

Evidence Compass



Summary Report

What emerging interventions are effective for
the treatment of adults with PTSD?

A Rapid Evidence Assessment

August 2013



Australian Government
Department of Veterans' Affairs

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Executive Summary

- While efficacious psychological interventions for post-traumatic stress disorder (PTSD) have been established, a number of new therapies termed 'emerging interventions' have generated interest within the popular media. This has created a flow-on effect whereby trauma survivors, including veterans, are increasingly requesting access to emerging interventions. Therefore, the efficacy of these interventions needs to be established.
- The aim of this rapid evidence assessment (REA) was to review the effectiveness of emerging interventions for the treatment of adults with a diagnosis of PTSD. The emerging interventions identified for review included mindfulness, acceptance and commitment therapy, meditation, transcendental meditation, acupuncture, power therapies (including emotional freedom technique (EFT), thought field therapy (TFT), visual-kinaesthetic dissociation (VKD), rewind technique (RT) and traumatic incident reduction (TIR) and experiential psychotherapies including adventure therapy, art therapy, music therapy, canine and equine assisted psychotherapy.
- Literature searches were conducted to collect studies published from 2003-2013 that investigated emerging interventions in adults with a diagnosis of acute stress disorder or PTSD. Studies were excluded if they did not measure PTSD symptoms, less than 70% of participants met diagnostic criteria for PTSD or where the sample was receiving concurrent psychological treatment for PTSD. Studies were assessed for quality of methodology, risk of bias, and quantity of evidence, and the consistency, generalisability and applicability of the findings to the population of interest. These assessments were then collated for each emerging intervention to determine an overall ranking of level of evidence support for each intervention.
- The ranking categories were 'Supported' –clear, consistent evidence of beneficial effect; 'Promising' – evidence suggestive of beneficial effect but further research required; 'Unknown' – insufficient evidence of beneficial effect; 'Not supported' – Clear, consistent evidence of no effect or negative/harmful effect.
- Eight studies met the inclusion criteria for review. Two-thirds originated from the USA, a quarter came from the UK and a final study originated from Uganda.
- One study investigated acceptance and commitment therapy, one investigated acupuncture, one study investigated meditation, two studies investigated

transcendental meditation, one study investigated music therapy, one study investigated EFT and final study investigated VKD. Overall, the quality of the studies was low and had high risk of bias. This influenced the ranking of the studies significantly.

- The evidence for traditional acupuncture in treating PTSD in adults received a 'Promising' ranking.
- The evidence for acceptance and commitment therapy in treating PTSD in adults received an 'Unknown' ranking. Other interventions that received an 'Unknown' ranking were meditation, transcendental meditation, music therapy, EFT, and VKD.
- No studies met the inclusion criteria for a number of the emerging interventions, including canine and equine assisted psychotherapy, adventure therapy, mindfulness, TFT, RT, TIR, and art therapy. The lack of any studies for these interventions meant they did not achieve a ranking according to this REA methodology.
- Well conducted, rigorous trials are required to test the efficacy of interventions identified in this REA in the treatment of PTSD. Currently, there is a paucity of evidence supporting to use of these interventions in the treatment of PTSD.

Background

'Emerging intervention' is an umbrella term bringing together a number of disparate and novel approaches with the aim of improving mental and physical health. This includes treatments that may be considered alternative, new age or complimentary and that often draw on Eastern philosophies and traditional medicine. Many have become popular in Western countries as the range of treatment approaches for mental and physical health has broadened. A growing number of emerging interventions have been used in the treatment of posttraumatic stress disorder (PTSD), yet the evidence for the efficacy of these interventions is yet to be established.

The aim of this review was to conduct a rapid assessment of the evidence examining the efficacy of emerging interventions for adults with a diagnosis of PTSD. In order to complete the review within the specified timeframe, it was necessary to limit the scope of this review to the following fifteen emerging interventions: Acceptance and Commitment Therapy, acupuncture, adventure therapy/Outward Bound therapy, art therapy, canine therapy, equine therapy, meditation, Transcendental Meditation, mindfulness, music therapy, Emotional

Freedom Therapy/Technique, Rewind Therapy/Technique, Thought Field Therapy, Traumatic Incident Reduction, and Visual Kinaesthetic Dissociation technique. A brief description of these interventions is given below.

Types of psychological interventions

Acceptance and Commitment Therapy (ACT) encourages the individual to create a rich and meaningful life, through committing to taking effective value based actions, remaining fully present and engaged, and accepting difficult experiences as an inevitable part of life¹. To achieve this, ACT incorporates **mindfulness**, which involves entering a mental state of awareness, focus and openness to the experience of the present moment. This occurs through an individual specifically concentrating only on what is currently happening around them, in all sensory terms, and by having no judgement towards the experience or thoughts that are occurring at the present moment.

