bakker, 2013). These claims are largely unscientific with little empirical evidence to support them (McCaslin, 2009; cf. Mollon, 2004).

For example, an explanation offered by EFT proponents is that the stimulation of various "acupressure points" reduces the activity of brain regions related to the fear response (Feinstein, 2008, 2012). However, these claims have also been challenged due to the fact that correlation between tapping and affect reduction does not imply causation (McCaslin, 2009; Siegel, 2010). For example, relevant outcomes could have arisen through a variety of means within the EFT process, such as self-affirmatory statements, the dual attention process, therapist-client rapport, and naming rather than avoiding the stressor. It is not unreasonable to assume that the same mechanism in effect within EMDR—the dual-attention process that reduces affect and assists in reprocessing distressing memories—is also in operation within EFT. Considering this, there is evidence to argue that EFT can achieve lasting resolution for a variety of physical and psychological ailments, despite what many claim is lacking in terms of theoretical support as to its mechanism of action (Church & Palmer-Hoffman, 2014).

Interestingly, MacKinnon (2014) stated that there is one advantage EFT has over EMDR in that "there is no protocol prohibiting one from doing it in a single session" (p. 250). The only drawback here is EFT's lack of rigorous protocol that is replicable, identifiable, and reliable (MacKinnon, 2014). Furthermore, one could argue that the working memory hypothesis has a solid theoretical foundation in explaining the relevant outcomes associated with traumatic memory recall for both EMDR and EFT. MacKinnon, observing the limitations in EMDR and EFT addressed above, developed a treatment approach that attempts to overcome these drawbacks: radical exposure tapping (RET).

RET was developed in 2010 as a way of integrating the beneficial aspects of EMDR and EFT, creating a more versatile technique that achieves similar results in a time-limited manner. The purpose of RET is to serve as a "memory processing intervention that works quickly in resolving disturbing affect that goes with distressing or traumatic memories" (MacKinnon, 2014, p. 250). The technique is *radical* because change is often achieved within a single session. And, as with any effective PTSD treatment, *exposure*-based techniques are used in RET. Finally, the *tapping* in RET refers to the utilisation of the EFT tapping procedure.

The full RET therapeutic process involves: 1) completion of a genogram; 2) completion of a chronological trauma memory list and a subsequent chronological positive memory list; 3) engagement in a mindfulness exercise (i.e., a safe place exercise); 4) administration of the 21-item depression, anxiety, and stress scales (DASS-21; Lovibond & Lovibond, 1995) and the 20-item PTSD checklist for the *DSM-5* (PCL-5; Blevins, Weathers, Davis, Witte, & Domino, 2015) to measure PTSD-, anxiety-, stress-, and depression-related symptomatology; and, finally, 5) administration of the RET protocol on each memory the client wishes to address, preferably beginning with the earliest negative event.

The RET protocol—arguably the most important element of the RET therapy— borrows from the EMDR protocol in terms of identifying the sensory, somatic, cognitive, and distress-based elements of a particular memory. Once this information is acquired, the clinician incorporates the EFT tapping

procedure into the protocol as a replacement to bilateral stimulation until subjective units of distress reduce and the memory has been reprocessed.

An effective RET clinician assists the client in tracking the therapeutic process without attempting to manipulate them into a preferential response (MacKinnon, 2014). As a way of reducing demand characteristics, the clinician aims to incorporate into the RET protocol the exact words the client uses to describe their memory. The protocol is effectively delivered in a neutral, but warm manner, with any changes in affect, bodily sensation, or cognition reflected by the client rather than clinician.

RET was found to be useful in the reduction of emotional reactivity associated with a range of presentations including bullying, spousal separation, intrusive traumatic flashbacks, and bereavement (MacKinnon, 2014). In her article, MacKinnon provided two case examples to highlight what RET looked like in practice. The first case, Nicole, could not get past a memory of her baby being removed by child protective services. Prior to administration of the protocol, MacKinnon ascertained the visual, somatic, and cognitive components of the memory. The subjective units of distress were initially recorded as 10/10, and following the 28-minute administration of the RET protocol, subjective units of distress reduced to 0/10. This outcome was maintained upon two-week follow-up—Nicole did not report feeling distress when recalling the memory of her baby being removed.

The second case example was Joe, who recalled a memory of being at a family court fighting allegations made against him. Following a number of rounds of RET within a 33-minute session, Joe revealed that this memory no longer triggered him. Furthermore, Joe made relevant changes within his own family unit which were reflective of his memory reprocessing.

Important to consider is that RET was initially developed in the context of single-session work to address emotional reactivity to distressing events, within *family therapy* (MacKinnon, 2014; McIlwaine & O'Sullivan, 2015). Furthermore, there is *only one article* written about RET, which appears only to focus on integrating the RET protocol within a family therapy framework. These considerations must be taken into account when reflecting upon MacKinnon's work and the application of her technique.

The above case examples (which are different to case *studies* in that they are relatively brief and less rigorous) are merely that: case examples. Statements of efficacy relating to a particular therapeutic approach, especially one that is relatively nascent, cannot be made on the basis of two case examples. In MacKinnon's (2014) case, these examples were extremely brief and therefore not adequate in and of themselves to provide either evidence of efficacy or therapeutic process.

At present there is no in-depth case study research, nor randomised controlled trial, to verify the outcomes of RET in general nor the RET protocol in particular. However, there appear to be relatively good reasons to believe that the RET protocol can serve as an effective memory reprocessing technique based on the literature surveyed above and the relevant arguments that have been proposed as to its methodology and potential mechanism of action, the working memory hypothesis. Furthermore, RET may serve as an economic and efficient alternative to modalities like EMDR and EFT, given the potential to produce significant outcomes in a single session.

