Combat-Related Multifaceted Trauma-Focused Group Therapy *A Pilot Study*

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Abstract: The efficacy of combat-related trauma-focused group therapy (TFGT) was tested using a unique technique that combines principles from prolonged exposure, cognitive processing therapy, and art therapy. Eighty Israeli male veterans exposed to traumatic events participated in the study. They were divided into eight therapeutic groups led by four pairs of trained therapists. Post-traumatic stress disorder and depression symptoms and levels of functioning were taken at pretherapy, end of therapy, and 6 months posttherapy. Analyses found that therapy helped in reducing posttraumatic and depressive symptoms at the end of therapy and at 6 months follow-up. It also showed that patients' functioning had significantly improved by the end of therapy and at 6 months follow-up. A significant clinical change in each parameter over time was also observed. In conclusion, the study provides preliminary evidence that combat-related TFGT may be efficacious in reducing psychological suffering and enhancing actual functioning. Follow-up randomized controlled trials to determine treatment efficacy are needed.

Key Words: Depression, Function, PTSD, Therapy effectiveness, Trauma-focused group therapy

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G roup therapy is used commonly in health care settings for treating posttraumatic stress disorder (PTSD) because it offers therapeutic factors that meet some of the unique needs of PTSD clients. The therapeutic group brings individuals together who have undergone a similar traumatic event while providing a "space" where they can cope with the outcomes of exposure to the traumatizing event. The group setting also leads to relief from the characteristic social isolation of these clients while acknowledging and validating their traumatic exposure and normalizing their traumatic responses. These elements are important and significant in facilitating individuals' adaptive coping with the outcomes of exposure to the traumatizing event (Foy et al., 2001; Kingsley, 2007). Research data associate group treatment for PTSD with favorable outcomes (Foy et al., 2001; Kingsley, 2007; Shea et al., 2009).

Trauma-focused group therapy (TFGT) for PTSD is a short-term therapy based on the principles of cognitive-behavioral group therapy. In it, group members receive prolonged exposure and cognitive restructuring (Foy et al., 2001). Trauma-focused group therapy embeds exposure within a group context that includes psychoeducation, cognitive restructuring, relapse prevention, and coping skills training. The group creates a sense of safety while offering opportunities for patients to expose their own traumatic events and be exposed vicariously to the traumatic events of other group members. The group context also helps to normalize symptoms, supplement therapeutic opportunities, increase the generalizability of skill acquisition, and improve self-esteem by allowing members to help one another (Foy et al., 2002, 2011; Schnurr et al., 2003).

Most group therapy studies are of short duration (Lorentzen et al., 2013). They include studies of focused group therapy, which is widely used with patients with PTSD and has been proven efficacious in reducing PTSD and depression and enhancing interpersonal skills, everyday functioning, and quality of life (Classen et al., 2011). However, we have little conclusive evidence regarding the effectiveness of the group format in treating PTSD (Schnurr et al., 2003).

Because many combat-related patients with PTSD experience grief, guilt, and shame along with difficulties in relating intimately to others because of the emotional numbing symptom, our group therapy was designed to address patients' needs. Our therapy consists of elements from cognitive processing therapy (CPT) (Resick and Schnicke, 1992) and prolonged exposure, with special emphasis on techniques borrowed from art therapy (AT).

Art therapy includes active performance and experience with art materials and is mostly combined with trauma-focused psychotherapy. By allowing clients to express feelings and thoughts, AT can reveal nonverbal encodings of traumatic material and nonverbal memory (Schouten et al., 2015). The aim of AT is to elicit processes of change, development, and acceptance using drawing, painting, collage, and sculpting. A reduction in PTSD symptoms and global clinical improvements are often reported as outcomes of AT (Collie et al., 2006).

The combination of CPT, prolonged exposure therapy (PE), and AT used in this TFGT framework addressed the needs of the population referred to the Unit for the Treatment of Combat-related PTSD (UTC-PTSD) and helped participants to reduce the inherent stress and anxiety that arises in any group meeting in which combatants share feelings. This stress and anxiety are the result of the mores of military culture (Moore, 2011). In addition, because the therapy is short, each participant has 2 hours in which to share and describe his feelings. We assumed that by using painting and/or drawing, both the participant and the group immerse in the process more quickly.