Traditional acupuncture is a procedure where small, solid needles are placed into rationally chosen points in subcutaneous tissue for a given period of time and manipulated (by turning the needle at the appropriate time)² with the intention of moving vital energy around the body to restore balance between bodily systems³.

Experiential psychotherapies draw on certain modalities of lived experiences for therapeutic gain, and include therapies such as **adventure therapy/Outward Bound therapy; art therapy, music therapy; canine therapy; and equine therapy.**

Broadly, **meditation** involves developing a greater awareness of the mind. **Transcendental meditation** involves mantram repetition, or focussing on an object to bring about a sense of peace and relaxation⁴ in addition to attempting to bring heightened awareness to the mantram repetition.

Power therapies, such as **Emotional Freedom Therapy/Technique; Rewind-Therapy/Technique; Thought Field Therapy; Traumatic Incident Reduction; and Visual Kinaesthetic Dissociation** technique all incorporate some form of visualisation. Some of the therapies will pair the visualisation with physical touch, or by working with physiological responsiveness. In power therapies the client is not generally required to verbalise or otherwise express their experience, but rather to re-experience it in their mind just as it regularly re-represents itself to them⁵.

Evaluating the evidence

Assessment of the evidence was based on the following criteria:

- the **strength of the evidence base** which incorporated the quality and risk of bias, quantity of the evidence (number of studies), and level of the evidence (study design)
- the **consistency** across studies
- the **generalisability** of the studies to the target population
- the **applicability** to an Australian context.

Ranking the evidence

After the evidence was evaluated, and the studies were ranked as follows:

SUPPORTED	PROMISING	UNKNOWN	NOT SUPPORTED
	Acupuncture	Acceptance and Commitment Therapy Meditation/ Transcendental Meditation Music Therapy Emotional Freedom Therapy/Technique Visual Kinaesthetic Dissociation Technique	

‘Supported’ means there was clear and consistent evidence of a beneficial effect of the intervention; **‘Promising’** means the evidence was suggestive of beneficial effect, but requires confirmation with additional evidence/research; **‘Unknown’** is defined as insufficient evidence at present on whether or not to support the use of this intervention, or additional evidence is required to determine efficacy of intervention; **‘Not supported’** is defined as evidence suggesting that the intervention does not have an effect, or produces a harmful effect when implemented.

Eight studies met the inclusion criteria for the current review. The evidence to support the use of traditional acupuncture was ranked as 'Promising'. The evidence for Acceptance and Commitment Therapy, Meditation/ Transcendental Meditation, Music Therapy, Emotional Freedom Therapy/Technique, Visual Kinaesthetic Dissociation Technique in the treatment of adults with PTSD was ranked as 'Unknown'.

No evidence was able to be found to support the effectiveness of treating adults with PTSD using; adventure therapy/ Outward Bound therapy, art therapy, canine therapy, equine therapy, mindfulness, rewind therapy/ technique, thought field therapy and traumatic incident reduction and therefore the evidence for these interventions could not be ranked.

Implications for policy makers and service delivery

The emerging interventions offer modalities of treatment that are novel, and involve a broad range of approaches for dealing with the psychological consequences of trauma. Some of these approaches are considered forms of exposure therapy, while others rely on therapeutic alliances or Eastern philosophies of the body as a system in balance, the rhythm of which can be restored through heightened states of consciousness. Aspects of these approaches may appeal to a broader audience, or to different audiences, than those that are currently accessing and engaging in standard treatments. The efficacy of emerging interventions, however, remains to be established. In the future, if some of these emerging interventions develop a sufficient evidence base, then perhaps they may offer a wider range of socially and culturally acceptable treatment options to those with PTSD. Ultimately this may assist funders and services to meet the needs of the broader audience of Australian veterans. However, there is a long way to go before this may occur.

If some of these emerging interventions did develop a sufficient evidence base, then it would be important to consider that some emerging interventions may be more suited to certain individuals and not others. For example, ACT may be found to be promising with veterans who have a preference to be disengaged from the actual trauma content and to work on other areas of life functioning. Similarly, this type of therapy may not be suitable for those who have a high level of trauma-related intrusion symptoms. In the same way, power therapies which rely heavily on guided visualisation to create a dissociative reviewing of the trauma-related content may not be suited to those for whom dissociation is a feature of their symptom profile.

What emerging interventions are effective for the treatment of adults with PTSD?

Well conducted, rigorous trials are required to test the efficacy of interventions identified in this REA in the treatment of PTSD. Currently, there is a paucity of evidence supporting to use of these interventions in the treatment of a diagnosis of PTSD.

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