In addressing the aforementioned lack of research, it is useful to note that case studies are particularly helpful research designs in the study of emergent and unique phenomena, including unstudied research modalities (McLeod, Thurston, & McLeod, 2015; Noor, 2008; Simons, 2009). Case study research is qualitative in nature (i.e., exploratory, often aiming to investigate an individual's experiences of a particular phenomenon; Finlay, 2015) and can be both deductive and inductive in method (Rule & John, 2015). One strength of case study research relevant to the current

study is the ability to illustrate intricate details about the delivery of a therapeutic modality, demonstrating its process and protocol. Importantly, it has been found that clinicians are more likely to alter their clinical practice on the basis of particularly rigorous case studies and examples rather than large-scale randomised controlled trials and meta-analytical studies, which are often devoid of detail on the clinical process (Stewart & Chambless, 2010).

Therefore, due to the gap in literature regarding the nascence of RET in general and the RET protocol in particular, and the interesting theoretical and practical utility of the RET protocol for the treatment of traumatic symptomatology, it was determined that more needs to be known about this approach. As single case study designs provide rich qualitative information about relevant phenomenological processes (McLeod, 2012), this methodology was selected with an explicit aim to investigate the participant's experience relating to the subjective process and related outcomes of the RET protocol in addressing trauma-related emotional reactivity. The RET protocol in particular was selected as the most salient part of RET therapy to be studied in the current phenomenological case study as the participant's response to the protocol was of primary interest.

### Method

# **Participant and Traumatic Memory**

The research participant, Alan (not his actual name), was born in England, spending the first three months of his life being taken care of by others in the family due to his mother's drug addiction and numerous mental health issues, which led her to attempt suicide multiple times. Alan's father was married to Alan's mother and was a significant support in his early life. The family immigrated to Australia when Alan was two years old. When in Australia, Alan recalled his uncle from his father's side moving in with them until Alan turned four years old. His relationships with his uncle and "unloving mother" were turbulent, often including verbal and emotional abuse. Alan's parents separated when he was fourteen years old and his relationship with his mother remained distant and aloof whereas his relationship with his father was "brilliant". Alan was forty years old when his mother died, and he could not recall any form of reconciliation.

Alan was 62 years old and employed as a bookkeeper at a financial organisation when he engaged in the current study. He appeared as relatively overweight, with an amicable and gentle presence, easily able to express his emotions when relevant. Upon initially consulting with the researcher, Alan stated that he had experienced high levels of anxiety, despair, fear of death, an anxiety attack, difficulty sleeping, cognitive ruminations, and vivid recollections relating to a medical emergency that had occurred one year earlier. Alan's memory of the event was attending a medical facility and undergoing a series of tests that revealed significant blood clots in his lungs. He remembered "the guy" coming into his room following a scan and saying, "Don't panic... we've called the ambulance... you've got blood clots." He was immediately wheeled out onto a stretcher and also recalled the receptionist saying, "Oh, good luck!"

Alan would re-experience this memory frequently, always with intense emotional reactivity, the most common example being an urge to cry. More recently he had begun distancing himself from those around him, attempting "to block it... not think of it."

### Researchers

The first author was an RET practitioner and Master of Counselling and Psychotherapy student at the Australian College of Applied Psychology (ACAP). The second author was the first author's supervisor, a professor at ACAP, counsellor/psychotherapist, and clinical and research supervisor with a specific interest in the field of trauma. The researchers were motivated to engage in the

current study following their expressed interest in expanding relevant knowledge to the counselling/psychotherapy field about a nascent, time-limited, and anecdotally-effective technique that had little empirical data at the time: the RET protocol.

As mentioned earlier, the interest in the RET protocol was process- rather than outcome-related and aimed to investigate Alan's experience and meaning-making journey. The authors had a tentative expectation that the memories selected for "processing" would be less emotionally reactive for Alan following the RET protocol, however, there was no explicit hypothesis citing this expectation as a research aim.

### **Procedure**

Following ethics approval from the Navitas Professional Human Research and Ethics Committee, the study was advertised via an electronic flyer that was distributed through social media (facebook and LinkedIn) and an online research-specific discussion group for students at ACAP. There were two respondents via Facebook, with Alan chosen as he satisfied the desired symptomatology of traumatic re-experiencing, and because he responded quickly when relative research time constraints were in effect. He provided informed consent to participate; all interviews (not part of RET therapy, however, determined to be required for the current study in order to secure phenomenological data pertaining to Alan's process) and administration of the RET protocol (specific and required for RET therapy) by the first author were audio-taped and transcribed.

### Session 1: Pre-screening interview.

An interview was held via phone call and aimed to: (1) identify a traumatic memory that Alan was willing to address through the administration of the RET protocol; and, (2) enquire about how Alan had managed associated distress related to the memory until the point of the phone call.

### Session 2: Preparatory session.

Alan attended this session in person and was guided through three affect regulation strategies, as detailed below.

# Safe place exercise.

This is an instrumental part of RET and guided Alan to find an image of a place in his mind (either real or imagined) that he considered safe and relaxing. He was then instructed to explore his sensory experiences (visual, olfactory, auditory, and somatic) when "inside" this place as a way of affect regulation.

### Dual awareness protocol.

This protocol was an additional grounding exercise where Alan was instructed to recall a mildly emotional memory and connect with the "here-and-now," orienting his senses and cognitive faculties (e.g., time, date, place) to the immediate vicinity of the room as a way of reminding himself that he was present and grounded at the same time.

# Square breathing exercise.

This additional exercise guided Alan in slowing down his breathing, breathing in for four counts, holding for four counts, breathing out for four counts, and holding for four counts. In effect, Alan's breathing slowed to four-to-five breaths per minute.

