RESEARCH ARTICLE

REVISED Four practice-based preliminary studies on Human Givens Rewind treatment for posttraumatic stress in Great Britain [version 2; peer review: 1 approved, 1 approved with reservations]

Shona Adams¹ , Steven Allan¹, William Andrews², Keith Guy³, Jayne Timmins⁴, Elizabeth Barr⁵

¹Department of Neuroscience Psychology and Behaviour, University of Leicester, Leicester, LE1 7HA, UK

²Pragmatic Tracker, Littlehampton, BN16 3NJ, UK

³The Red Poppy Company, Falmouth, TR11 5GH, UK

⁴Independent Researcher, Glanaman, UK

⁵Independent Researcher, Market Harborough, UK

v2 First published: 16 Oct 2020, 9:1252
<https://doi.org/10.12688/f1000research.25779.1>
 Latest published: 07 Feb 2022, 9:1252
<https://doi.org/10.12688/f1000research.25779.2>

Abstract

Background: Human Givens (HG) Rewind is a relatively unknown trauma-focussed treatment. This paper aimed to provide preliminary evidence of the effectiveness of Rewind to treat posttraumatic stress (PTS) in a variety of clinical settings in Great Britain.

Methods: An observational prospective design was used in each of the four studies. Standardised questionnaires were administered in every session. Pre- and post-treatment means and effect sizes were calculated for each study, as were 'recovery rates' and 'reliable change' rates.

Results: Across four studies, a total of 274 clients completed treatment and had complete data. The data capture rate ranged from 80-100%. The mean pre-treatment scores were in the *severe* range. The pre-post treatment effect sizes ranged from 1.90-2.68. The percentage of clients who were below the clinical cut-off after treatment ranged from 46-56% for the more conservative lower cut-offs, and ranged between 71-82% for the higher clinical cut-offs as used by Improving Access to Psychological Therapies (IAPT). Across the four studies, 83-96% of clients had 'reliably improved' (88-94% on trauma-specific questionnaires), with 4-17% having no reliable change on those questionnaires. The mean number of HG treatment sessions ranged from 5-6.5 sessions (range 1-24 sessions), with between 73% and 84% of participants completing treatment in six sessions or less.

Conclusions: These preliminary results indicate that HG Rewind appears to be a promising trauma treatment in a variety of settings. A

Open Peer Review

Approval Status

	1	2
version 2 (revision) 07 Feb 2022		 view
version 1 16 Oct 2020	 view	

1. **Richard Gray** , The Research and Recognition Project, Corning, USA
Fairleigh Dickinson University, Madison, USA
2. **Olga Winkler** , University of Alberta, Edmonton, Canada

Any reports and responses or comments on the article can be found at the end of the article.

randomised controlled trial is now required to determine the efficacy of this treatment.

Keywords

Human Givens, Rewind, exposure, imaginal exposure, PTSD, posttraumatic stress, practice-based, reliable change

Corresponding author: Shona Adams (shonaa@sfu.ca)

Author roles: **Adams S:** Conceptualization, Data Curation, Formal Analysis, Methodology, Project Administration, Validation, Visualization, Writing – Original Draft Preparation; **Allan S:** Conceptualization, Formal Analysis, Methodology, Project Administration, Supervision, Writing – Review & Editing; **Andrews W:** Data Curation, Investigation, Methodology, Resources; **Guy K:** Data Curation, Investigation, Resources; **Timmins J:** Data Curation, Investigation, Resources; **Barr E:** Data Curation, Investigation, Resources

Competing interests: There are no financial competing interests. Five of the six authors are trained as Human Givens (HG) therapists (Dr Steven Allan is not a HG therapist).

Grant information: The author(s) declared that no grants were involved in supporting this work.

Copyright: © 2022 Adams S *et al.* This is an open access article distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

How to cite this article: Adams S, Allan S, Andrews W *et al.* **Four practice-based preliminary studies on Human Givens Rewind treatment for posttraumatic stress in Great Britain [version 2; peer review: 1 approved, 1 approved with reservations]** F1000Research 2022, 9:1252 <https://doi.org/10.12688/f1000research.25779.2>

First published: 16 Oct 2020, 9:1252 <https://doi.org/10.12688/f1000research.25779.1>

REVISED Amendments from Version 1

We have changed all references to “recovery rates” in our studies to “below cut-off rates”, “below the clinical cut-off” or “within the normal range after treatment”.

There were not follow-up intervals in three of the four studies. Although this was already mentioned in the Limitations section and also in future research recommendations in the Discussion, this information has been added to the Results section and to Table 2.

The error in Table 3 and Table 4 for describes the “IES” used in Study 2 instead of the “IES-E” which is described in the methods section for Study 2. A check was done with the data and confirmed that the “IES-E” was used in this study. Instead of using clinical cut-offs for IES, the clinical cut-offs for IES-E was corrected in Table 3 and the number below the correct clinical cut-off in Table 4 was recalculated and triple checked and corrected.

We modified the statement in the discussion to state “There was no reliable deterioration reported in any of the studies at the end of treatment.” A statement in the discussion about reliable deterioration has been removed from the Abstract and Discussion as requested because there was inadequate follow-up to draw conclusions about reliable deterioration.

In order to include the review of RCTs for military-related PTSD (Steenkamp *et al.*, 2015) we have added a section on veterans in the Discussion that includes this reference and some more recent studies and relating to this population and to Study 2 in this paper.

An additional statement was also added to the Limitation section. “All studies only collected binary data on gender (i.e. male and female), thereby excluding information relating to gender non-conforming people who are disproportionately by trauma (e.g. Bauer & Scheim, 2015; Herman *et al.*, 2014; James *et al.*, 2016).”

Any further responses from the reviewers can be found at the end of the article

Introduction

Post traumatic stress (PTS) refers to clinical symptoms resulting from trauma and includes both symptoms and traumatic events that may not meet diagnostic criteria for posttraumatic stress disorder (PTSD). Traumatic events can result in PTSD but also depression, anxiety disorders, and substance misuse disorder (Brady *et al.*, 2000; Schmidt, 2015). Survivors of significant traumas who do not meet all the DSM IV criteria for PTSD (American Psychiatric Association [APA], 1994) can still suffer clinically significant impairment (Cukor *et al.*, 2010) and can respond well to PTSD treatment (Dickstein *et al.*, 2013; Handley *et al.*, 2009). In addition, events that did not meet the DSM IV criteria of PTSD could be the content of intrusive images (Brewin *et al.*, 2010; Day *et al.*, 2004) and generate PTSD-like symptoms (Mol *et al.*, 2005). This paper presents preliminary evidence for the effectiveness of a trauma-focused treatment called Rewind to treat PTS and PTSD.

Human Givens (HG) Rewind is a little known trauma treatment that was developed in the United Kingdom. It is a trauma-focused technique that utilises graded imaginal exposure in which the levels of psychological distancing from the trauma are graded during the exposure (Adams & Allan, 2019a). After explaining the technique and ensuring the trauma memory has

been activated, the client is deeply relaxed and then ‘observes’ themselves watching an imaginary video of the traumatic event from before the event started to when the event is over, then ‘watches’ the video of the traumatic event, and finally experiences the traumatic event very quickly backwards (which is where “Rewind” gets its name)¹. HG Rewind is part of HG therapy and was adapted by Griffin & Tyrrell (2004) from a technique called Visual Kinesthetic Dissociation (VKD; Bandler & Grinder, 1979). The HG version of Rewind differs from the Muss version of Rewind that was also developed from VKD in Great Britain (Adams & Allan, 2018; Muss, 2002), in that the HG protocol includes steps to keep arousal levels relatively low during exposure. Reconsolidation of Traumatic Memories (RTM) is another trauma treatment technique that is derived from VKD (Gray & Bourke, 2015; Gray *et al.*, 2019; Gray *et al.*, 2020; Tylee *et al.*, 2017).

Several possible mechanisms explaining Rewind have been proposed (see Adams & Allan, 2018; Adams & Allan, 2019a; Adams & Allan, 2019b). Memory reconsolidation and extinction were suggested as mechanisms underlying VKD (Gray, 2010; Gray & Liotta, 2012). In memory reconsolidation the traumatic memory is retrieved and modified with updated non-fearful information (Schiller *et al.*, 2010), and in extinction the prefrontal cortex inhibits the amygdala (Schiller *et al.*, 2013) and the fear memory is only masked. Griffin & Tyrrell (2004) acknowledge the importance of REM sleep, the observing self, but proposed that that reduced arousal was the critical factor in processing trauma memories. Reduced arousal during exposure may keep the arousal within the ‘window of tolerance’. Adams & Allan (2019b) noted that psychological distancing is graded during exposure in Rewind. Psychological distancing involves observing the trauma from the perspective of an observer (Koenigsberg *et al.*, 2010) rather than re-experiencing the trauma memory, and psychological distancing has been shown to be an effective method for emotional regulation (Ochsner & Gross, 2008) and has been used in other trauma treatments (e.g. Ehlers & Clark, 2000; Sloan *et al.*, 2012; Sloan *et al.*, 2013). Adams & Allan (2019a) summarised several mechanisms that might be involved in the reprocessing of the traumatic memory, including the contextualisation of the traumatic event, activating the ‘observing self’ or ‘distancing’ (Griffin, 2005; Okhai, 2005), and that experiencing the trauma backwards during the ‘rewind’ stage may utilise a similar EMDR mechanism of ‘split attention’ (Lee *et al.*, 2006; Lee *et al.*, 2017) or the ‘orienting and relaxation response hypothesis’ (Pagani *et al.*, 2017). For more details regarding the physiological mechanisms underlying memory consolidation, sleep, and connectivity between the amygdala and the prefrontal cortex, see Feng *et al.* (2018) and Murkar & De Koninck (2018) and the link between the orienting response and REM sleep in processing memories see Pagani *et al.* (2017).

