Treatment of Survivor Guilt after Trauma using Imagery Rescripting:

A Proof-of-Concept Study

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Abstract

Survivor guilt can arise after surviving trauma in which others die. No studies have systematically investigated psychological treatment for survivor guilt. The present study was a proof-of-concept investigation of treatment of survivor guilt using Imagery Rescripting. Thirteen participants with PTSD and self-reported survivor guilt attended two consecutive imagery therapy sessions, to first elaborate and then rescript related imagery. Significant improvements were observed on idiographic process measures of cognitons, emotions and disress related to survivor guilt following the rescripting session. The study provides preliminary evidence that ImRs can be used as an experiential technique to treat survivor guilt.

Keywords:

Survivor guilt, Guilt, Trauma, PTSD, Imagery, Imagery rescripting.

Individuals who survive a traumatic event in which others died may feel intense guilt about being fortunate to remain alive. Survivor guilt arises from the appraisal that the person has done wrong by surviving, as their survival is tied to the death of others (Valent, 2000). Survivor guilt has been documented in survivors of war, accidents and natural disasters and is linked to greater severity of PTSD symptoms and risk of suicide. A recent study of survivor guilt among a UK clinic sample of PTSD sufferers (Murray, 2018) revealed that over 90% of those who had survived events in which others died reported guilt about surviving, often at severe levels.

Contemporary psychological PTSD treatments emphasise the importance of actively targeting the full range of individual emotional reactions to trauma. Given its prevalence and associations with PTSD severity and suicide, there is a need for research that explores treatment options for survivor guilt. Imagery rescripting (ImRs) is a transdiagnostic technique in which there is a growing interest, particularly for addressing persistent guilt feelings after trauma (Arntz, 2012).

ImRs seeks to reduce distress through manipulation of mental imagery. Clients are encouraged to visualise and describe traumatic memories or upsetting images in detail, and are then guided to introduce changes in their imagination.

Psychological therapies to address survivor guilt have yet to be investigated. However, imagery interventions form an integral part of recently developed treatments for similar problems, such as moral injury, persistent complex bereavement disorder and shame-based trauma, suggesting that similar approaches may be appropriate to address survivor guilt.

The present study

The present study is a proof-of-concept investigation of treatment of survivor guilt using ImRs. The survivor guilt intervention was evaluated as an additional discrete treatment component delivered within standard psychological treatment for PTSD. The study used a

two-session design (one session of imagery elaboration, one session of imagery rescripting) with five measurement points.

It was hypothesised that ratings of cognitive and emotional components of survivor guilt and imagery distress would reduce significantly following rescripting sessions but not at other time points. It was also hypothesized that weekly measures of survivor guilt and mental imagery would reduce significantly following the rescripting session.

Method

Participants

The sample consisted of nine men and five women who were currently undergoing trauma-focused treatment at one of two specialist PTSD services. The sample had a mean age of 46.9 years and was ethnically diverse; only 35.7% of the sample (n=5) were of White British origin. Participants had experienced a wide range of traumas including assaults, accidents, torture, genocide and combat. Eleven participants (78.6%) had experienced interpersonal violence during trauma, and 12 participants (85.7%) had experienced repeated and/or multiple traumas. All had witnessed the death of at least one other person. The average time since trauma was 21 years (range=5-35). Participants showed clinically significant PTSD symptoms on the Post-Traumatic Diagnostic Scale (Foa, 1995) at the first session (mean = 37.38, SD = 9.16; scores over 36 are considered severe) and depression symptoms on the Patient Health Questionnaire-9 (Kroenke, Spitzer, & Williams, 2001; mean =18.64; SD = 5.21; scores over 10 indicate clinical range).

Clients who had experienced a traumatic event that involved the death of one or more people and reported feelings of survivor guilt were eligible to participate (22 of 32 clients that were approached for the study). Clients with active suicidal intent, insufficient English-language ability to complete the measures and for whom participation in the study was not

considered in their best interest (e.g., participation would lead to substantial disruption to the treatment plan) were excluded (six clients). Two eligible clients declined participation. One participant dropped out after the elaboration session.

Imagery interview

An imagery interview was carried out before the first imagery session to elicit imagery linked to survivor guilt and to identify the personal meaning of this imagery ('encapsulated belief').

Measures

Based on the design used by Wild, Hackmann and Clark (2008), weekly measures and single-item VASs were administered before each session and one week after the intervention (follow-up). The single-item scales were also administered after each session.