The main goal was to present the therapy method used for combat veterans and test the hypothesis that this method can reduce posttraumatic and depressive symptoms among veterans who accepted and completed the therapy while enhancing their general everyday functioning.

METHODS

Participants

Participants were 80 treatment-seeking veterans (all male) who were diagnosed with combat-related PTSD after exposure to a combat event. These veterans had contacted the UTC-PTSD between 2006 and 2014 and were treated with TFGT. Table 1 summarizes their background data. The study was approved by the Ethics Committee of the Israeli Defense Forces Medical Corps (Helsinki Committee).

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Age	Mean (SD)	26.4 (6.35)
	Range	18-66
Immigrant	No	68 (85%)
	Yes	12 (15%)
Years of education	Mean (SD)	12.69 (1.29)
	Range	10-17
Marital status	Single	59 (73.7%)
	Married	21 (27.3%)
Employment status	Employed	52 (75%)
	Unemployed	28 (25%)
Rank	Officer	5 (6.2%)
	Not officer	75 (93.8%)
Military profession	Fighter	75 (93.8%)
	Not fighter	5 (6.2%)
Suffered from an injury	Yes	6 (7.5%)
	No	74 (92.5%)

TABLE 1. Sociodemographic Characteristics of All Patients (N = 80)

Measurement Instruments

Posttraumatic Stress Disorder Checklist (PCL) (Blanchard et al., 1996)

The questionnaire includes 17 statements. Scores ranged from 17 to 85, and a higher score reflected higher posttraumatic stress symptoms. The internal consistency of this study for the first, second, and third administrations of the questionnaire was 0.915, 0.931, and 0.905, respectively. In other studies, the internal consistency of the questionnaire measured using Cronbach's alpha showed acceptable levels of alpha coefficients (.91; *e.g.*, Lima Ede et al., 2012).

Depression Questionnaire—The Montgomery and Asberg Depression Rating Scale (Montgomery and Asberg, 1979)

This questionnaire is based on a semistructured clinical interview using 10 items to evaluate a respondent's level of depressive symptoms. Symptom severity is rated from 0 (no difficulty) to 6 (severe). Depression severity is indicated by a cumulative score: 0 to 6, no symptoms; 7 to19, mild depression; 20 to 34, moderate depression; higher than 35, severe depression. The questionnaire's internal consistency in this study for the first, second, and third administrations was 0.927, 0.931, and 0.972, respectively. In other studies, the internal consistency of the questionnaire measured using Cronbach's alpha showed acceptable levels of alpha coefficients (.887; *e.g.*, Santen et al., 2009). It is important to stress that we chose the Montgomery and Asberg Depression Rating Scale (MADRS) for its high degree of internal consistency and for its shortness (only 10 items) and clarity.

Functioning Questionnaire—Psychotherapy Outcome Assessment and Monitoring System–Trauma Version (Green et al., 2003)

This questionnaire examined functioning using 10 questions relating to different life domains: work/studies; intimate relationships; relationship with children; social connections; sexual functioning; habitual vulnerability; pleasure from life; physical health, self-organization; and money management. Participants were questioned about their functioning in each area in the past 2 weeks. Scores ranged from 0 to 4 on a Likert scale (4, very well; 0, very badly), where a lower score indicated low functioning. For data analysis, a measure was built consisting of the mean of nine questions (the question on relations with children was omitted because very few participants had children). Internal consistency in the present study was 0.839, 0.937, and 0.889, respectively.

Questionnaire reliability in other studies ranged from $\alpha = .84$ to $\alpha = .90$ (*e.g.*, Levi et al., 2015; Svetlicky et al., 2010).