# Session 3: RET protocol, session one.

This session addressed Alan's memory of the medical emergency cited earlier.

Upon the researcher's instruction and following the complete RET protocol, Alan detailed aspects of the memory that were significantly distressing upon recall, specifically: 1) visual stimuli (i.e., what he saw); 2) somatic sensations (i.e., what he felt in his body); and, 3) cognitions (i.e., what he was thinking).

Following this, Alan was instructed to rate the memory from 0-10 via the subjective units of distress scale (Wolpe, 1969; with "10" being the most distressed he has ever felt and "0" being the least distressed he has ever felt), and then begin the tapping procedure at the same time, reciting the somatic and visual information paired with a self-affirmatory statement. That is, in tandem with the researcher's modelling, Alan was instructed to use each hand to tap the other in a "karate chop" motion while saying, for example, "Even though I have a tense head, neck, and shoulders, and I'm feeling a bit queasy when I see myself in the bed, I deeply and completely accept myself."

This karate chop procedure was repeated three times prior to continuing with the RET protocol and tapping on various others parts of the body (i.e., on top of the head, between the eyebrows, on the right side of the right eye, underneath the right eye, underneath the nose but above the upper lip, underneath the lower lip but above the chin, underneath the right collar bone, and finally, on the right side of the body, just under the armpit) while reciting the somatic (e.g., "I'm feeling a bit queasy"), cognitive (e.g., "Is this it?", "fearful of dying", "despair"), and visual (e.g., "I see the medical equipment") elements of the memory. Each part of the body was tapped on approximately 15 times. This tapping procedure was repeated twice prior to the researcher instructing Alan to "take a deep breath in and out", and asking, "What comes up for you right now?"

As per the protocol, this entire procedure was repeated, incorporating any new material (e.g., somatic sensations, cognitions, images) after each round of tapping, until Alan's subjective units of distress reduced to 0 out of 10. Once this was achieved, Alan was instructed to consider what he would like to think about instead if this memory were to arise in the future: "I am \_\_\_\_\_?" Once Alan responded, the tapping procedure was repeated, beginning with the karate chop tapping point and using Alan's positive cognition: "Even though I may think of this in the future, I *choose* to know that I am alive." Then, progressing to tap on the body areas above reciting related cognitions (e.g., "it's just a memory", "I see the room, it's like I'm not there").

### Session 4: RET protocol, session two.

Following the initial RET protocol session, Alan contacted the writer stating that another related memory arose between sessions that he wanted to address in the upcoming session—allowances were made for this to occur, as part of what was stated in the informed consent process. The second memory was related to the initial medical emergency, however, it involved the reactions of concern of other individuals ("an office full of women") at Alan's workplace upon hearing the news of his emergency. The same procedure described above was repeated for this memory.

# Session 5: Semi-structured interview.

After all four sessions were completed, a final session was arranged for a semi-structured interview. The semi-structured interview was based on two highly efficient qualitative data collection methods (Elliot, 2012)—the helpful aspects of therapy form (Llewelyn, 1988) and the client change interview (Elliott, Slatick, & Urman, 2001)—and modified in structure to speak directly to the RET protocol and Alan's change process. The semi-structured interview consisted of 12 questions in total, asking about factors such as: 1) Alan's experiences of any personal changes taking place within the

research process; 2) the significance of these changes; 3) the most significant aspects of the research process in terms of eliciting relevant changes; and, 4) Alan's experience of the RET protocol.

# **Data Analysis**

Interpretive phenomenological analysis (IPA) was the qualitative data analysis approach used in this research, aiming to provide a detailed investigation of how individuals make sense of their own lived experiences and social worlds (Smith & Osborn, 2009; Smith & Osborn, 2015). IPA involves a double hermeneutical process where the participant's experience is reflected on by the participant themselves, with researchers attempting to make sense of the participant's experience, including how it may relate to phenomenological and theoretical data in the extant literature (Gianakis & Carey, 2011; Smith & Osborn, 2009).

Researcher reflexivity and credibility was ensured through frequent cross checking between the principal and secondary researchers. Transcripts were reviewed multiple times by both researchers in order to ensure that superordinate and subordinate themes were not inferred a priori, but drawn organically from the data itself. This process included triangulation of relevant data in order to ensure each theme was not isolated, but occurred across and throughout more than one of the five research sessions. Also, special attention was paid to ensure that the themes that emerged and subsequently listed appeared predominantly from Alan's interaction with the RET protocol.

### Results

Of the five data collection sessions, IPA allowed for three superordinate themes to emerge: "emotional experiences", "memory processing", and "vulnerability"; with each superordinate theme housing subordinate themes categorically grouped based on their frequency of occurrence within the data itself (refer to Table 1). Some superordinate/subordinate themes emerged independently of others, and some arose in parallel to others—each are described in turn below.

Table 1

Alan's RET Protocol Experience: Emerging Superordinate and Subordinate Themes

Superordinate Themes		
Emotional experiences	Memory processing	Vulnerability
Subordinate Themes		
Fear/distress	Acceptance	Self-image
Despair	Reduction in rumination	Self-criticalness
Eliciting bodily sensations	Catharsis	
Reduction in negative emotions	Moving on	
Positive emotions	Outcomes Direction	

superordinate theme is categorically linked with the respective cluster of subordinate themes listed below it.

### **Theme 1: Emotional Experiences**

Note.

Emotional experiences was coded as a general term that referred to the emotions expressed by Alan prior to, during, and following the RET protocol. These emotions were all linked to the primary traumatic memory that he brought to the research. This theme appeared in sessions 1, 3, 4, and 5—all the sessions that focused on the traumatic memory—with more significant appearances within the RET protocol sessions, and were qualified by statements such as:

I still get emotional about [the medical emergency]... I do a bit of crying... [I feel] depressed... sad... scared... anxious and pissed off [session 1]... My emotions escaped in front of people [session 4]... Describing the events, yeah, were upsetting... that was the heart stuff... the emotions [session 5].