Rewind differs from other trauma techniques in that multiple traumas can be treated in one session (Guy & Guy, 2009; Murphy, 2007) making it potentially cost effective. As Rewind

¹ A more detailed description of the Rewind technique is provided later in this paper.

utilises imaginal exposure, the trauma does not need to be discussed in detail during treatment and preliminary evidence suggests that this may make treatment more accessible for people with shame-based traumas (Adams, 2017, pp. 136-137, 141). Potential increased treatment accessibility for some people and possible cost effectiveness suggest that Rewind is worthy of further investigation.

HG Rewind is one of the techniques used in HG therapy. HG therapy is a brief solution-focused therapy that is based on a biopsychosocial model in which nine unmet basic emotional needs create heightened arousal to enable us to meet our needs (Griffin & Tyrrell, 2004). They proposed that we have natural resources to aid us that are adaptive but can also cause difficulties, such as the activation of the fight and flight response when we are not in danger. HG therapy integrates effective components of other therapies, such as anxiety management strategies, goal setting, skills training, use of imagery and imagery rescripting, metaphors and therapeutic use of language, graded exposure, and informally challenging negative thoughts, but within a different theoretical framework. Interventions to support fulfilling unmet emotional needs can include goal setting, social interventions like debt advice or housing provision, social skills training to facilitate socialising, goal setting to assist attaining a sense of status, finding a new job, and integrating into the community. Although not the main focus of treatment, some of these are recognised as part of a treatment programmes for those recovering from PTSD or PTS (e.g., Kintzle *et al.*, 2018; Koven, 2018; Murphy, 2016), and HG therapy provides a psychological framework and rationale for these interventions. See Yates & Atkinson (2011) and Adams & Allan (2019a) for a more detailed description of basic HG techniques.

Evidence for effectiveness in practice-based studies

At present, the evidence for the effectiveness of Rewind is based on practice-based evidence. A literature review by Corp *et al.*, (2008) only found individual case descriptions and two wider studies. The first of these studies by Guy & Guy (2003) reported on all those treated with Rewind during a specified period ($N=30$), with 40% rating the treatment as 'extremely successful', 53% rating it as 'successful', 7% rating it as acceptable, and no one rating the treatment as 'poor' or 'a failure'. However, they did not use standardised questionnaires. The second of these studies by Murphy (2007) used a qualitative methodology to explore the effectiveness of a single Rewind treatment session. All those treated with Rewind at a trauma clinic were included ($N=47$). They reported that all those treated experienced symptom reduction with none meeting the criteria for PTSD after treatment, whether treated for single or multiple traumas. They also reported the Rewind could be used successfully as a standalone treatment or in conjunction with other treatments. Results from a more recent qualitative study using a single Rewind treatment session suggested that Rewind treatment may make treatment more accessible for shame-based traumas as details of the traumas do not need to be discussed during the treatment (Adams, 2017, pp. 136-141). A later uncontrolled study by Guy & Guy (2009) reported on 97

clients treated with the single HG Rewind treatment session. Mean scores on the Impact of Events Scale – Extended version (IES-E; Tehrani *et al.*, 2002) reduced from 68 pre-treatment (the *severe* range) to 18 post-treatment (the *normal* range). However, only the pre- and post-treatment data were provided with no indication of effect sizes or standard deviations, making it difficult to compare their findings with other studies. Burdett & Greenberg (2019) reported 52% ($N=504$) of war veterans with planned endings treated with Human Givens therapy (42% of the whole sample) were below the clinical cut-off of 11 on Clinical Outcomes in Routine Evaluation (CORE-10; Connell & Barkham, 2007) after treatment. Of these, 42% attended more than one session and 5% attended 6 or more sessions. In a separate study comparing a single Rewind session with a treatment-as-usual session, data capture rates, means and effect sizes, as well as 'reliable improvement' and 'recovery rates' were reported (Adams & Allan, 2019b). After a single Rewind session ($N=44$), 38% were below the clinical cut-off of 11 on CORE-10, with a pre-post effect size of 1.86.

Three studies have explored the effectiveness of HG therapy overall, have been reported (Andrews *et al.*, 2011; Andrews *et al.*, 2013; Tsaroucha *et al.*, 2012). None of these three studies reported how many clients were treated with the Rewind technique. The first two of these studies were large trans diagnostic practice based studies that reported effect sizes as well as 'recovery rates' and 'reliable improvement rates' in line with the Improving Access to Psychological Therapies (IAPT) protocol (Clark *et al.*, 2009). The Andrews *et al.* (2011) practice-based study included 3 therapists and 124 clients while the Andrews *et al.* (2013) study included 46 therapists at multiple sites, with 3,885 clients. Treatment was completed in an average of 3.75 treatment sessions (Andrews *et al.*, 2011) and 4.69 treatment sessions (Andrews *et al.*, 2013), excluding the initial assessment session. The pre-post treatment effect sizes were 1.39 (Andrews *et al.*, 2011) and 1.58 (Andrews *et al.*, 2013), both slightly above the IAPT effect size of 1.22 (Clark *et al.*, 2009). Tsaroucha *et al.* (2012) compared HG treatment for depression with a treatment-as-usual control group in a non-randomised study and reported similar improvement rates between treatment groups but HG therapy requiring an average of 2 rather than 4 treatment sessions to achieve similar results. Thus, there is some preliminary evidence that HG therapy may be a promising treatment but it is unclear how frequently the Rewind technique was utilised in these studies.

In summary, Rewind is a relatively new treatment for PTS in which the trauma does not need to be discussed in detail and multiple traumas can be treated in one session. HG therapy that incorporates the Rewind technique may require fewer sessions and therefore might be cost effective, but more research is needed to record the number of treatment sessions for PTS. Practice-based evidence across different treatment settings has evolved to report 'recovery rates', the percentage of those below the clinical cut-off after treatment, and 'reliable improvement' as well as pre-post treatment effect sizes, and practice-based data capture rates have improved by using questionnaires in

every session (see [Clark *et al.*, 2009](#)). However, this data has not been consistently reported in previous Rewind studies and those earlier findings have yet to be replicated in different treatment settings.

This paper briefly describes the evidence from four practice-based preliminary studies for HG Rewind. The aim of this paper was to attempt to replicate findings from previous preliminary studies in a variety of settings. The average number of treatment sessions, exclusion criteria, data capture rates, effect sizes, below cut-off rates, and reliable improvement and deterioration are reported for each study.

Methods

Design

Each of the four studies were observational prospective cohort studies. A session-by-session monitoring system was used where clients were asked to complete the questionnaires in every session in order to provide greater data capture rates ([Clark *et al.*, 2009](#); [Gillespie *et al.*, 2002](#)). The scores from the last treatment session were used as the 'end of treatment' score.

Statistical analysis

Means, standard deviations and effect size were reported for each study. Cohen's *d* was used to calculate the effect size, subtracting the post-treatment mean from the pre-treatment mean and dividing the outcome by the pooled standard deviation ([Clark *et al.*, 2009](#)) using Microsoft Excel. Effect sizes were interpreted using [Cohen's \(1988\)](#) suggested convention of 0.2 indicating a small, 0.5 a medium, and 0.8 a large effect size and compared to the CBT benchmark IAPT effect size of 1.22 ([Clark *et al.*, 2009](#)) that was used by [Andrews *et al.* \(2011\)](#) and [Andrews *et al.* \(2013\)](#).

A within-subject analysis was used to calculate 'below clinical cut-off rates', 'reliable improvement rates', 'no reliable change rates, and 'reliable deterioration rates'. These measures of effectiveness (IAPT, 2012) have become more popular as IAPT has become established in Great Britain. 'Below cut-offs' was defined as scores below the clinical cut-off on standardised questionnaires at the end of treatment and are considered in the normal range. Participants were categorised as having 'reliable improvement', 'no reliable change', or 'reliable deterioration' using the Reliable Change Index (RCI) for each questionnaire. The RCI refers to the amount of change that is not likely to be due to chance. The RCI was calculated for those scales where the RCI was unknown using the [Jacobson & Truax \(1991\)](#) formula.

Intervention: Brief description of the Rewind technique

The Rewind technique involves graded imaginal exposure to the trauma(s), while keeping arousal levels relatively low. The [Griffin & Tyrrell \(2001\)](#) protocol was used. For a more detailed description and discussion of HG Rewind, see [Adams & Allan \(2019a\)](#). HG Rewind has several stages:

1. **Preparation and activation of the trauma memory.** The therapist briefly explains the procedure and helps the client

create an imaginary 'video' that will be used later in the process. The video starts with a good memory. Then for each trauma or trigger, the video starts before and ends when the incident is over, and then the video ends with a recent good memory.

2. **Relaxation.** The therapist guides the client to become deeply relaxed. This includes imagining being in a relaxed place.

3. **Double distancing exposure.** In their imagination, the client watches themselves watch the imaginary 'video' backwards and forwards until they feel calm when watching themselves.