Treatment Group Assignment and Treatment Procedures

Patients were assigned to TFGT after a diagnostic interview and after completing a self-report questionnaire (PTSD Checklist [PCL] Questionnaire, MADRS, and Psychotherapy Outcome Assessment and Monitoring System–Trauma Version [POAMS]). Diagnostic interviews were conducted by 14 therapists (psychiatrists, clinical psychologists, and social workers), all with extensive experience in PTSD diagnosis and treatment. Each of the therapists had completed mandatory Israeli Defense Forces service and were thus familiar with Israeli military culture, language, code of manners, behavioral norms, belief system, dress code, and rituals.

The TFGT was conducted by eight therapists specializing in group psychotherapy and cognitive behavioral group therapy. They were also trained and experienced in group therapy for posttraumatic stress casualties. All groups received the same therapeutic procedure from two male therapists and one female therapist. One team of therapists treated four different groups; one team treated two different groups, and two other teams treated one group each. All therapists attended weekly supervision sessions (peer group) led by the first author to discuss their cases. Supervision, which was ongoing, related to the description given by the team presenting in a given supervision meeting. Each team described the interventions during their group therapy session. After their presentation, each team of therapists received peer feedback from the group. This also benefitted members of the other teams. Moreover, during the weekly supervision, we dealt with differences between the therapists to maintain the therapeutic procedure.

The senior UTC-PTSD therapists discussed and decided as a group which therapy patients should receive cognitive-behavioral therapy, psychodynamic therapy, TFGT, psychodynamic group therapy (PGT), or drug therapy (for a description of this procedure, see Levi and Lubin, 2010). Each patient's record was presented by the in-taker, and decisions regarding the diagnosis and treatment venue were made. In most of the cases, the decision about the diagnosis and preferred treatment was consensual. In instances where there was no consensus (less than 10% of cases), the in-taker's impression determined both the diagnosis and preferred treatment. All participants were informed about the study aims during the intake (namely, to monitor the efficacy of treatments provided by the UTC-PTSD) and asked whether they were willing to participate. At this stage, all the interviewees gave their consent to participate in the study (written informed consent). However, if someone declined treatment after intake (15 participants, 15.7% of the sample), he was excluded from the study and offered an alternative treatment (individual psychotherapy, PGT, or drug therapy).

Patients with posttraumatic stress disorder with focused symptoms producing specific dysfunctions who seemed to hold strong negative beliefs and biased cognitions leading to marked dysfunction (*e.g.*, "It is not safe anywhere," "I am dead inside") received 24 hours of group therapy for an average of 13 sessions (depending on group size).

Trauma-focused group therapy consists of four stages. In all four stages, group members a) use personal/drawings to depict the traumatic event while highlighting the event arena and their location during the event, b) reconstruct the traumatic event, and c) identify "stuck think-ing" and the connection between these thoughts and feelings of distress. In stage 1, on one half of a sheet of paper, each patient describes the facts of his traumatic event (*e.g.*, "The first shots were fired at 0600") using text or drawing (Fig. 1), starting with the first moment of exposure to the conclusion of the event, and then examines the feelings associated with the facts. This stage ends when each patient has described his event. In the second stage, on the second half of the paper, next to the initial painting/drawing, each patient then describes in words



FIGURE 1. Example of a drawing. An example of a drawing by one of the patients in the group.

or drawing his functioning after the event. This includes stuck thinking and the link between stuck thinking, distress, and unadaptive functioning. Helped by the group, this stage focuses on assimilated stuck points (*e.g.*, "It was my fault my friend died") and times when the individual alters an event details to support his current beliefs (*e.g.*, "I was in command of the mission so it must be my fault my friend died"). Then, assisted by the rest of the group, the therapist tries to alter each patient's beliefs to make them more realistic (*e.g.*, "I can control some things, but not everything"). At this point, the therapist and patient try to identify and challenge over generalizations of trauma-based reactions to nontraumatic situations (*e.g.*, "If I make any mistakes someone will die"). The third stage is the group processing stage. This stresses support, sharing, acceptance, and, above all, being able to be a support group for everyone in the group. Stage 3 focuses on the message that the event has been processed at the group level. The fourth stage is the termination and summary stage, and the patient continues to examine his thoughts about the trauma as he summarizes the treatment. In this concluding stage, the therapists, individual patient, and the group as a whole help the participants understand whether the goals have been achieved and review the tools acquired during the process. It is thought