The emerging subordinate themes described experiences such as *fear/distress* (i.e., cognitive, emotional, and somatic experiences of perceived threat upon memory recall) and saw Alan describe his "fear of dying [session 1]" when recalling the distressing medical emergency. When asked about the memory of the incident in session 3 prior to the administration of the RET protocol, Alan also cited a sense of *despair* that manifested somatically in his "head", "neck", and "shoulders", as well as cognitively ("my word is despair").

Relatedly, the theme *eliciting bodily sensations* (i.e., Alan's descriptions of his somatic experiences) saw Alan describe his breathing as "very shallow" with "tight[ness in the] chest and abdomen," and feeling "queasy" with "agitation coming in... fear and despair in the chest area... tightness in the neck, in the shoulders... a headache [in session 3, when recalling the event]". Then, when asked "what comes up now" following the administration of the RET protocol in session 3, Alan stated, "the physical sensations in my body... disappeared," evidencing a *reduction in negative emotions* (i.e., less somatic and cognitive emotional reactivity), and leaving room for *positive emotions* (e.g. relaxed posture, smiling expressions, contemplative appearance), as he, for example, leant forward to shake the researcher's hand saying in session 3: "That [the RET protocol] is pretty good... That works... I can feel a bit of happiness coming in... Far out... Brilliant. F—k me."

# **Theme 2: Memory Processing**

Memory processing was coded as the second most pervasive theme, and was defined as: to observe, following the administration of the RET protocol, the emotional, somatic, and cognitive changes of the relevant memories as they evolved within and between sessions. This theme appeared in sessions 3, 4, and 5 with processing initially observed in session 3 after being asked "what comes up" as per the RET protocol following a subjective units of distress score of 0. Alan reported, "there's not so much of *me* there... I know it's happened... in the past," resulting in a sense of *acceptance*: "I've accepted. I feel acceptance... The room [the image associated with his traumatic incident] hasn't changed, but it's like I'm not there... The bed's empty... I'm really focusing in on it... not feeling... it's like I'm not there."

In session 5, Alan cited a *reduction in rumination* when asked whether he experienced any changes following the RET protocol in session 3. He stated, "it's not playing on my mind anymore... from 'I'm laying on the bed' to 'I'm looking down almost on an empty bed' and, 'Who cares?' ... you got through it, you survived." He described an experience of *catharsis* (i.e., the release of "strong, pent up emotions" usually related to trauma; VandenBos, 2007, p. 153): "My emotions... exploded... It's a release, I suppose. A build-up... an outlet of everything that had happened... It's better to have let it go... it's okay."

Also, Alan described this cathartic experience as a *moving on*: "Okay, it happened. I got through it. Move on to the next bits... next challenges, or the next things in life that I want to resolve [session 5]". In this session, Alan described the *outcomes* as explicitly resulting from the RET protocol: "Yes it worked... The tapping. What we went through... it worked for me... My aim was to be rid of the

emotional, um, the trauma— get rid of it —and it worked... it went". For Alan, an importance was placed on *direction* as applied to the RET protocol: "If I was to try and think about them imagery, sensations, cognitions, and related distress] by myself it's almost directionless... I think you need the direction... you were the leader. I was following." Summing up, in session 5, Alan stated that:

This process was quick... it eliminated some negativities in my life; got rid of excess baggage. Allows you to, I suppose, experience a positive outcome... that it can be done. And gives you a change to move on to other issues and try to analyse and all that... It's freed up the mind... Do you feel silly coming here and tapping? Yeah. [laughs] ... Guess the mechanics of it—why it works—I dunno; but it works, it worked for me. Seeing how this has worked... it's inspired me... if I can deal with those two issues, I must be able to deal with other issues.

# Theme 3: Vulnerability

Vulnerability was coded third in prevalence and arose in response to the application of the RET protocol on the second memory addressed in session 4. For Alan, vulnerability could be defined as being perceived as "weak" and "exposed", especially in the presence of the opposite gender. This sense of vulnerability was inextricably linked to the:

role of a male... always have been for me to be rigid, strength... it's still there [because] the male perception... is, you know, ahh, don't show the emotion... [this is] society's [perception] I suppose... you have to be the strong one [session 4].

In session 4, he discussed feeling exposed, and this led to questions about how his sense of vulnerability led him to question his own *self-image*: "People [i.e., "an office full of women"] that *know* you seeing a part of you that you perhaps don't want them to see." Alan's self-image not only pertained to his being a partner, but also in displaying a sense of *self-criticalness*. Alan did not perceive himself as fitting the "strong" male stereotype when expressing particular emotions—in these situations he often perceived himself as "weak". And, in session 4, Alan stated that these thoughts often led to other related thoughts of being "not acceptable; different; don't fit in the crowd; nominal."

# **Initial Comments on Data Analysis**

As detailed above, the raw data where the superordinate and subordinate themes arose from was triangulated, cross-checked and revised between researchers, coded, and tabulated throughout the research process. The themes were checked and re-checked to make sure they pertained specifically to what had occurred during the RET protocol. Each theme occurred relatively independently of the others, however, interrelationships could be posited as they all occurred initially as a response to the activated traumatic memories, and secondly in response to the RET protocol as this addressed the relevant memories. How these themes relate to trauma memory reprocessing and emotional reactivity is discussed in the section below.