Process measures. Three single-item VASs of process variables (adapted from Wild et al., 2008) were selected as the primary outcome measures: Distress associated with the survivor guilt imagery, encapsulated belief (a statement summarising the meaning of the participant's survivor guilt imagery) and feelings of survivor guilt.

Weekly symptom measures. Weekly survivor guilt was measured using two relevant items from the Clinician Administered PTSD Scale (Blake et al., 1995). Participants rated frequency and intensity over the past week, and ratings were combined into a total score. Frequency and intensity of imagery over the past week was measured using two VASs.

Imagery rescripting intervention

The evaluated intervention consisted of two consecutive therapy sessions (45-60 minutes) embedded within participant's standard treatment by their treating clinician. Participants were all undergoing trauma-focused psychological therapy; either Trauma-Focused CBT, Narrative Exposure Therapy or EMDR.

The *elaboration session* was conducted to establish a baseline effect of exploring and elaborating the imagery (but not changing it). Therapists supported participants to describe the content and context of survivor guilt imagery without actively changing the imagery or its meaning.

The aim of the *rescripting session* was to modify the survivor guilt imagery to make it less distressing. Participants could change their imagery in any way they felt would be helpful. Rescripts included imagining or visiting the deceased in afterlife, 'repairing' distressing aspects of the memory, preventing the death and accessing pleasant memories of the deceased alive.

Procedure

Clients who met the study criteria were approached by their treating clinician and provided with the information sheet. Therapists attended a training event and were given a study manual to maximise protocol adherence. Audio recordings were used to check for protocol violations, in particular the use of verbal cognitive restructuring during the elaboration or rescripting sessions. No major violations were detected.

Results

Analyses carried out using parametric statistics and non-parametric counterparts were equivalent, so only the parametric analysis results are reported. Information from one participant who dropped out after the elaboration sessions was excluded from analysis of response to rescripting.

Repeated-measures ANOVAs (Scale x Time) of mental imagery and survivor guilt did not show a main effect for time: $F(1,12) = .17$, $p = .78$, and $F(1,12) = .89$, $p = .40$, respectively. These findings contradict the prediction that the intervention would lead to changes on these measures.

A two-way repeated-measures ANOVA (VAS x Time) used to assess changes on pre and post session survivor guilt-specific VASs did not produce a significant interaction and so the VASs were pooled to produce an average score which would have greater reliability. The profile of pooled VAS over time is shown in Figure 1. The one-way repeated measure ANOVA for the pooled VAS score showed a significant main effect for time, $F(4,48) = 8.36$, $p = .001$ (following Greenhouse-Geisser adjustment). Paired contrasts revealed that the only significant difference was between pre and post rescripting session scores, $F(1,12 = 11.18)$, $p = .006$. Analyses of the individual VASs showed the same pattern of results. The pooled VAS rating was used to identify participants who experienced reliable change. The Reliable Change Index (RCI; Jacobson & Truax, 1991) classified seven participants as responders and six as non-responders.