4. **Single distancing exposure and association exposure.** The client watches the imaginary video with the trauma memories backwards and forwards until they are calm when watching it. For the association exposure, the client is then guided to re-experience all of the trauma sensations very quickly backwards by imagining they are being pulled backwards very quickly through the memory from when the trauma was over to the beginning before the trauma started. This is repeated until the scenes evoke no anxiety.

5. **Rehearsal (optional).** If relevant, the client is asked to visualize themselves reacting to a similar situation in the future in a way that the client would like to respond.

6. **End.** The client is re-oriented to the present.

Procedure and measures

The procedures and measures used in each study are described below. Data collected at each of the sites was part of the routine clinical care, and as such did not require ethical approval from the University of Leicester. However, all participants provided informed consent for their anonymised data to be used to study the effectiveness of their treatment.

STUDY 1: Rewind treatment outcomes for staff in a police force

The purpose of this preliminary study was to investigate the effectiveness of the Rewind treatment for PTS in a police force setting. Officers and staff in the police force were referred for treatment by the Occupational Health advisors, and all those who were referred were treated with no exclusion criteria. Any staff with a possible diagnosis of PTSD were first seen by the Forces Medical Advisor for a diagnosis before making the referral for Rewind treatment. All the clients treated using the Rewind technique in a specific police force between 2009 and 2013 were included. All those treated by the service completed the CORE-OM before and after treatment. Those with a diagnosis of PTSD or PTS were also given the IES-R before and after treatment. The [Griffin & Tyrrell \(2004\)](#) HG treatment was used with the [Griffin & Tyrrell \(2001\)](#) protocol for the Rewind technique.

Impact of Events Scale – Revised version (IES-R). The IES-R is a modified version of the IES ([Horowitz *et al.*, 1979](#)),

and is a questionnaire designed to measure symptoms of traumatic stress. The IES has an avoidance and intrusion subscale. Weiss & Marmar (1997) added an intrusion subscale with seven additional items as part of the IES-R to conform with DSM IV (APA, 1994) PTSD criteria. There are 'avoidance', 'hyper-arousal', and 'intrusion' subscales that are added together to give a total score. In the IES-R, the respondent answers the question in relation to the impact of a specific traumatic event on symptoms using a 0–4 rating scale. The IES-R has 22 items and can generate a total score of 88. A clinical cut-off of 33 has been established (Creamer *et al.*, 2003). The RCI for the IES-R is 9 (IAPT, 2011).

Clinical Outcomes for Routine Evaluation (CORE-OM). The CORE-OM was designed in the UK by Evans *et al.* (2000) to measure outcomes for psychological therapies. It is a 34-item questionnaire, where items are scored from 0–4 over the past week, and cover subjective well-being, symptoms, functioning, and risk. It has good internal consistency and test-retest reliability (Evans *et al.*, 2002). Scores of 8.5–12.5 are mild, 12.75 – 16.75 are moderate, 17–21 are moderate to severe, with scores over 21 considered to be severe. An RCI on the CORE-OM is 5 or more (Connell & Barkham, 2007). The recommended cut-off between clinical and non-clinical populations for the CORE-OM is 10 (Connell *et al.*, 2007).

STUDY 2: Treatment outcomes for war veterans

The purpose of this preliminary study was to investigate the effectiveness of the Rewind treatment for war veterans suffering from PTS in clinical settings using 43 therapists. All war veterans who self-referred between 24 April, 2014 and 14 January, 2015 for treatment to a national war veteran charity providing HG therapy were included. The charity then referred the veterans to fully qualified and registered local HG therapists. The charity registered clients online on the **Pragmatic Research Tracker** when the referral was made, ensuring all those referred to the service were eligible to be included. HG therapy included the Griffin & Tyrrell (2001) Rewind treatment protocol for trauma. All the therapists were trained HG therapists and on the HG national register.

Impact of Events Scale –Extended Version (IES-E). The IES-E is a modified version of the Impact of Events Scale (IES; Horowitz *et al.*, 1979). Tehrani *et al.* (2002) modified the IES by adding a question about sleep to the 'intrusion' subscale and adding a 'hyper-arousal' subscale to make it more in line with the DSM IV (APA, 1994) PTSD criterion. The respondent answers the questions in relation to the impact of a specific traumatic event on symptoms on a 0–4 rating scale. There are 'avoidance', 'hyper-arousal', and 'intrusion' subscales which are added together to give a total score. There are 23 items and the maximum score is 92. Using a UK sample, Tehrani *et al.* (2002) found the reliability and discriminant validity of the IES-E to be good. The mean Cronbach's alpha for the three subscales was 0.92, and the standard deviation from the norm was 12.6. Using the Jacobson & Truax (1991) formula, the RCI for the IES-E is 9. Tehrani *et al.* (2010) determined the clinical cut-off for PTSD

for the IES-E was 50 and above, with scores of 40–49 indicating moderate symptoms still requiring treatment, scores of 30–39 indicating mild symptoms, and scores of less than 30 being in the normal range.

Clinical Outcomes in Routine Evaluation (CORE-10). The CORE-10 (Connell & Barkham, 2007) is a brief 10 item standardised questionnaire measuring psychological distress that is based on the longer 34 item CORE-OM (Barkham *et al.*, 2001). Each self-report item is rated on a 0–4 scale, with a total score of 40. CORE-10 has a high correlation with CORE-OM (Adams, 2017; Andrews *et al.*, 2011; Andrews *et al.*, 2013). The clinical cut-off for CORE-10 is 11, with the specific cut-off for depression of 13 (Barkham *et al.*, 2013; IAPT, 2011). The RCI is 6 or more (Barkham *et al.*, 2013).

STUDY 3: Rewind treatment in a private PTSD treatment clinic

The purpose of this preliminary study was to examine the clinical effectiveness of a single Rewind session to treat PTS in a clinical setting. All clients who were referred to the PTSD treatment clinic between 2009 and 2014 were included and accepted for treatment with no exclusion criteria. The Griffin & Tyrrell (2001) Rewind protocol for treating trauma was used. This treatment session was part of the HG therapy that they received. The Impact of Events Scale –Extended Version (IES-E) was administered to clients before the Rewind treatment session and in the follow-up session, 1–2 weeks after the treatment.

Impact of Events Scale –Extended Version (IES-E). See above.

STUDY 4: Rewind treatment in a private practice

The purpose was to evaluate the effectiveness of HG therapy for treating PTS in a fourth clinical setting. All clients who were referred to this private practice were treated with Rewind between February 2010 and February 2015 were eligible for inclusion in this study. Of the 113 clients treated during this period, 38 were treated with HG therapy without the Rewind and 75 were treated with HG therapy including Rewind. There were no exclusion criteria, with all those being referred for treatment being accepted for an assessment. The CORE-10 (study 4a) and the GAD-7 and PHQ-9 (study 4b) were administered at the assessment and at every subsequent treatment session. The questionnaires used in this practice changed during the data collection period to reflect changes in practice in the local area. The Griffin & Tyrrell (2001) Rewind protocol was used.

Clinical Outcomes in Routine Evaluation (CORE-10). See above

Generalised Anxiety Disorder (GAD-7). The GAD-7 is a self-report questionnaire to screen and measure the severity of generalised anxiety disorder (Spitzer *et al.*, 2006). It has 7 items that are rated on a 4 point scale. The scoring range on the GAD-7 is 0–21, with scores of 15–21 indicating severe anxiety, scores of 11–15 indicating moderate anxiety, and scores of 5–10 indicating mild levels of anxiety. The clinical cut-off for anxiety on the GAD-7 is 8 and above, and the RCI is 4 or more (Clark & Oates, 2014)

Patient Health Questionnaire (PHQ-9). The PHQ-9 is a self-report questionnaire to screen and measure the severity of depression (Kroenke *et al.*, 2001). It has 9 items that are rated on a 4 point scale, with scores ranging from 0–27. Scores of 20–27 indicate severe depression, scores of 15–19 indicate moderately severe depression, scores of 10–14 are in the moderate range, scores of 5–9 are in the mild range, with the clinical cut-off for depression being 10 and above. The RCI is 6 or more (Clark & Oates, 2014).

Results

The anonymised data is available as underlying data.

Participants

Demographics are reported in Table 1. There were approximately 30% males in two of the studies and 87% male in the war veteran study. The gender of participants in one study was unknown. The average age in the studies ranged from 39 years to 46 years, with age in one study not recorded.

Exclusion criteria, pre-assessment attrition rates, data capture rates, dropout rates and follow-up

The client pathways for all studies, including those referred, assessed, started treatment, completed treatment and data capture rates for ‘intention-to treat’ and those who completed treatment for all studies are summarised in Table 2. Studies 1, 2, and 3 treated everyone that was assessed. Clients were excluded from these studies if they were under 18 years old ($n=5$) or were below the clinical cut-off before treatment commenced ($n=15$). The intention-to-treat data capture rates ranged from 80% to 100%. The data capture rates for those who completed treatment were 100% for three studies and 82% for Study 2. There was a 1-2 week follow-up in Study 3 and no follow-ups in the other studies.

Number of sessions

Table 1 shows the number of sessions in each study. The results for Study 3 are based on a single Rewind session, but participants had other HG therapy treatment sessions. The mean number

of sessions in all the studies ranged from 5 to 6.5, with between 73% and 84% completing treatment in 6 sessions or less. The number of treatment sessions ranged from one to 24 sessions.