### Discussion

The present study aimed to investigate Alan's phenomenological experience of the RET protocol in his treatment of trauma-related emotional reactivity. Three superordinate themes emerged from the analysis, all comprising various subordinate themes. All themes emerged in response to both the activation of the traumatic memories and in response to the RET protocol. Data was triangulated to ensure its strength and relevance to the traumatic memories and in response to the RET protocol. The discussion below relays the importance of relevant themes as they emerged in relation to the research aims and extant literature.

The findings of this study support the notion that re-experiencing symptoms such as emotional reactivity are generally prominent in trauma memory recall (Altena et al., 2016; APA, 2013; Levine, 2008). Prolonged emotional distress and physical reactivity following a potentially traumatic event appears in more than one diagnostic criterion within the DSM-5. In fact, one of the subordinate themes in the present study corresponding to the DSM-5 criterion for PTSD featuring "marked physiological reactions" (criterion B; APA, 2013) was termed "eliciting bodily sensations" due to the somatic output relayed by Alan to the researcher. Alan consistently reflected how this "felt-sense" (Watson, 2013) of "fear" and "despair" relating to his traumatic memory led to related somatic sensations that he perceived to be negative.

Similar to modalities such as EMDR and EFT, the RET protocol was found to be effective in not only reducing Alan's emotional reactivity arising from the memory of his traumatic medical emergency and subsequent re-experiencing, but also in achieving a sense of acceptance that the experience had ceased, and that he was still alive. Individuals undergoing EMDR often reflect on the reduced lucidity of prior traumatic memories, alongside a reduction in affect (Hensley, 2009); the same is found for EFT (Church, 2013). The outcome difference in the present study when comparing the RET protocol with EMDR was the time taken to achieve a sense of complete resolution: the first memory was "reprocessed" in 25 minutes; the second in 58 minutes (which was consistent with MacKinnon's [2014] case examples).

From a "fidelity to protocol" perspective, the latter cannot be achieved in a single session with EMDR—all eight treatment phases are necessary for EMDR to be considered as adhering to therapeutic protocols (EMDR Institute, 2017; Shapiro, 2001). When compared to the EFT procedure it is important to note that both RET and EFT can achieve results in a single session. However, where RET differs is in its rigour of protocol: the RET protocol is identifiable and follows a specifically rigorous formula; something lacking in EFT (cf. MacKinnon, 2014, and Craig, n.d.). Alan's emphasis on the outcomes relating to the RET protocol within a single session, and his emphasis on "direction" supports the latter contention.

Furthermore, in trauma particularly, and in addressing trauma through treatment, a sense of vulnerability and disconnection (emotionally and physically, from oneself and others) is very often experienced (Brown, 2012). For Alan, this sense of vulnerability arose and tied into his own self-image when around women and when recalling his traumatic memories, leading him to disconnect from others around him, including friends and family. This finding is consistent with research that reported that men often avoid talking about their traumatic experiences, leading to greater levels of distress (Elder, Mata-Galán, Domino, & Kilmartin, 2017). Alan related his expression of emotion, especially in front of women, as a display of "weakness". Alan wanted nothing less than to have a "strong" self-image, invulnerable, fitting into society's perception—"the male perception… the male stereotype."

Similarly, for Alan there was a realisation that his upbringing lent a lot to his belief that a "real man" does not show his vulnerability but is the epitome of strength; a belief that was not easily forgotten despite the more prolonged session 4. As he reflected upon his upbringing through the RET protocol, and within the interview in session 5, he considered that various developmental schemas in early life could have arisen, leading to his sense of vulnerability and self-image. These potentially related to mistrust, emotional inhibition, and defectiveness—themes that could be inferred here as they are common in adult survivors of interpersonal trauma (Karatzias, Jowett, Begley, & Deas, 2016). In particular, self-criticalness is often tied to schemas of defectiveness (Young, Klosko, & Beck, 1994), a finding that was observed in Alan's case as he reflected on his not being acceptable, as being different, nominal.

The importance of the findings in the present study lie in the clinical relevance for the treatment of trauma-related emotional reactivity. Already mentioned was the willingness of clinicians to adopt therapeutic modalities on the basis of rigorous and descriptive case studies that describe both outcomes and the process in which they were achieved (Stewart & Chambless, 2010). The current study has demonstrated the potential efficacy of the RET protocol in the treatment of PTSD symptomatology, thus potentially presenting clinicians with a time-efficient and economical approach that can assist individuals in resolving traumatic memories.

The findings relating to the efficacy of the RET protocol in the reduction of trauma-related emotional reactivity may be transferable outside the confines of Alan's experience (cf. the research surveyed above as related to the findings in this study, especially those related to the "memory processing" theme). However, any claims towards transferability in relation to traumatic memory reprocessing are within the context of the extant literature only—one cannot generalise based on the context of a single case study. Furthermore, the findings do not support a general claim that the RET protocol is alone sufficient to treat PTSD and all its intricate manifestations. The best treatment approaches for PTSD are integrative in nature, with severely traumatised individuals rarely achieving "quantum change" (i.e., sudden and enduring personal transformation; James, 1902; Miller, 2004) in the context of a single session.

Notable limitations include those relating to demand characteristics which cannot be ruled out despite the aim for neutrality in the administration of the RET protocol. However, researcher reflexivity and frequent consultation with the research supervisor aimed to provide a buffering effect on any potential demand characteristics. Furthermore, although the researcher was trained in RET by MacKinnon herself, delivering the protocol with noted fidelity, no external observer was implemented to validate this in the current research. The only validation was within the transcript and consultation with co-researcher. Also, due to time restrictions, the full RET therapy was not implemented, but rather, the RET protocol. Alongside this, various elements were added for the purposes of acquiring relevant data (i.e., pre-screening interview, the square breathing exercise and the dual awareness protocol, and the semi-structured interview), and removed (i.e., psychometrics) that were not within the original therapy so as to measure phenomenological data. As this was the case, only the RET protocol can be referred to as providing relevant outcomes as opposed to RET as a whole. Finally, although the semi-structured interview was formed through the integration of two well-validated qualitative methods, its influence over the session 5 reflections cannot be ruled out.