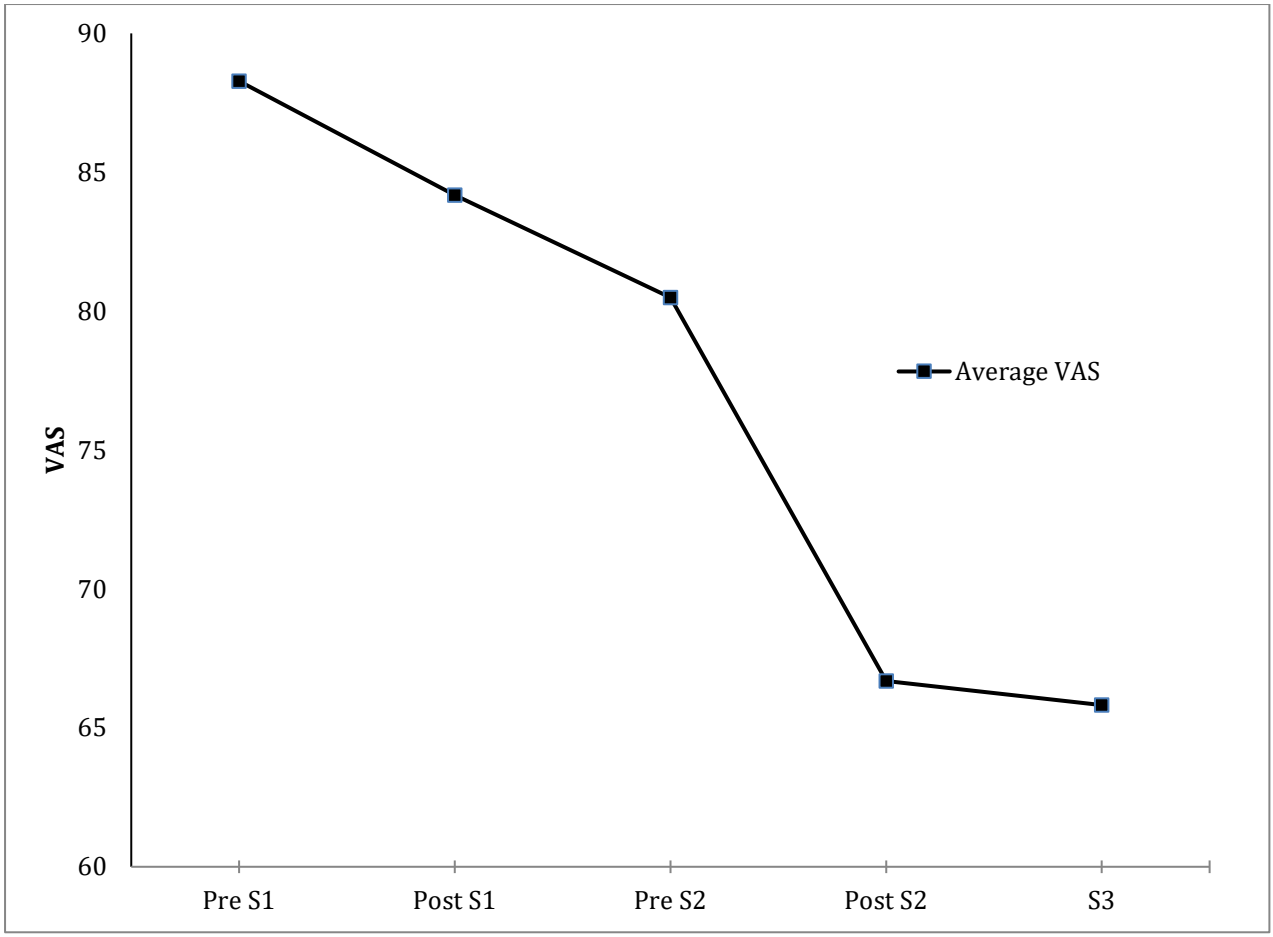

Figure 1. Change in mean pooled survivor guilt VASs over five measurement points.

Discussion

The present study was a proof-of-concept trial of ImRs for survivor guilt in a PTSD sample. Idiographic measures of the cognitive and emotional components of survivor guilt, and distress associated with survivor guilt imagery, reduced significantly during the rescripting session. These changes were not observed in the preceding session in which imagery was elaborated but not modified, and improvements seemed to persist at the next session. These changes were gained in the absence of verbal cognitive restructuring. These findings point to the conclusions that (1) ImRs produces emotional changes that are not solely attributable to habituation, and (2) it is possible to shift emotions by changing relevant

perceptual imagery, bypassing the verbal-cognitive route traditionally used in cognitive therapy.

Although participants improved overall on idiographic process measures, they did not experience significant changes on weekly measures of survivor guilt or imagery distress. This may indicate that the effect of the imagery rescripting is only transitory, is highly specific to the image being targeted, or that a longer follow-up period was required to observe changes. Given that the sample consisted predominantly of multiply traumatised individuals, it may be that the two-session survivor guilt intervention was insufficient to reduce overall survivor guilt symptoms, even though it seemed to impact positively on the target image and associated beliefs and feelings. Around half of the participants were classed as responders. Some participants appeared to engage well with the ImRs intervention while others struggled to visualize changed images, although the sample was too small to analyse systematically who benefitted most from the intervention. Observationally, responders were more likely to have used afterlife imagery than other types of rescript, and further research could usefully consider which types of imagery rescript are most effective.

Efforts were devoted to ensuring that the research intervention had ecological and face validity to maximise the generalisability of the findings. The results are representative of a 'real world' view of ImRs as applied to addressing survivor guilt. However, the study design and small sample limits the interpretations that can be drawn from the results. The participants were highly heterogeneous. Most participants had been exposed to severe, multiple traumas and all participants had complex presentations of PTSD. The order of sessions was fixed, which may have produced sequencing effects. Observed improvements could be attributed to the time period during the rescripting session but may not be due to ImRs. For example, participants may have experienced a delayed effect from the elaboration

session. The study was designed as a proof-of-concept, but requires replication in a larger, controlled study.

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