Means and standard deviations for pre- and post-treatment scores, effect sizes and RCIs

Results for those who completed treatment in all of the studies are presented in Table 3. This includes the number of those who completed treatment, mean and standard deviations for pre- and post-treatment scores with the clinical cut-off for that questionnaire, the mean change in scores and the RCI for the questionnaire, and the within-group effect size. The mean pre-treatment scores were either in the *severe* range or in the *moderately-severe* range on all questionnaires. Many of the questionnaires had both a higher and a lower clinical cut-off. The mean post-treatment scores were below the higher clinical cut-off in all of the studies and below the lower clinical cut-off in Studies 1 and 4b. The change in scores for all of the studies was higher than the RCI. There was a large within-group effect size for each of the studies.

Below cut-offs rates, reliable improvement, no reliable change and reliable deterioration

The below clinical cut-off rates, ‘reliable improvement’ rates, ‘no reliable improvement’ and ‘reliable deterioration’ for participants who completed treatment are presented in Table 4. Table 4 reports the results of different versions of the IES, a trauma questionnaire, with both the higher and lower clinical cut-offs included. With the trauma questionnaires, the ‘below cut-off’ rates ranged between 47% – 53% for the lower cut-offs (*normal* range) and 81%–89% for the higher clinical cut-offs. Using the CORE questionnaires the ‘below cut-off’ rates ranged from 49% – 59% for the lower clinical cut-off and 58% – 74% for the higher IAPT clinical cut-off.

The improvement rate of those who were either above the RCI or below the clinical cut-off after treatment ranged from 88% – 90% for trauma symptoms, and 83% – 96% on the other

Table 1. Demographics and number of sessions.

	Study 1	Study 2	Study 3	Study 4a	Study 4b
<u>Demographics</u>					
Sample size	N=52	N =79	N=77	N =54	N =50
Male/female ratio [†]	-	87/8	31 / 66	30 / 70	30 / 69
Average age	-	40 (10.1)	39 (9.8)	45 (18.9)	46 (15.9)
<u>Number of sessions</u>					
Mean (SD)	5.0 (4.2)	5.1 (1.6)	6.5 (1.7)	5.3 (3.9)	6.4 (5.3)
Range	1 – 20	-	2 – 12	2 – 21	1 – 24
% 6 sessions or less	83%	84%	79%	78%	73%

[†]Note the gender of some participants was not recorded.

Table 2. Exclusion criteria, dropout rates and data capture rates for all studies.

	Study 1	Study 2	Study 3	Study 4a and 4b
Service exclusion criteria	No	No	No	No
Number referred	65	106	77	133
Pre-assessment attrition rate	0%	24% (N=25)	0%	0%
Number assessed	65	81	77	133
Treatment exclusion criteria	No	No	No	Yes† (N =3)
Number starting treatment	65	81	77	130
Number excluded from study‡	0	2‡	0	23§
Intention-to-treat (ITT)	65	79	77	107
Data capture rate for ITT	80% (N =52)	82% (N =65)	100% (N =77)	87% (N =93)
Treatment dropout rate	20%	13%	0%	13%
Number completing treatment (CT)	52	69	77	93
Data capture rate for CT	100% (N =52)	94% (N =57)	100% (N =77)	100% (N =93)
Follow-up	None	None	1–2 weeks	None

† One person died, two did not have cognitive capacity during the assessment.

‡ Two were below the clinical cut-off prior to treatment.

§ Thirteen were under the clinical cut-off prior to treatment, five wanted consultation about a family member not individual treatment, and five were under 16 years old.

Table 3. Analysis of treatment completers: Sample size, mean post-treatment scores with clinical cut-off, mean change in scores and reliable change index, and effect size for questionnaires in each study.

	Study 1		Study 2		Study 3	Study 4a	Study 4b	
	IES-R	CORE-OM†	IES-E	CORE-10†	IES-E†	CORE-10†	GAD-7†	PHQ-9
Sample size for finished treatment	17	52	46	53	77	46	46	28
Pre-treatment mean	65.7‡	23.6‡	56‡	25.3‡	65.7‡	24.1‡	16.5‡	18.2
Pre-treatment standard deviation	7.62	5.8	11.6	5.8	12.8	7.1	4.6	5.1
Post-treatment mean	32.2§	8.3§	27.9¶	11.9¶	34.6¶	11.2¶	5.7§	6.8§
Post-treatment standard deviation	20.8	5.6	17.4	7.9	18.6	6.5	3.9	4.8
Clinical cut-offs	33	<10	<30	<11	<30	<11	<8	<10
			<50	<13	<50	<13		
Mean changes in scores	32.8	15.3	28.9	13.2	33.2	16.5	16.8	11.7
Reliable Change Index (RCI)	9+	5+	9+	6+	9+	6+	4+	6+
Mean change above RCI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cohen's <i>d</i> effect size	2.42	2.68	1.90	2.36	2.08	2.42	2.57	2.36

† = Primary questionnaire of study; ‡ = In the severe range for the questionnaire; § = Below clinical cut-off; ¶ = Below clinical higher cut-off but above lower cut-off.

Table 4. Below clinical cut-off rates and improvement rates (recovered and/or reliably improved), no reliable change and reliable deterioration for Rewind treatment on the IES, IES-E, IES-R, CORE-10, CORE-OM, GAD-7 and PHQ-9, including both the higher and lower clinical cut-offs where relevant, for those who completed treatment.

Study	Study 1		Study 2				Study 3		Study 4a		Study 4b	
Questionnaire	IES-R	CORE-OM	IES		CORE-10		IES-E		CORE-10		GAD-7	PHQ-9
Cut-off score	33	10	30†	50†	11	13‡	30†	50†	11	13‡	8	10‡
Sample size	N=17	N=52	N=46	N=46	N=53	N=53	N=77	N=77	N=46	N=46	N=46	N=27
Below cut-off rate	47%	67% (n=35)	50% (n=35)	89% (n=41)	49% (n=26)	58% (n=31)	53% (n=40)	81% (n=62)	59% (n=25)	74% (n=32)	72% (n=33)	96% (n=26)
Improvement rate	88%	96% (n=50)	89% (n=41)	89% (n=41)	83% (n=44)	85% (n=45)	90% (n=69)	90% (n=69)	87% (n=40)	74% (n=32)	93% (n=43)	89% (n=24)
No reliable change	11%	4% (n=2)	11% (n=5)	11% (n=5)	17% (n=9)	15% (n=8)	10% (n=8)	10% (n=8)	13% (n=6)	13% (n=6)	7% (n=3)	11% (n=3)
Reliable deterioration	None	None	None	None	None	None	None	None	None	None	None	None

† Scores of < 30 are within the *normal* range on the IES-E and scores of > 50 indicate probable PTSD (Tehrani *et al.*, 2010).

‡ Clinical cut-offs for depression (Barkham *et al.*, 2013; IAPT, 2011; Kroenke *et al.*, 2001).

questionnaires. That is, between 11% –17% of the veterans and 4% – 13% of the other clinical groups in these studies had no ‘reliable improvement’. There was no ‘reliable deterioration’ in any of the studies.

Discussion

The aim of this paper was to report the results of four practice-based preliminary studies on HG Rewind in Great Britain. In these four studies, a total of 274 clients completed treatment by 46 therapists and had complete data, with a data capture rate of 80–100%. The mean pre-treatment scores were in the *severe* or *moderately-severe* range on all questionnaires. Mean number of treatment sessions ranged from 5–6.5, with 73–84% of treatment being completed in 6 sessions or less. The within-group effect sizes ranged from 1.90–2.68, with the lowest effect sizes in the study with 43 therapists. The percentage of clients who were in the *normal* range after treatment ranged from 47–59% for the more conservative lower cut-offs, and ranged between 58–72% for the higher clinical cut-offs used in IAPT. Across the studies, 83–96% had ‘reliably improved’ (88–90% on trauma-specific questionnaires), with around 10% (4–17%) having ‘no reliable change’ on those questionnaires.

Number of treatment sessions

These results are similar to previous studies using HG therapy. The results of Study 3 are from a single Rewind treatment session, with 45% of the sample was below the clinical cut-off of 30 on the IES-E after the Rewind treatment. Other preliminary studies have found that some clients do not require further treatment after a single Rewind session. Of those treated with Rewind in a trauma clinic in Northern Ireland (N=44), 61% of those treated were reported as only needing a single Rewind session (Murphy, 2007). Similarly, of those treated

with a single Rewind session at a pilot NHS trauma clinic (N=27), 37% did not need further treatment (Adams, 2017, p.133) and in a separate study (N=44), 38% were below the clinical cut-off of 11 on the CORE-10 after a single Rewind session (Adams & Allan, 2019b). Burdett & Greenberg (2019) reported 58% (N=504) only attended one session, although it is unclear how many of these did not require further treatment. With the emphasis on cost-effective treatment the possibility of a stepped care approach to trauma treatment might be considered, with a single trauma-focussed exposure treatment being offered initially to those who might benefit from it before being stepped up to currently recommended treatments if necessary.

While a single treatment session can be effective, most clients require more than one HG treatment session. In spite of this, the mean number of HG treatment sessions in these four pilot studies ranged from 5–6.5 sessions (range 1–24 sessions). This is similar to other HG studies. Guy & Guy (2009) treated their clients in six sessions or less. Andrews *et al.* (2013) reported an average of 4.69 treatment sessions (N=3,885) and Andrews *et al.* (2011) reported an average of 3.75 treatment sessions (N=124). It is important to note that across the four studies presented here, 16–27% of these clients required more than six sessions. Burdett & Greenberg (2019) reported 5% (N=504) attended six or more sessions. Thus, although the majority of clients treated with HG therapy were treated within six treatment sessions, it is also clear that some clients require more sessions.