As the current study is a comprehensive single case phenomenological account of the RET protocol in practice, future research could explore RET therapy in the treatment of PTSD symptomatology using a randomised controlled trial: the gold standard in efficacy measures (Kabisch, Ruckes, Seibert-Grafe, & Blettner, 2011). Randomised controlled trial may be beneficial in investigating whether outcomes could be achieved for a sample of participants with a clinical diagnosis of PTSD, with a preference towards separating participants into childhood- and adulthood-onset trauma groups. Importantly, it has been found that for individuals with childhood-onset potentially traumatic events, trauma memory reprocessing techniques such as EMDR are less efficacious upon follow-up (van der Kolk et al., 2007). As the current study found the RET protocol effective in the treatment of an adult-onset trauma, no inferences can be made as to its efficacy for chronic and significant childhood trauma. More needs to be known about the potential efficacy of short-term trauma treatment methods such as RET. Also, it may also be useful for a theory-building research study to be engaged in order to navigate and understand the mechanism of action through which outcomes are achieved in the context of symptom reduction and resolution of traumatic memories.

# Conclusion

The current single case study aimed to investigate the phenomenological experience of the participant following the administration of the RET protocol for two traumatic memories relating to a medical emergency. Various superordinate and subordinate themes emerged from the data analysis, ultimately demonstrating clinically important efficacy findings of the approach in the reduction on trauma-related emotional reactivity, with multiple recommendations for future researchers to consider. These included the recommendation of randomly controlled trials and theory-building studies to further investigate the outcome reliability and mechanism(s) of change for RET in the treatment of PTSD symptomatology.

### References

Altena, E., Geoffroy, P.-A., Bioulac, S., Micoulaud-Franchi, J.-A., Sanz-Arigita, E., & Philip, P. (2016). The bidirectional relation between emotional reactivity and sleep: From disruption to recovery. *Behavioral Neuroscience*, *130*(3), 336-350. doi: 10.1037/bne0000128

Amano, T., & Toichi, M. (2016). The role of alternating bilateral stimulation in establishing positive cognition in EMDR therapy: A multi-channel near-infrared spectroscopy study. *PLoS ONE, 11*(10), 1-11. doi: 10.1371/journal.pone.0162735

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author. Retrieved from

http://dsm.psychiatryonline.org.ezproxy.navitas.com/doi/full/10.1176/appi.books.9780890425596.dsm07.doi: 10.1176/appi.books.9780890425596.dsm07

Bakker, G. M. (2013). The current status of energy psychology: Extraordinary claims with less than ordinary evidence. *Clinical Psychologist*, *17*, 97-99. doi: 10.1111/cp.12020

Becerra, R., & Campitelli, G. (2013). Emotional reactivity: Critical analysis and proposal of a new scale. *International Journal of Applied Psychology*, *3*, 161-168. doi: 10.5923/j.ijap.20130306.03

Bisson, J. I., Roberts, N. P., Andrew, M., & Lewis, C. (2013). Psychological therapies for chronic post-traumatic stress disorder (PTSD) in adults. *Cochrane Database Systematic Review, 18*(3). doi: 10.1002/14651858.CD003388.pub4

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress*, *28*, 489-498. doi: 10.1002/jts.22059

Boals, A. (2016). Trauma in the eye of the beholder: Objective and subjective definitions of trauma. *Journal of Psychotherapy Integration*, 1-13. doi: 10.1037/int0000050

Briere, J. N., & Scott, C. (2015). Principles of trauma therapy: A guide to symptoms, evaluation, and treatment (2nd ed.). Los Angeles, CA: SAGE Publications.

Brown, B. (2012) Daring greatly: How the courage to be vulnerable transforms the way we live, love, parent and lead. London, UK: Penguin.

Church, D. (2013). Clinical EFT as an evidence-based practice for the treatment of psychological and physiological conditions. *Psychology*, *4*(8), 645-654. doi: 10.4236/psych.2013.48092

Church, D., & Palmer-Hoffman, J. (2014). TBI symptoms improve after PTSD remediation with emotional freedom techniques. *Traumatology*, 20(3), 172-181. DOI: 10.1037/h0099831

Church, D., Piña, O., Reategui, C., & Brooks, A. (2012). Single-session reduction of the intensity of traumatic memories in abused adolescents after EFT: A randomized controlled pilot study. *Traumatology, 18*(3), 73-79. DOI: 10.1177/15347611426788

Craig, G. (n.d.). *The EFT Manual* (6th ed.). Retrieved from http://eftmanual.weebly.com/uploads/3/1/0/1/3101311/eft manual 6th ed..pdf.

Elder, W. B., Mata-Galán, E. L., Domino, J. L., & Kilmartin, C. (2017). Masculinity as an avoidance symptom of posttraumatic stress. *Psychology of Men & Masculinity, 18*(3), 198-207. doi: 10.1037/men0000123

Elliott, R., Slatick, E., & Urman, M. (2001). Qualitative change process research on psychotherapy: Alternative strategies. In J. Frommer & D. L. Rennie (Eds.), *Qualitative psychotherapy research: Methods and methodology* (pp. 69-111). Lengerich, Germany: *Pabst Science*.

Elliot, R. (2012). Qualitative methods for studying psychotherapy change processes (pp. 69-81). In A. Thompson & D. Harper (Eds.), *Qualitative research methods in mental health & psychotherapy: An introduction for students & practitioners*. Chichester, UK: Wiley-Blackwell.

EMDR Institute, (2017, October 21). *Frequent questions*. Retrieved from https://www.emdr.com/frequent-questions/.