TABLE 2. Description of TFGT Sessions Meeting Description Meeting Content Duration Note 1.5 hr Preparatory Meeting Introductions, presentation of therapy, goals, rationale First measurement of post traumatic symptoms, functioning level, and hope 50 min per presenter Meeting 1 Participants produce a drawing/painting showing the Approximately 2.5 hr event from the moment of exposure until its end + 2 presenters Meetings 2-5 Participants continue presenting their drawings/paintings 2 hr per meeting-50 min 2 presenters per meetings and the group relates to them guided by the therapists, per presenter followed by the therapists' relation to them Participants produce a drawing/painting showing the Meeting 6 Approximately 2.5 hr 50 min per presenter events and experiences of their everyday life after the event + 2 presenters Participants continue presenting their drawings/paintings Meetings 7-10 2 hr per meeting—50 min 3 presenters in meetings 6 and 7 and and the group relates to them guided by the therapists, per presenter 2 presenters in meeting 8. Up to followed by the therapists' relation to them 2 breaks in a meeting Meeting 11 1.5 hrGroup-level processing Meeting 12 Summary and end 2 hrSecond measurement of posttraumatic symptoms, functioning

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that when treatment achievements are reviewed by therapists and group members, patients can revisit possibly inaccurate conclusions about the traumatic event, themselves personally, others, and the world in general.

These components allowed exposure of patients to the source of their traumatic experience while constructing a narrative expressing the traumatic event and highlighting its effect on emotions and functioning in the present. When processing the event, patients' incorrect beliefs and interpretations are rebutted. Table 2 summarizes the therapy structure and session contents.

Procedure

Eight groups received therapy using this method (with 12, 12, 10, 8, 8, 9, 9, and 12 patients in each of the groups). Patients were assigned to TFGT either because they came from a unit that participated in the same war or combat operation or because they took part in the same war or combat operation but were referred by different units. All patients wanted to understand the impact of the trauma, clarify their distress, reconstruct the traumatic event, and identify their stuck thinking and the connection between these thoughts and their feelings of distress. All groups received the same therapeutic procedure with the same therapy team-two therapists and a note taker. The therapists were trained and experienced in group therapy for posttraumatic stress casualties. The note taker recorded what was said by the patients and therapists during therapy. The therapy staff used those notes in staff meetings at the end of each session. One team of therapists treated five different groups and three teams of therapists treated one group each. All groups were closed, and no new patients could join them once they began. At the end of the final session, we retested the frequency of posttraumatic stress symptoms and depression and functioning levels (second measurement) and retested them in the follow-up session (third measurement) some months after therapy ended for all group members.

Data Analysis

Descriptive statistics were obtained for the sociodemographic variables for the whole sample along with means and standard deviations for PTSD, depression, and global functioning at the pretreatment, posttreatment, and follow-up as a function of treatment. Treatment effect over time on symptoms of PTSD, depression, functioning, and self-reported hope was tested in random effects time-series models using multilevel modeling (MLM) analysis (Tasca and Gallop, 2009). Sociodemographic variables were examined as control variables when testing the model. This approach handles missing data by computing estimated marginal means while relying on the entire sample of patients including subjects with missing data at each of the assessments points.

Jacobson and Truax (1991) developed a concept that considers the clinical relevance of treatment change in an attempt to overcome the shortcomings of measuring treatment outcomes in terms of statistical significance or effect size. This approach divides patients into three treatment outcome groups: normative patients: who have normative scores at both pre- and postmeasurement; reliably changed patients: who demonstrate statistically significant improvement between pre- and postmeasurement; and clinically significantly improved patients: who exhibit statistically significant improvement and normal range symptoms at the end of therapy. Using this procedure, the reliable change criterion for the various outcome instruments were as follows: PCL greater than 20.81, MADRS less than 16.24, and function greater than 9.87. A positive change between the pre- and post- and pre and follow-up measurements that exceeded those criteria was interpreted as a reliable improvement.