Effect sizes and ‘below cut-off’ rates

The within-group treatment effect sizes across the four studies ranged from 1.90–2.68 for those who completed treatment, above the CBT benchmark IAPT effect size of 1.22

(Clark *et al.*, 2009). These effect sizes are in line with other HG studies, where the pooled effect sizes for the IES-E were 2.13 (Guy & Guy, 2009) and for the CORE-10 were 1.86 (Adams & Allan, 2019b), 1.58 (Andrews *et al.*, 2013), and 1.39 (Andrews *et al.*, 2011).

‘Below cut-off’ rates using CORE-10 in these studies ranged from 49–59%. Similarly, 56% ($N=124$) and 54% ($N=3,885$) were below the CORE-10 clinical cut-off of 11 after HG treatment (Andrews *et al.*, 2011 and Andrews *et al.*, 2013 respectively). For war veterans completing treatment, 52% ($N=504$) were below the CORE-10 clinical cutoff after treatment (Burdett & Greenberg, 2019). The IES-E clinical cut-off for probable PTSD is 50 and above, with scores less than 30 considered in the normal range. In Study 2, 89% were below the higher IES-E cut-off of 50 after treatment with 50% in the *normal* range after treatment and in Study 3, 81% were below the higher IES-E cut-off of 50 after treatment with 53% in the *normal* range. While these scores are not directly comparable, in Study 1, 47% were in the *normal* range with a score below 33 on the IES-R. Nonetheless, the rates of those in the *normal* range after HG treatment exceed the UK Department of Health’s target for IAPT services of a 40% recovery rate (IAPT, 2012).

In summary, the results of these four studies seem to be in line with previous evidence for HG therapy, both in terms of outcomes and the number of sessions.

War veterans

In relation specifically to war veterans, Study 2 ($n=79$) found a within-group effect size of 1.9, with the pre-treatment mean of 56 which is above the clinical cut-off for probable PTSD of >50 on the IES-E, and the post-treatment mean being 27.9 which is within the *normal* range of <30 on the IES-E, and had a dropout rate of 13%. In a review of military-related PTSD, Steenkamp *et al.* (2015) reported within-group effect sizes for Cognitive Processing Therapy (CPT) were 0.78–1.10 and for Prolonged Exposure (PE) was .80. They reported that for CPT 3–40% no longer had the diagnosis of PTSD post-treatment and that this data was not available for PE. Dropout rates for CPT were 13–39% and for PE were 9–25%. Different PTSD questionnaires were used in these studies and with no head-to-head comparisons, direct comparisons between these studies and Study 2 cannot be made.

Since this review, Burdett & Greenberg (2019) reported 42% of war veterans ($n=504$) treated with Human Givens therapy (including Rewind) who were above the clinical cut-off of 11 on CORE-10 pre-treatment, were below the clinical cut-off after treatment. Of these, 42% attended more than one session and 5% attended 6 or more sessions. Reconsolidation of Traumatic Memories (RTM) is similar to Rewind and also derived from VKD, comprising of three 120 minute sessions. In a pilot study with 30 veterans, Gray & Bourke (2015) found a within-group effect size of 2.9. In a RCT with 30 male veterans, 88% did not meet diagnostic criteria for PTSD and were below the clinical cut-off post-treatment, with 73% in

complete remission at one year follow-up (Tylee *et al.*, 2017). In a RCT with 74 male veterans, Gray & colleagues (2019) reported 94% were below the clinical cut-off at one year follow-up. Finally, a RCT with 30 female veterans found 96% reported no intrusions and a significant reduction in PTSD symptom rating scales after treatment compared to 0% of the controls, and this was maintained at one year follow-up, with a 3% dropout rate (Gray *et al.*, 2020). Taken together, Rewind and RTM appear to be promising treatments for military-related PTSD.

Limitations

While these studies had high data capture rates and low exclusion criteria, subjects were not randomized nor were control groups used. As such, no firm conclusions can be drawn about the effectiveness of the treatment. Data on ethnicity was not collected. All studies only collected binary data on gender (i.e. male and female), thereby excluding information relating to gender non-conforming people who are disproportionately by trauma (e.g. Bauer & Scheim, 2015; Herman *et al.*, 2014; James *et al.*, 2016). Studies all relied on self-report measures. Referring parties made all PTSD diagnoses and were not part of the study protocol. In addition, not all of the participants had a PTSD diagnosis, and therefore no conclusions about PTSD treatment should be drawn from these results. There was brief follow-up in only one study and no long-term follow-ups.

Conclusion

The effect sizes and recovery rates in these uncontrolled studies suggest that HG Rewind is potentially an effective treatment for PTS. These studies appear to support previous research, which indicated that a single session of Rewind treatment could treat a significant number of clients. While some clients may need more sessions, the majority of clients were treated in six HG sessions or less. This suggests that HG Rewind may be a cost effective treatment, but more research is needed to evaluate this. Further research is also needed to determine the effectiveness of Rewind in other cultures. Finally, an RCT with long-term follow-up is now clearly needed.

Data availability

Underlying data

Figshare: Timmins (2020) Study 1 data, Human Givens Rewind treatment for posttraumatic stress in a police force. <https://doi.org/10.6084/m9.figshare.11316041.v2>.

Figshare: Andrews (2020) Study 2, Human Givens Rewind treatment of posttraumatic stress in veterans. <https://doi.org/10.6084/m9.figshare.11316032.v3>.

Figshare: Guy (2020) Study 3 data, Human Givens Rewind treatment for posttraumatic stress and PTSD. <https://doi.org/10.6084/m9.figshare.11316038.v2>.

Figshare: Barr (2020) Study 4, Human Givens Rewind treatment for posttraumatic stress. <https://doi.org/10.6084/m9.figshare.11316035.v2>.