Feinstein, D. (2008). Energy psychology: A review of the preliminary evidence. *Psychotherapy*, 45(2), 199-213. doi: 10.1037/0033-3204.45.2.199

Feinstein, D. (2012). Acupoint stimulation in treating psychological disorders: Evidence of efficacy. *Review of General Psychology*, *16*(4), 364-391. doi: 10.1037/a0028602

Finlay, L. (2015). Qualitative methods. In A. Vossler & N. Moller (Eds.), *The counselling and psychotherapy research handbook* (pp. 198-211). London, UK: SAGE Publications.

Foa, E., Hembree, E., & Rothbaum, B. O. (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences: Therapist Guide*. New York, NY: Oxford University Press.

Foa, E. (2009). Effective treatments for PTSD (2nd ed.). New York, NY: The Guilford Press.

Foa, E., Keane, T. M., Friedman, M. J., & Cohen, J. A. (2009). *Effective treatments for PTSD: Practice guidelines of the international society for traumatic stress studies* (2nd ed.) New York: Guilford.

Gabbard, G. O. (2014). *Gabbard's treatments of psychiatric disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

Gentry, E. J., Baranowsky, A. B., & Hoton, R. (2017). Trauma competency: An active ingredients approach to treating posttraumatic stress disorder. *Journal of Counselling & Development, 95*(3), 279-287. doi: 10.1002/jcad.12142

Gianakis, M., & Carey, T. A. (2011). An interview study investigating experiences of psychological change without psychotherapy. *Psychology and Psychotherapy: Theory, Research and Practice, 84*, 442-457. doi: 10.1111/j.2044-8341.2010.02002.x

Gunter, R. W., & Bodner, G. E. (2008). How eye movements affect unpleasant memories: Support for a working-memory account. *Behaviour Research and Therapy*, *46*, 913-931. doi: 10.1016/j.brat.2008.04.006

Hensley, B. (2009). *An EMDR primer: From practicum to practice*. New York, NY: Springer Publishing Company.

Infurna, F. J., Rivers, C. T., Reich, J., & Zautra, A. J. (2015). Childhood trauma and personal mastery: Their influence on emotional reactivity to everyday events in a community sample of middle-aged adults. *PLoS ONE*, *10*(4), 1-21. doi: 10.1371/journal.pone.0121840

James, W. (1902). The varieties of religious experience. Cambridge, MA: Harvard University Press.

Kabisch, M., Ruckes, C., Seibert-Grafe, M., & Blettner, M. (2011). Randomized controlled trials. *Deutsches Ärzteblatt International*, *108*(39), 663-668. doi: 10.3238/arztebl.2011.0663

Karatzias, T., Jowett, S., Begley, A., & Deas, S. (2016). Early maladaptive schemas in adult survivors of interpersonal trauma: Foundations for a cognitive theory of psychopathology. *European Journal of Psychotraumatology*, 7. doi: 10.3402/ejpt.v7.30713

Kavanaugh, D. J., Freese, S., Andrade, J., & May, J. (2001). Effects of visuospatial tasks on desensitization to emotive memories. *British Journal of Clinical Psychology, 40*, 267-280. doi: 10.1348/014466501163689

Levine, P. A. (1997). Waking the tiger: Healing trauma. Berkeley, CA: North Atlantic Press.

Levine, P. A. (2008). *Healing trauma: A pioneering program for restoring the wisdom of your body*. Boulder, CO: Sounds True.

Llewelyn, S. P. (1988). Psychological therapy as viewed by clients and therapists. *British Journal of Clinical Psychology*, 27, 223–237. doi: 10.1111/j.2044-8260.1988.tb00779.x

Lovibond, S.H. & Lovibond, P.F. (1995). *Manual for the depression, anxiety, and stress scales* (2nd Ed.). Sydney: Psychology Foundation.

Lynch, E. (2007). Emotional acupuncture: A therapy that cures negative emotions works wonders where conventional approaches fail, its supporters claim. *Nursing Standard*, *21*(50), 24-25.

MacKinnon, L. (2014). Deactivating the buttons: Integrating radical exposure tapping with a family therapy framework. *Australian & New Zealand Journal of Family Therapy, 35*, 244-260. doi: 10.1002/anzf.1070

May, C. L., & Wisco, B. E. (2016). Defining trauma: How level of exposure and proximity affect risk for posttraumatic stress disorder. *Psychological Trauma: Theory, Research, Practice, and Policy,* 8(2), 233-240. doi: 10.1037/tra0000077

McCaslin, D. (2009). Comments and rejoinder: A review of efficacy claims in energy psychology. *Psychotherapy Theory, Research, Practice, Training, 46*(2), 249-256. doi: 10.1037/a0016025

McIlwaine, F., & O'Sullivan, K. (2015). 'Riding the wave': Working systematically with traumatised families. *Australian and New Zealand Journal of Family Therapy, 36*, 310-324. DOI: 10.1002/anzzf.1114

McLeod, J. (2012). Case study research: In counselling and psychotherapy. London, UK: SAGE Publications.

McLeod, J., Thurston, M., & McLeod, J. (2015). Case study methodologies. In A. Vossler & N. Moller (Eds.), *The counselling and psychotherapy research handbook* (pp. 198-211). London, UK: SAGE Publications.

Menon, S. B., & Jayan, C. (2010). Eye movement desensitization and reprocessing: A conceptual framework. *Indian Journal of Psychological Medicine*, *32*(2), 136-140. doi: 10.4103/0253-7176.78512

Miller, W. R. (2004). The phenomenon of quantum change. *Journal of Clinical Psychology, 60*(5), 453-460. doi: 10.1002/jclp.20000

Mollon, P. (2004). *EMDR and the energy therapies: Psychoanalytic perspectives*. London, UK: Karnac Books.