Participants

Figure 2 presents the flow through the study. Of the 80 participants who met the inclusion criteria and agreed to participate in the therapy and completed the baseline assessment (assessment 1), 70 (87%)



FIGURE 2. Flow of patients throughout the study. Eighty patients began TFGT. Seventy went through the posttreatment assessment, and 10 patients did not complete the therapy. Follow-up was conducted on 43 patients, and 27 patients did not arrive for different reasons.

completed the posttreatment assessment (assessment 2). A total of 43 (61%) of those who completed the study also completed the follow-up assessment 6 months after treatment ended. On comparing the completers and noncompleters using *t*-test and chi-square test (Table 1), aside from the work variable (p = 0.013) there were no group differences for any of the sociodemographic variables (all p > 0.10).

Treatment Adherence

Multilevel modeling (Tasca and Gallop, 2009) analyses were performed at three measurement points: pretherapy, end of therapy, and follow-up meeting 6 months after therapy. Sociodemographic variables were also examined while testing the model.

Table 3 presents the means and standard deviations for PTSD (PCL), depression (MADRS), and global functioning (POAMS) at pretreatment, posttreatment, and follow-up as a function of treatment for each group.

The main time effects after including the sociodemographic variables were confirmed by the model analyses for the PCL questionnaire, MADRS depression, and POAMS functioning level: B(time2) = -13.91

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Group	M	SD	n	М	SD	n	М	SD	n	М	SD	n	М	SD	n	М	SD	n	М	SD	n	М	SD	n
PCL 1	39.5	11.62	12	41.5	13.85	12	46.4	11.06	10	58.3	12.86	8	64.3	2.87	8	54.1	11.76	9	54.6	7.83	9	43.9	14.00	12
PCL 2	32.4	12.35	12	30.4	13.11	12	34.4	13.73	10	35.7	9.05	7	35.5	9.11	4	40.1	9.02	8	36.2	8.32	5	35.3	12.78	12
PCL 3	32.0	11.33	7	31.2	10.47	5	27.8	7.41	6	32.2	11.82	5	32.5	7.23	4	37.7	11.34	6	32.7	7.02	3	26.1	9.56	8
MADRS 1	27.5	13.46	12	28.6	12.80	12	37.7	7.69	10	32.3	8.99	8	24.1	10.27	8	32.7	9.18	9	32.1	8.12	9	31.5	10.04	12
MADRS 2	23.0	13.18	12	23.1	10.67	12	18.6	10.98	10	17.1	9.53	7	21.8	14.43	4	12.4	8.30	8	16.4	8.26	5	22.7	12.09	12
MADRS 3	13.3	16.56	4	24.4	18.62	5	12.5	9.67	6	20.0	13.27	4	33.7	14.01	3	9.7	13.88	6	26.7	19.63	3	16.3	16.80	6
Function 1	19.4	8.07	12	19.5	6.80	12	18.3	7.08	10	16.8	3.79	8	13.12	6.28	8	14.3	4.03	9	15.2	4.29	9	20.8	6.61	12
Function 2	22.5	11.6	12	24.0	10.5	12	25.1	6.77	10	22.8	8.31	7	17.2	13.5	4	29.2	6.08	8	27.6	10.0	5	27.2	9.35	12
Function 3	31.2	2.68	5	28.6	2.60	5	27.6	8.93	6	28.2	5.79	4	15.6	11.5	3	32.0	2.44	6	29.0	3.46	3	30.7	2.87	7

TABLE 3. Means and SDs for Posttraumatic Stress Symptoms (PCL), Depression (MADRS), and Functioning Levels (POAMS), at Pretherapy (1), Posttherapy (2), and at 6 Months Follow-Up (3)

(SE = 1.57), -11.04 (SE = 1.82), 6.96 (SE = 1.19), respectively, p = .000 and, B(time3) = -17.20 (SE = 1.89), -11.33 (SE = 2.29), 9.77 (SE = 1.48), were all ps < .000. This shows significant reductions in clinician-rated and patient-reported PTSD and depression symptoms after treatment and retention of treatment gains at follow-up. It also shows a significant increase in functioning after treatment, with retention of treatment gains at follow-up, compared with pretreatment.