References

- Adams S: **Human Givens Rewind treatment for PTSD and sub-threshold trauma**. University of Leicester, Leicester, U.K. [Dissertation] 2017.
[Reference Source](#)
- Adams S, Allan S: **Human Givens Rewind trauma treatment: Description and conceptualisation**. *Mental Health Review Journal*. 2019a; **24**(2): 98–111.
[Publisher Full Text](#)
- Adams S, Allan S: **The effectiveness of Human Givens Rewind treatment for trauma**. *Mental Health Review Journal*. 2019b; **24**(3): 228–242.
[Publisher Full Text](#)
- Adams S, Allan S: **Muss' Rewind treatment for trauma: Description and preliminary evidence**. *J Ment Health*. 2018; **27**(5): 468–474.
[PubMed Abstract](#) | [Publisher Full Text](#)
- American Psychiatric Association: **Diagnostic and statistical manual of mental disorders**. (4th edn.). American Psychiatric Association, Washington, DC. 1994.
- Andrews W: **Andrews (2020) Study 2, Human Givens Rewind treatment of posttraumatic stress in veterans**. *figshare*. Dataset. 2020.
<http://www.doi.org/10.6084/m9.figshare.11316032.v3>
- Andrews W, Twigg E, Minami T, et al.: **Piloting a practice research network: A 12-month evaluation of the Human Givens approach in primary care at a general medical practice**. *Psychol Psychother*. 2011; **84**(4): 389–405.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Andrews W, Wislocki A, Short F, et al.: **A five-year evaluation of the Human Givens therapy using a practice research network**. *Mental Health Review Journal*. 2013; **18**(3): 165–176.
[Publisher Full Text](#)
- Bandler R, Grinder J: **Frogs into princes, 15**. Moab, UT: Real People Press. 1979.
[Reference Source](#)
- Barkham M, Bewick B, Mullin T, et al.: **The CORE-10: A short measure of psychological distress for routine use in the psychological therapies**. *Counselling and Psychotherapy Research*. 2013; **13**(1): 3–13.
[Publisher Full Text](#)
- Barkham M, Margison F, Leach C, et al.: **Service profiling and outcomes benchmarking using the CORE-OM: toward practice-based evidence in the psychological therapies**. *J Consult Clin Psychol*. 2001; **69**(2): 184–196.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Barr E: **Barr (2020) Study 4, Human Givens Rewind treatment for posttraumatic stress**. *figshare*. Dataset. 2020.
<http://www.doi.org/10.6084/m9.figshare.11316035.v2>
- Bauer GR, Scheim AI: **Trans people in Ontario, Canada: Statistics to inform human rights policy**. 2015.
[Reference Source](#)
- Brady KT, Killeen TK, Brewerton T, et al.: **Comorbidity of psychiatric disorders and posttraumatic stress disorder**. *J Clin Psychiatry*. 2000; **61**(Suppl 7): 22–32.
[PubMed Abstract](#)
- Brewin CR, Gregory JD, Lipton M, et al.: **Intrusive images in psychological disorders: Characteristics, neural mechanisms, and treatment implications**. *Psychol Rev*. 2010; **117**(1): 210–232.
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
- Burdett H, Greenberg N: **Service evaluation of a Human Givens therapy service for veterans**. *Occup Med (Lond)*. 2019; **69**(8–9): 586–592.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Clark DM, Layard R, Smithies R, et al.: **Improving access to psychological therapy: Initial evaluation of two UK demonstration sites**. *Behav Res Ther*. 2009; **47**(11): 910–920.
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
- Clark D, Oates M: **Improved Access to Psychological Therapies: Measuring improvement and recovery, Adult services**. 2014.
[Reference Source](#)
- Cohen J: **Statistical Power Analysis for the Behavioural Sciences**. 2nd Edition. Hillsdale, NJ: Lawrence Erlbaum. 1988.
[Reference Source](#)
- Connell J, Barkham M: **CORE-10 user manual (Version 1.1)**. Rugby: CORE System Trust & CORE Information Management Systems. 2007.
[Reference Source](#)
- Connell J, Barkham M, Stiles WB, et al.: **Distribution of CORE-OM scores in a general population, clinical cut-off points and comparison with the CIS-R**. *Br J Psychiatry*. 2007; **190**: 69–74.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Corp N, Tsaroucha A, Kingston P: **Human Givens therapy: The evidence base**. *Mental Health Review Journal*. 2008; **13**(4): 44–52.
[Publisher Full Text](#)
- Creamer M, Bell R, Failla S: **Psychometric properties of the Impact of Events Scale-Revised**. *Behav Res Ther*. 2003; **41**(12): 1489–1496.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Cukor J, Wyka K, Jayasinghe N, et al.: **The nature and course of subthreshold PTSD**. *J Anxiety Disord*. 2010; **24**(8): 918–923.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Day SJ, Holmes EA, Hackman A: **Occurrence of imagery and its link with early memories in agoraphobia**. *Memory*. 2004; **12**(4): 416–427.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Dickstein BD, Walter KH, Schumm JA, et al.: **Comparing response to cognitive processing therapy in military veterans with subthreshold and threshold posttraumatic stress disorder**. *J Trauma Stress*. 2013; **26**(6): 703–709.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Ehlers A, Clark DM: **A cognitive model of posttraumatic stress disorder**. *Behav Res Ther*. 2000; **38**(4): 319–345.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Evans C, Connell J, Barkham M, et al.: **Towards a standardised brief outcome measure: psychometric properties and utility of the CORE-OM**. *Br J Psychiatry*. 2002; **180**: 51–60.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Evans C, Mellor-Clark J, Margison F, et al.: **CORE: Clinical outcomes in routine evaluation**. *J Ment Health*. 2000; **9**(3): 247–255.
[Publisher Full Text](#)
- Feng P, Becker B, Zheng Y, et al.: **Sleep deprivation affects fear memory consolidation: bi-stable amygdala connectivity with insula and ventromedial prefrontal cortex**. *Soc Cogn Affect Neurosci*. 2018; **13**(2): 145–155.
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
- Gillespie K, Duffy M, Hackmann A, et al.: **Community based cognitive therapy in the treatment of posttraumatic stress disorder following the Omagh bomb**. *Behav Res Ther*. 2002; **40**(4): 345–357.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Gray RM: **NLP and PTSD: the Visual-Kinesthetic Dissociation Protocol**. *Current Research in NLP*. 2010; **2**: 33–42.
[Reference Source](#)
- Gray R, Bourke F: **Remediation of intrusive symptoms of PTSD in fewer than five sessions: A 30- person pre-pilot study of the RTM Protocol**. *J Mil Veteran Fam Health*. 2015; **1**(2): 85–92.
[Publisher Full Text](#)
- Gray R, Budden-Potts D, Bourke F: **Reconsolidation of Traumatic Memories for PTSD: A randomized controlled trial of 74 male veterans**. *Psychother Res*. 2019; **29**(5): 621–639.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Gray RM, Budden-Potts D, Schwall RJ, et al.: **An open-label, randomized controlled trial of the reconsolidation of traumatic memories protocol (RTM) in military women**. *Psychol Trauma*. 2020.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Gray RM, Liotta R: **PTSD: extinction, reconsolidation and the visual-kinesthetic dissociation protocol**. *Traumatology*. 2012; **18**(2): 3–16.
[Publisher Full Text](#)
- Griffin J: **PTSD: why some techniques for treating it work so fast**. *Human Givens Journal*. 2005; **12**(3).
[Reference Source](#)
- Griffin J, Tyrrell I: **The Shackled Brain: How to release locked-in patterns of trauma**. Cheltenham: Human Givens Publishing. 2001.
[Reference Source](#)
- Griffin J, Tyrrell I: **Human Givens: A new approach to emotional health and clear thinking**. Cheltenham, East Sussex: Human Givens Publishing. 2004.
[Reference Source](#)
- Guy K: **Guy (2020) Study 3 data, Human Givens Rewind treatment for posttraumatic stress and PTSD**. *figshare*. Dataset. 2020.
<http://www.doi.org/10.6084/m9.figshare.11316038.v2>
- Guy K, Guy N: **The fast cure for phobia and trauma: Evidence that it works**. Cheltenham, East Sussex: Human Givens Publishing. [Electronic Version]. 2003.
[Reference Source](#)
- Guy K, Guy N: **Psychological Trauma, Counselling at Work**. Spring, 2009; 19–22.
[Reference Source](#)
- Handley RV, Salkovskis PM, Scragg P, et al.: **Clinically significant avoidance of public transport following the London bombings: Travel phobia or subthreshold posttraumatic stress disorder?** *J Anxiety Disord*. 2009; **23**(8): 1170–1176.
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
- Herman JL, Haas AP, Rodgers PL: **Suicide attempts among transgender and gender non-conforming adults**. 2014.
[Reference Source](#)
- Horowitz M, Wilner N, Alvarez A: **Impact of Events Scale: A measure of subjective stress**. *Psychosom Med*. 1979; **41**(3): 209–218.
[PubMed Abstract](#) | [Publisher Full Text](#)
- Improving Access to Psychological Therapies (IAPT) National Team: **Enhancing Recovery Rates in IAPT Services: Lessons From Year One**. London: National IAPT Programme Team. 2011.
- Improving Access to Psychological Therapies (IAPT): **IAPT Key Performance**

Indicator (KPI) Technical Guidance for Adult IAPT Service 2012/13. 2012.

Jacobson NS, Truax P: **Clinical significance: A statistical approach to defining meaningful change in psychotherapy research.** *J Consult Clin Psychol.* 1991; **59**(1): 12–19.

[PubMed Abstract](#) | [Publisher Full Text](#)

James S, Herman J, Rankin S, *et al.*: **The report of the 2015 US transgender survey.** 2016.

[Reference Source](#)

Kintzle S, Barr N, Corletto G, *et al.*: **PTSD in U.S. Veterans: The role of social connectedness, combat experience and discharge.** *Healthcare (Basel).* 2018; **6**(3): 102.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Koenigsberg HW, Fan J, Ochsner KN, *et al.*: **Neural correlates of using distancing to regulate emotional responses to social situations.** *Neuropsychologia.* 2010; **48**(6): 1813–1822.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Koven SG: **Veteran treatments: PTSD interventions.** *Healthcare.* 2018; **6**: 64.

Kroenke K, Spitzer RL, Williams JBW: **The PHQ-9: Validity of a brief depression severity measure.** *J Gen Intern Med.* 2001; **16**(9): 606–613.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Lee CW, Taylor G, Drummond PD: **The active ingredient in EMDR: is it traditional exposure or dual focus of attention?** *Clinical Psychology and Psychotherapy.* 2006; **13**(2): 97–107.

[Publisher Full Text](#)

Lee JLC, Nader K, Schiller D: **An update on memory reconsolidation updating.** *Trends Cogn Sci.* 2017; **21**(7): 531–545.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Mol SSL, Arntz A, Metsemakers JFM, *et al.*: **Symptoms of post-traumatic stress disorder after non-traumatic events: Evidence from an open population study.** *Br J Psychiatry.* 2005; **186**: 494–499.

[PubMed Abstract](#) | [Publisher Full Text](#)

Murkar AA, De Koninck J: **Consolidative mechanisms of emotional processing in REM sleep and PTSD.** *Sleep Med Rev.* 2018; **41**: 173–184.

[PubMed Abstract](#) | [Publisher Full Text](#)

Murphy D: **Supporting veterans.** *Therapy Healthcare Counselling and Psychotherapy Journal.* 2016; **16**(2): 24–27.

Murphy M: **Testing treatment for trauma: Qualitative research providing evidence of effectiveness of the rewind technique for trauma.** *Human Givens.* 2007; **14**(4): 37–42.

Muss DC: **The rewind technique in the treatment of post-traumatic stress disorder.** In Figley, C. R. (Ed.), *Brief treatments for the traumatized, a project of the Green Cross Foundation.* Westport, CT: Greenwood. 2002; 306–314.

[Reference Source](#)

Ochsner KN, Gross JJ: **Cognitive emotion regulation: Insights from social cognitive and affective neuroscience.** *Curr Dir Psychol Sci.* 2008; **17**(2): 153–158.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Okhai F: **Tapping versus rewind.** *Human Givens.* 2005; **12**(2): 45–46.