Monson, C. M., Resick, P. A., & Rizvi, S. L. (2014). Posttraumatic stress disorder. In D. H. Barlow (Ed.), *Clinical handbook of psychological disorders: A step-by-step treatment manual* (5th ed.) (pp. 62-113). New York, NY: The Guilford Press.

Noor, K. B. M. (2008). Case study: A strategic research methodology. *American Journal of Applied Sciences*, *5*(11), 1602-1604. doi: 10.3844/ajassp.2008.1602.1604

Ortner, N. (2013). *The tapping solution: A revolutionary system for stress-free living*. U.S.: Hay House.

Phoenix Australia – Centre for Posttraumatic Mental Health (2013). *Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder*. Retrieved from http://phoenixaustralia.org/wp-content/uploads/2015/03/Phoenix-ASD-PTSD-Guidelines.pdf.

Rimini, D., Molinari, F., Liboni, W., Balbo, M., Darò, R., Viotti, E., & Fernandez, I. (2016). Effect of ocular movements during eye movement desensitization and reprocessing (EMDR) therapy: A near-infrared spectroscopy study. *PLoS ONE, 11*(10), 1-15. doi: 10.1371/journal.pone.0164379

Rule, P., & John, V. M. (2015). A necessary dialogue: Theory in case study research. *International Journal of Qualitative methods*, 1-11. doi: 10.1177/1609046915611575

Shapiro, F. (1989). Efficacy of the eye movement desensitization procedure in the treatment of traumatic memories. *Journal of Traumatic Stress*, *2*(2), 199-223. doi: 10.1002jts.2490020207

Shapiro, F. (Ed.). (2001). *Eye movement desensitization and reprocessing (EMDR)* (2nd ed.). New York, NY: Guilford Publications.

Shapiro, F. (2002). EMDR treatment: Overview and integration. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 27-55). Washington, DC: American Psychological Association.

Siegel, D. J. (2002). The developing mind and the resolution of trauma: Some ideas about information processing and an interpersonal neurobiology of psychotherapy. In F. Shapiro (Ed.), *EMDR as an integrative psychotherapy approach: Experts of diverse orientations explore the paradigm prism* (pp. 85-121). Washington, DC: American Psychological Association.

Siegel, D. J. (2010). *The mindful therapist: A clinician's guide to mindsight and neural integration*. New York, NY: W.W. Norton & Company, Inc.

Siegel, D. J. (2012). Pocket guide to interpersonal neurobiology: An integrative handbook of the mind. New York, NY: W.W. Norton & Company, Inc.

Simons, H. (2009). Case study research in practice. Los Angeles, CA: Sage.

Smith, J. A., Osborn, M. (2009). Interpretive phenomenological analysis. In J. A. Smith, P. Flowers, & M. Larkin (Eds.). *Interpretive phenomenological analysis: Theory, method and research* (pp. 53-80). Los Angeles: SAGE.

Smith, J. A., Osborn, M. (2015). Interpretive phenomenological analysis as a useful methodology for research on the lived experience of pain. *British Journal of Pain*, *9*(1), 41-42. doi: 10.1177/2049463714541642

Stewart, R. E., & Chambless, D. L. (2010). Interesting practitioners in training in empirically supported treatments: Research reviews versus case studies. *Journal of Clinical Psychology, 66*, 73-95. doi: 10.1002/jcip.20630

The Australian Psychological Society (2010). *Evidence-based psychological interventions in the treatment of mental disorders: A literature review* (3rd ed.). Retrieved from http://psychology.org.au/Assets/Files/Evidence-Based-Psychological-Interventions.pdf.

van den Hout, M. A., Muris, P., Salemink, E., & Kindt, M. (2001). Autobiographical memories become less vivid and emotional after eye movements. *British Journal of Clinical Psychology, 40*, 121-130. doi: 10.1348/014466501163571

van den Hout, M. A., & Engelhard, I. M. (2012). How does EMDR work? *Journal of Experimental Psychopathology*, *3*(5), 724-738. doi: 10.5127/jep.028212

VandenBos, G. R., (2007). *APA dictionary of psychology* (2nd ed.). Washington, DC: American Psychological Society.

van der Kolk, B. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York, NY: Penguin Books.

van der Kolk, B., Spinazzola, J., Blaustein, M. E., Hopper, J. W., Hopper, E. K., Korm, D. L., & Simpson, W. B. (2007). A randomized clinical trial of eye movement desensitization and reprocessing (EMDR), fluoxetine, and pill placebo in the treatment of posttraumatic stress disorder: Treatment effects and long-term maintenance. *Journal of Clinical Psychiatry, 68*(1), 37-46. doi: 10.4088/JCP.v68n0105

Watson, J. (2013). Knowing through the felt-sense: A gesture of openness to the other. *International Journal of Children's Spirituality*, *18*(1), 118-130. doi: 10.1080/1364436X.2012.745393

Wolpe, J. (1969). The practice of behaviour therapy. New York, NY: Pergamon Press.

Watts, B. V., Schnurr, P. P., Mayo, L., Young-Xu, Y., Weeks, W. B., & Friedman, M. J. (2013). Metaanalysis of the efficacy of treatments for posttraumatic stress disorder. *The Journal of Clinical Psychiatry, 74*(6), 541-550.doi: 10.4088/JCP.12r08225

World Health Organization (2013). *Guidelines for the management of conditions specifically related to stress*. Geneva, Switzerland: Author.

Young, J. E., Klosko, J. S., & Beck, A. T. (1994). *Reinventing your life: A breakthrough program to end negative behaviour and feel great again*. New York, NY: Plume.

# Return to Journal Articles