Participants also reported reliable improvement (47.1%-65.7%) in the primary outcome variable PTSD, depression, and function (Table 4) between pre- and posttreatment. A small number of participants (1.4%-7.2%) reported reliable deterioration in the outcome measurements between pre- and posttreatment. Improvement continued between pretreatment and follow-up (48.8%-53.5%), and only a few participants reported reliable deterioration for depression (9.3%).

DISCUSSION

The study examined the effectiveness for combat veterans of TFGT techniques, which are borrowed from CPT, PE, and AT. The results show the effectiveness of TFGT for reducing PTSD and depression symptoms and enhancing functioning. The possible structural commonalities of three seemingly different theoretical and clinical methods point to a central process for PTSD intervention. We saw that all interventions can alter the maladaptive and traumatic sensory processing and affect excitatory reactions by shifting to enhancement of functioning. Sarid and Huss (2010) showed similar results for cognitive-behavioral intervention and AT for acute stress disorder.

The treatment dropout rate was 12.5% and 39% in the follow-up phase. It is important to note the relatively low dropout rate of participants in this study compared with other group therapy studies showing higher dropout rates in both group therapy and individual treatment (Goetter et al., 2015; Imel et al., 2013). The short duration of the therapy and focus goals seem to have contributed to the low dropout rate.

In terms of the reduction in the posttraumatic stress and depression symptoms, the results are consistent with other results relating to the efficacy of trauma-focused group cognitive therapy for posttrauma casualties in general (Foy et al., 2002; Schnurr et al., 2003) and posttrauma after exposure to combat events in particular (Chard et al., 2010; Sloan et al., 2013). Note that the inclusion of functioning in our focus is unique because most studies of posttrauma casualties report on effect size and reduced number of symptoms and/or weakening of symptoms, and less on end-state functioning (Pocock et al., 2012).

As noted, TFGT is a combination of CPT, PE, and AT. However, whereas CPT and PE have a lot to offer patients with PTSD, we know from evidence-based trials (Benish et al., 2008; Foa et al., 2005; Resick et al., 2008; Shalev et al., 2012; Steenkamp and Litz, 2013) that AT has

only been examined in systematic review (Schouten et al., 2015) and other studies (Huss et al., 2010; Sarid and Huss, 2010).

In the present study, it seems that the combination of three different clinical methods helps to modulate and challenge explicit traumatic autobiographical memories by stimulating a subsequent cognitive process. This theoretical model carries implications for the theory and practice of CPT and for PE practitioners and art therapists dealing with the trauma symptoms. If we analyze CPT, PE, and AT through the prism of physical-emotional stress reduction and memory restructuring, it seems that all of them have similar outcomes and that they all utilize a holistic approach to trauma memories that helps in reintegrating the overwhelming and fragmenting experience of trauma. It allowed each member of the group to distance themselves from emotion and stimulated cognitive integration of emotion and meaning-making processes, while using this to access and integrate traumatic memories, by communicating and documenting images of traumatic memories and through rituals. All this is effective in a group setting because it allows patients to work on their feelings and at the same time illustrate them and find support from others while sharing these feelings verbally. It seems that because all members of the group have shared the experience of creating the art, they are more likely to be empathetic and receptive when

TABLE 4. Number of Participants (% in Parenthesis) Who Reported Clinically Reliable Improvement, Improvement, and Deterioration on Each Outcome Between Pretreatment to Posttreatment (n = 70) and Between Pretreatment to Follow-Up (n = 43)