Pagani M, Amann BL, Landin-Romero R, *et al.*: **Eye movement desensitization and reprocessing and slow wave sleep: A putative mechanism of action.**

Front Psychol. 2017; **8**: 1935.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Schiller D, Kanen JW, LeDoux JE, *et al.*: **Extinction during reconsolidation of threat memory diminishes prefrontal cortex involvement.** *Proc Natl Acad Sci U S A.* 2013; **110**(50): 20040–20045.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Schiller D, Monfils MH, Raio CM, *et al.*: **Preventing the return of fear in humans using reconsolidation update mechanisms.** *Nature.* 2010; **463**(7277): 49–53.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Schmidt U: **A plea for symptom-based research in psychiatry.** *Eur J Psychotraumatol.* 2015; **6**: 27660.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Sloan DM, Lee DJ, Litwack SD, *et al.*: **Written Exposure Therapy for Veterans Diagnosed with PTSD: A Pilot Study.** *J Trauma Stress.* 2013; **26**(6): 776–779.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Sloan DM, Marx BP, Bovin MJ, *et al.*: **Written Exposure as an Intervention for PTSD: A Randomized Clinical Trial with Motor Vehicle Accident Survivors.** *Behav Res Ther.* 2012; **50**(10): 627–635.

[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)

Spitzer RL, Kroenke K, Williams JB, *et al.*: **A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7.** *Arch Intern Med.* 2006; **166**(10): 1092–1097.

[PubMed Abstract](#) | [Publisher Full Text](#)

Steenkamp MM, Litz BT, Hoge CW, *et al.*: **Psychotherapy for Military-Related PTSD: A Review of Randomized Clinical Trials.** *JAMA.* 2015; **314**(5): 489–500.

[PubMed Abstract](#) | [Publisher Full Text](#)

Tehrani N, Cox SJ, Cox T: **Assessing the impact of stressful incidents in organizations: The development of an extended impact of events scale.** *Couns Psychol Q.* 2002; **15**(2): 191–200.

[Publisher Full Text](#)

Tehrani N, Rainbird C, Dunne B: **Supporting the police following the 7/7 London terrorist bombs.** In N. Tehrani (Ed.), *Managing Trauma in the Workplace: Supporting workers and organisations.* London: Routledge, 2010; 191–203.

Timmins J: **Timmins (2020) Study 1 data, Human Givens Rewind treatment for posttraumatic stress in a police force.** *figshare.* Dataset, 2020. <http://www.doi.org/10.6084/m9.figshare.11316041.v2>

Tsaroucha A, Kingston P, Stewart T, *et al.*: **Assessing the effectiveness of the “human givens” approach in treating depression: A quasi experimental study in primary care.** *Mental Health Review Journal.* 2012; **17**(2): 90–103.

[Publisher Full Text](#)

Tylee DS, Gray R, Glatt SJ, *et al.*: **Evaluation of the reconsolidation of traumatic memories protocol for the treatment of PTSD: a randomized, wait-list-controlled trial.** *J Mil Veteran Fam Health.* 2017; **3**(1): 21–33.

[Publisher Full Text](#)

Weiss DS, Marmar CR: **The impact of event scale – revised.** In J. Wilson & T. M. Keane (Eds.), *Assessing Psychological Trauma and PTSD.* New York: Guilford Press, 1997; 399–411.

Yates Y, Atkinson C: **Using Human Givens therapy to support the well-being of adolescents: A case example.** *Pastor Care Educ.* 2011; **29**(1): 35–50. [Publisher Full Text](#)

Open Peer Review

Current Peer Review Status:

Version 2

Reviewer Report 12 September 2022

<https://doi.org/10.5256/f1000research.79361.r148626>

© 2022 Winkler O. This is an open access peer review report distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Olga Winkler

University of Alberta, Edmonton, Canada

Introduction

1. How do authors define "traumatic events" here? Is this criterion A as per DSM or does it include other injuries, such as interpersonal injuries often seen in dissociative or complex PTSD?
2. Can the authors please refer to DSM-5 instead of IV? It includes more complexity to the PTSD diagnosis.
3. Can all PTSD respond the same to PTSD treatment? What kind of PTSD treatment are the authors referring to (i.e. please specify if you are talking about dissociative or non-dissociative PTSD and if you are referring to pharmacological treatments, trauma-focused treatments, non-trauma-focused psychotherapy, or all of the above)?

Methods

1. Can you please include more details about the profiles of the participants included in this analysis? i.e. demographic information, diagnoses, types of traumas, predominant symptoms, etc.? "trauma" or "PTS" is not very specific.

Conclusion

1. Please consider saying that "HG *may be* an effective treatment for PTS" instead of "HG *is* an effective treatment for PTS." This is because this is not a randomized trial and does not truly prove that HG is effective but, rather, suggests it.

Is the work clearly and accurately presented and does it cite the current literature?

Partly

Is the study design appropriate and is the work technically sound?

Partly

Are sufficient details of methods and analysis provided to allow replication by others?

Partly

If applicable, is the statistical analysis and its interpretation appropriate?

I cannot comment. A qualified statistician is required.

Are all the source data underlying the results available to ensure full reproducibility?

Partly

Are the conclusions drawn adequately supported by the results?

No

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: My area of research is the transdiagnostic use of trauma-focused psychotherapeutic and interventional psychiatry treatments. I am both a practicing clinician and researcher, who utilizes EMDR, 3MDR, and psychedelic-assisted therapy to explore the treatment of PTSD and other psychiatric disorders

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Version 1

Reviewer Report 27 October 2020

<https://doi.org/10.5256/f1000research.28449.r73276>

© 2020 Gray R. This is an open access peer review report distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Richard Gray

¹ The Research and Recognition Project, Corning, NY, USA

² Fairleigh Dickinson University, Madison, NJ, USA

This is an important paper that continues the process of documenting supporting evidence for the rewind technique in the Human Givens program of treatment as begun by Adams and subsequently reported in Adams and Allan, 2019.¹ The intervention first appears in the Human Givens literature with Guy and Guy's qualitative review of the intervention (Guy & Guy 2003).² Every effort appears to have been made to report all of the relevant studies. The technique is adequately detailed here and elsewhere. In light of the preliminary nature of the reports, the statistical methods are adequate.

The review is also important because it represents a growing body of emerging evidence for the use of NLP-based therapies as an element in mainline treatment protocols. The authors accurately

source the technique to its historic roots in NLP and David Muss' heroic (1991, 2002) work with veterans, service members and first responders.^{3,4}

The authors review four studies that use the intervention to treat Post Traumatic Stress, and presumably, prodromal PTSD. Two versions of the Impact of Events Scale (IES) are used to provide a presumptive diagnosis of PTSD, and in all studies, any patient not scoring above the minimal diagnostic cut-off (32-33 depending upon the version used) was excluded. Similarly, the studies report using two different versions of the UK-based Clinical Outcomes for Routine Evaluation (CORE; CORE-OM, Evans, *et al.*, 2002; CORE-10, Connell & Barkham, 2007) for the evaluation of overall function.^{5,6} The two versions of the inventory have clinical cutoff scores of 10 and 11 respectively.

The study reports reliable change indices for each measure. The intervention produced reliable symptom score reductions on both measures. This suggests that the intervention, like the mainline treatments for PTSD, produces reliable symptom reductions independent of total remission. Pre-post effect sizes for the four studies were almost uniformly above 2 SMDs. Follow-up times were only reported for study 3. It would be useful if the authors could provide an indication of follow-up intervals from the other studies. If longer-term follow-ups have been collected, they would provide some important data that could reveal whether the results are robust and may also provide information regarding the underlying mechanism. In this regard, without a clear sense of when the follow-up data was obtained and whether longer term assessments were made, the use of the term 'recovery' may be a bit ambitious.

Similarly, the lack of reliable deterioration must, in light of the missing post treatment follow-ups, be interpreted as reliable deterioration in the course of treatment. Please clarify this.

Although the current review is limited to practice-based studies without controls, they form an excellent base for effectiveness research in which the outcomes of a new treatment are compared against the results of more classical treatments (Begley, 2011; Cohen, 2013; Docteur & Berenson, 2010).^{7,8,9} When one considers that this process obtains the same general level of symptom score reductions--in the course of six treatments or fewer--it may be profitably compared to mainline treatments for PTSD used in the US and elsewhere.

In this regard, I would strongly suggest a review of Steenkamp *et al.*'s report of psychological treatments for military PTSD (Steenkamp *et al.*, 2015).¹⁰

Without referring to the citation, it is unclear whether the qualitative studies reported on page 2 of the study occur in the context of the broader Human Givens treatment program or not (they do).

Please clarify this in the text.

The text reporting the measures used in study 2 (page 5), indicates that the IES-E was used. That designation is missing in Tables 3 and 4. They should be amended.

In the references, there is an anomalous "15" in the Bandler and Grinder Citation. Please correct this.