	Improved	Clinically Improved	Deteriorated
Posttraumatic symptoms			
Pre-post treatment	46	24	0
-	(65.7%)	(34.3%)	
Pre follow-up	22	21	0
	(51.2%)	(48.8%)	
Depression symptoms			
Pre-post treatment	38	31	1
	(54.3%)	(44.3%)	(1.4%)
Pre follow-up	21	18	4
	(48.8%)	(41.9%)	(9.3%)
Level of functioning			
Pre-post treatment	33	32	5
-	(47.1%)	(45.7%)	(7.2%)
Pre follow-up	23	20	0
-	(53.5%)	(46.5%)	

giving one another feedback and receiving it. Moreover, in this study, cognitive restructuring was the main technique that escorted the drawing and painting, whereas exposure was part of it. Therefore, it seems fair to describe this process as "narrative exposure therapy," which in clinical practice is mostly applied in combination with AT (Schouten et al., 2015). One way or another, we assume that the active use and experience with art materials contributed to the process as a whole and to end of therapy results.

The intimate encounter between the group members—which emphasizes the potential of group therapy for PTSD (Sripada et al., 2016)—in which the veteran has an opportunity to discuss his difficulties and receive attention and empathy can be a powerful factor in alleviating symptoms. Similarly, factors such as a positive attitude combined with warmth, authenticity, understanding, support, encouragement, insight, sensitivity, and empathy can all influence treatment outcome (Lambert and Bergin, 1994).

It is also possible that the treatment assignment protocol to the therapy, which the UTC-PTSD refined over many years, has maximized the therapeutic gains for each patient. Unfortunately, the present study's data cannot assess whether this is indeed the case. This could be resolved by future studies applying random assignment methods.

The current study had several limitations, most of which are regularly found in studies of comparative effectiveness of routine treatments in real-life settings (Shadish et al., 2000). The first is the lack of a control group of untreated patients. This design problem limits our ability to attribute treatment gains to the treatment protocols in question. The UTC-PTSD is instructed to provide immediate access to care for veterans, thus precluding direct control over basic factors such as the simple passage of time. Another limitation and a serious obstacle to inference is lack of random assignment to TFGT. As a result, one cannot rule out biased assignment as an explanation for the observed equivalence in therapeutic gains. Still, these concerns are somewhat mitigated in the current study by the fact that the patients assigned to each group had severe PTSD and depression symptoms, which means a disturbance to begin with. Second, we did not compare our multifaceted intervention to other well-established therapeutic modalities such as CPT and PE. Future research is needed to illuminate the advantages of our proposed intervention. Third, although the therapists did receive ongoing weekly supervision, treatment manuals were not used and therapy sessions were not directly monitored. It was therefore not possible to assess adherence to the treatment protocol. For a discussion of this issue see Foa and Meadows (1997). Fourth, although incomplete data are common in routine practice settings (Greasley and Small, 2005), they nevertheless limit inference. Those patients who complete their treatment and are administered posttreatment measures are more likely to have agreed with their therapist when treatment should end (Barkham et al., 2006) than patients who do not complete treatment, and are also more likely to have improved during treatment (Stiles et al., 2008). The MLM approach to data analysis used in the current study should alleviate these concerns to some extent. As in many treatment studies of chronic PTSD, a large number of the participants in the current sample failed to complete posttreatment and follow-up assessments (Imel et al., 2013). Although this is a serious limitation to research and analyses, it reflects an even more serious problem of treatment retirement for veterans with chronic PTSD in the real world. Fifth, this study examined one type of population-combat soldierswhich means we cannot generalize to other populations with posttraumatic stress disorders such as victims of rape or road accident casualties. Sixth, the study's outcome measures are self-report only. The use of self-report measures are rarely validated, whereas the specificity and sensitivity of the measure are dependent on the time elapsed between the assessment and the exposure to the traumatic event, and it is also influenced by the willing to be treated in a clinic (Sundin et al., 2010).

In conclusion, the current study provides preliminary evidence of the effectiveness of a group multifaceted intervention for soldiers suffering from PTSD. Although this research does not offer a comprehensive answer to the question of how and why different therapies help (Kazdin and Kendall, 1998), we must continue to search for research evidence that shows the effectiveness of therapies for treating PTSD, including group therapy.

DISCLOSURE

The authors declare no conflict of interest.

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