References

1. Adams S, Allan S: The effectiveness of Human Givens Rewind treatment for trauma. *Mental Health Review Journal*. 2019; **24** (3): 228-242 [Publisher Full Text](#)
2. Guy K, Guy N: The fast cure for phobia and trauma: evidence that it works. *Human Givens Journal* . 2003; **9** (4). [Reference Source](#)
3. Muss DC: A new technique for treating post-traumatic stress disorder. *Br J Clin Psychol*. **30** (1): 91-2 [PubMed Abstract](#) | [Publisher Full Text](#)
4. Muss D: The rewind technique in the treatment of post-traumatic stress disorder: Methods and applications. C. R. Figley (Ed.), *Contributions in psychology, no. 39. Brief treatments for the traumatized*. 2002. 306-314

5. Evans C, Connell J, Barkham M, Margison F, et al.: Towards a standardised brief outcome measure: psychometric properties and utility of the CORE-OM. *Br J Psychiatry*. 2002; **180**: 51-60 [PubMed Abstract](#) | [Publisher Full Text](#)
6. Connell J, Barkham M, Stiles WB, Twigg E, et al.: Distribution of CORE-OM scores in a general population, clinical cut-off points and comparison with the CIS-R. *Br J Psychiatry*. 2007; **190**: 69-74 [PubMed Abstract](#) | [Publisher Full Text](#)
7. Begley S: The best medicine. *Sci Am*. 2011; **305** (1): 50-5 [PubMed Abstract](#) | [Publisher Full Text](#)
8. Cohen JP: Comparative-effectiveness research: does it matter?. *Clin Ther*. 2013; **35** (4): 371-9 [PubMed Abstract](#) | [Publisher Full Text](#)
9. Docteur E, Berenson R: How Will Comparative Effectiveness Research Affect the Quality of Health Care?. *Urban Institute Timely Analysis of Immediate Health Policy Issues*. 2010. [Reference Source](#)
10. Steenkamp MM, Litz BT, Hoge CW, Marmar CR: Psychotherapy for Military-Related PTSD: A Review of Randomized Clinical Trials. *JAMA*. 2015; **314** (5): 489-500 [PubMed Abstract](#) | [Publisher Full Text](#)

Is the work clearly and accurately presented and does it cite the current literature?

Yes

Is the study design appropriate and is the work technically sound?

Yes

Are sufficient details of methods and analysis provided to allow replication by others?

Yes

If applicable, is the statistical analysis and its interpretation appropriate?

Yes

Are all the source data underlying the results available to ensure full reproducibility?

Yes

Are the conclusions drawn adequately supported by the results?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: I am the author of several of the articles cited here. I have done extensive research in the neuroscience of and behavioral interventions for PTSD, and addiction. I have significant research experience in behaviorism, hypnosis, NLP, and Jungian theory.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 10 Nov 2021

Shona Adams, University of Leicester, Leicester, UK

Many thanks for your very thoughtful review.

Thank you for noting the two typographical errors in Tables 3 and 4 and the one in the References. The error in Table 3 describes the "IES" used in Study 2 instead of the "IES-E" which is described in the methods section for Study 2. A check was done with the data and confirmed that the "IES-E". The clinical cut-offs for IES-E was corrected in Table 3 and the number below the correct clinical cut-off in Table 4 was recalculated and triple checked. These have been corrected.

You are correct that unfortunately there were not follow-up intervals in three of the four studies. This information has been added to the Results section and in Table 2. This is indeed a weakness of these studies and is already mentioned in the Limitations section and also in future research recommendations in the Discussion.

Regarding the terminology of "recovery rates", I agree with your statement about not using the word "recovery" when relating to results that don't have follow-up, because it is uncertain from the data if the positive results were maintained. We have changed reference to the reported "recovery rates" in our studies to "below cut-off rates", "below the clinical cut-off" or "within the *normal* range after treatment".

Your statement about reliable deterioration has been noted. While some participants had 'no reliable change', there was no 'reliable deterioration' in any of the studies. We modified the statement in the discussion to state "There was no reliable deterioration reported in any of the studies at the end of treatment." The statement in the discussion about reliable deterioration has been removed as requested.

Many thanks for your suggestion to reference Steenkamp *et al.* (2015) review of RCTs for military-related PTSD. While reluctant to provide direct comparisons, we have included this review as you suggested for context. We have added a section on veterans that includes this reference and some more recent studies and relating to this population and to Study 2 in this paper. While we are presenting this data, and as there are not head to head comparisons, no direct comparisons can be made about the different treatments, but seeing this data in the context of other data does put the results into context. I note the Steenkamp *et al.* (2020) call for "improvement in existing PTSD treatment and for development and testing of novel evidence-based treatments", and this is what the present paper aims to do.

Your comment on "comparative effectiveness" (CE) in practice-based literature in the three articles mentioned has been noted. Indeed, Docteur and Berentsein (2010) stated that comparative effectiveness can indicate treatments being more cost-effective compared to the standard treatment. Also noted was the suggestion that applying new research methods using databases "could replace traditional 'hierarchies of evidence' and reliance on experimental methods". High quality practice-based methods, with high data capture rates, session by session data collection, intention to treat reporting, and low exclusion criteria can arguably be more reliable in determining effectiveness in clinical settings than poor quality randomised controlled trials (RCTs) with high attrition rates, low data capture rates and many exclusion criteria. In fact, it could be argued that instead of controlling for

extraneous variables through randomisation, it is possible that 'introducing variability' which is possible in practice-based studies, such as multiple therapists at multiple sites with large numbers of participants could also control for the effect of extraneous variables. Then if the results at the different sites with different therapists using the same standardised measures are similar to those found in effective treatments in RCTs and greater than the control groups in those studies, one could argue that the improvements are due to the treatment in the practice-based studies rather than extraneous variables. However, while CE can refer to comparisons to benchmarks it often refers to head to head studies in real life populations or to data in databases and for this reason this term was not used in this paper.

Many thanks again for your attention to detail and your thoughtful and helpful comments.

An additional statement was also added to the Limitation section. According to the British Psychological Society (2019, p. 9), "psychologists should ensure that their language and practice does not inadvertently exclude GSRD [gender, sexuality and relationship diverse] people". Following APA guidelines (APA, 2015; APA, 2020), this paper refers to 'gender' and not 'sex'. However, we were not able to use the terminology of "cisgendered female and cisgendered male" as we did not collect the appropriate data. Therefore, in addition to the above recommended revisions, a statement was therefore also added to the Limitations section, "All studies only collected binary data on gender (i.e. male and female), thereby excluding information relating to gender non-conforming people who are disproportionately by trauma (e.g. Bauer & Scheim, 2015; Herman, Haas & Rodgers, 2014; James *et al.*, 2016)." This statement is a small step in the journey to prevent discrimination and not to prolong the harm done through research to gender non-conforming people, by erasing them and therefore not having adequate data pertaining to them, further perpetuating health inequalities. In accordance with the gender policy of the European Association of Science Editors, Olff wrote "we need more gender- and sex-sensitive research as well as reporting" (Olff, 2017). Finally, this statement is also in line with the APA resolution on Psychology and Human Rights (APA, 2021) stating "Psychologists respect human rights and oppose the misuse of psychological science, practice, and applications and their negative impact on human rights".

Please note that I am writing these additional comments as an individual.

Warmly,

Dr. Shona Adams

References

American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist*, 70(9), 832–864. <https://doi.org/10.1037/a0039906>

American Psychological Association (2020). Gender, Section 5.5, in Publication Manual of the American Psychological Association, Seventh Edition. <https://apastyle.apa.org/style-grammar-guidelines/bias-free-language/gender>

American Psychological Association (2021). APA RESOLUTION on APA, Psychology, and Human Rights. <https://www.apa.org/about/policy/resolution-psychology-human-rights.pdf>

Bauer, G. R., & Scheim, A. I. (2015). *Trans people in Ontario, Canada: Statistics to inform human rights policy*. <http://transpulseproject.ca/wp-content/uploads/2015/06/Trans-PULSE-Statistics-Relevant-for-Human-Rights-Policy-June-2015.pdf>

British Psychological Society (2019). Guidelines for psychologists working with gender, sexuality and relationship diversity: For adults and young people (aged 18 and over): <https://www.bps.org.uk/news-and-policy/guidelines-psychologists-working-gender-sexuality-and-relationship-diversity>

Docteur, E., & Berenson, R. (2010). How Will Comparative Effectiveness Research Affect the Quality of Health Care?. *Urban Institute Timely Analysis of Immediate Health Policy Issues*: <https://www.urban.org/sites/default/files/publication/28426/412040-How-Will-Comparative-Effectiveness-Research-Affect-the-Quality-of-Health-Care-.PDF>

Herman, J. L., Haas, A. P., Rodgers, P. L. (2014). *Suicide attempts among transgender and gender non-conforming adults*. <https://cloudfront.escholarship.org/dist/prd/content/qt8xg8061f/qt8xg8061f.pdf>

James, S., Herman, J., Rankin, S., Keisling, M., Mottet, L., Anafi, M. (2016). *The report of the 2015 US transgender survey*. <https://transequality.org/sites/default/files/docs/usts/USTS-Full-Report-Dec17.pdf>

Olf M. (2017). Sex and gender differences in post-traumatic stress disorder: an update. *European Journal of Psychotraumatology*, 8(sup4), 1351204. <https://doi.org/10.1080/20008198.2017.1351204>

Steenkamp, M.M., Litz, B.T., Hoge, C.W., & Marmar, C.R. (2015). Psychotherapy for Military-Related PTSD: A Review of Randomized Clinical Trials. *JAMA*, 314(5), 489-500. [10.1001/jama.2015.8370](https://doi.org/10.1001/jama.2015.8370)

Steenkamp, M.M., Litz, B.T., & Marmar, C.R. (2020). First-line Psychotherapies for Military-Related PTSD. *JAMA*, 323(7), 656–657. doi: [10.1001/jama.2019.20825](https://doi.org/10.1001/jama.2019.20825)

Competing Interests: I am the main author of this article and am responding to the first reviewer's comments and changes made to the first version of this paper.

The benefits of publishing with F1000Research:

- Your article is published within days, with no editorial bias
- You can publish traditional articles, null/negative results, case reports, data notes and more
- The peer review process is transparent and collaborative
- Your article is indexed in PubMed after passing peer review
- Dedicated customer support at every stage

For pre-submission enquiries, contact research@f1000.com

F1000Research