

BRIEF REPORT

Examining the impact of brief couples-based posttraumatic stress disorder treatments on anger and psychological aggression in veterans and their partners

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Abstract

Anger can adversely impact functioning in veterans. Psychological aggression, which is related to but distinct from anger, is particularly detrimental to veterans' mental health. Research examining anger and psychological aggression following individual therapy for posttraumatic stress disorder (PTSD) has demonstrated small effect sizes. Treatments that directly target conflict management and interpersonal functioning, both regarding content and delivery to veterans and their loved ones (e.g., couples-based PTSD treatments), may be more effective in alleviating anger symptoms. This study examined whether larger reductions in anger and psychological aggression would be observed in a couples-based intervention compared to an active comparator at posttreatment and follow-up. Data were derived from a randomized trial comparing brief cognitive-behavioral conjoint therapy for PTSD (bCBCT) and PTSD family education (PFE). Participants were 137 veterans and their intimate partners (bCBCT: $n = 92$, PFE: $n = 45$). We observed within-condition significant reductions in angry temperament, $d = -0.47$, $p < .001$, and angry reaction, $d = -0.26$, $p = .004$, among veterans in bCBCT but not PFE, $|d|s = 0.13-0.17$, $ps = .166-.268$. Veterans

and partners in both conditions reported reductions in psychological aggression, $ldls = 1.09\text{--}1.46$, $ps < .001$. There were no significant differences between the treatment conditions on any outcome, $ps = .103\text{--}.443$, and there were no significant changes in anger between posttreatment and follow-up, $ldls = 0.07\text{--}0.24$, $ps = .052\text{--}.582$. Couples-based interventions for PTSD, including bCBCT and PFE, can be effective in improving aspects of anger among veterans and their intimate partners.

Anger is the most commonly reported postdeployment reintegration concern among military veterans with posttraumatic stress disorder (PTSD; Sayer et al. 2010) and one of the primary presenting issues among veterans seeking treatment for PTSD (Rosen et al., 2013). There is a robust, bidirectional association between anger and PTSD such that anger predicts higher levels of PTSD symptom severity (Koenen et al., 2003; Novaco & Chemtob, 2002), and PTSD improvements are associated with improvements in anger (Galovski et al., 2014; Miles et al., 2020). Problematic anger has been shown to negatively impact interpersonal functioning and relationships (Taft et al., 2011) and may serve to weaken social support by alienating others. Additionally, psychological aggression (i.e., verbal and behavioral acts that aim to intimidate, threaten, demean, or belittle one's partner; Follingstad et al., 2005) is common among military personnel with PTSD—in one study, 97% of active duty members with PTSD endorsed psychological aggression prior to treatment (Miles et al., 2020). Psychological aggression is related to but distinct from anger and is the most common form of interpersonal violence (Shorey et al., 2012). It is associated with higher levels of anxiety, physical health symptoms, and distress among survivors even when controlling for physical aggression (Taft et al., 2006) and can be more detrimental to survivors than physical aggression (Williams et al., 2012). Psychological aggression is also associated with poorer relationship satisfaction (Taft et al., 2006). Given the deleterious effects of both anger and psychological aggression on mental health and functioning within couples, there is a need to identify PTSD treatments that can improve anger and psychological aggression.

Trauma-focused individual psychotherapies for PTSD (e.g., cognitive processing therapy [Resick et al., 2017], prolonged exposure [Foa et al., 2019]) are often effective at reducing anger in veterans, but the effect size is generally small to medium (Wells et al., 2024). Cognitive-behavioral conjoint therapy (CBCT), a couples-based, trauma-focused intervention, may be particularly promising to reduce anger and psychological aggression given its specific attention to interpersonal anger, tools to manage anger, and conflict management skills (Monson & Fredman, 2012).

Few studies have examined changes in anger following CBCT (Fredman et al., 2020; Monson et al., 2011, 2012). In one study, 24 veteran and active duty service members and their partners completed CBCT. Veterans and service members, but not their partners, reported significant reductions in state anger, with a small effect size ($d = 0.45$) at 1-month posttreatment and a moderate effect size ($d = 0.60$) at 3-months posttreatment (Fredman et al., 2020). In another study, a mixed sample of veterans and civilians ($N = 40$) were randomly assigned to CBCT or a waitlist control condition (Monson et al., 2012). Participants who received CBCT experienced large reductions in trait anger ($d = 0.84$) and moderate reductions in anger expression ($d = 0.68$), but their partners' anger symptoms were not assessed. Finally, a pilot study of seven civilians did not find significant reductions in trait anger or anger expression from pre- to posttreatment among participants, but there were large nonsignificant improvements in state anger at posttreatment among participants and significant improvements in anger expression among partners (Monson et al., 2011). Psychological aggression has also been shown to improve following Strength at Home Couples (Taft et al., 2016), a couples-based intervention to reduce intimate partner violence, as well as cognitive processing therapy (Miles et al., 2020).

Thus, there is evidence of an effect of CBCT on anger symptoms for both individuals seeking treatment and their partners. However, past research has been limited by small sample sizes, mixed populations (e.g., veterans, civilians), and variability in the type of anger, and psychological aggression outcomes following CBCT or other couples-based PTSD treatments have yet to be examined. Research in this area is critical given the deleterious effects of anger and psychological aggression on individuals with PTSD and their families.

This study is a secondary data analysis of data derived from a randomized controlled trial (RCT) that examined PTSD outcomes following couples-based interventions. The parent study utilized a brief, eight-session version of CBCT (bCBCT), which has demonstrated similar efficacy to full CBCT (Morland et al., 2022) and has a higher

likelihood of implementation in the field due to its briefer, more scalable format. The parent study consisted of three treatment arms: office-based bCBCT; home-based telehealth bCBCT; and office-based PTSD family education (PFE), a psychoeducation program that provides information about the impact of PTSD on relationships. The results of the parent study indicated that office-based bCBCT and home-based telehealth bCBCT resulted in larger PTSD symptom reductions when compared to PFE. There were no significant differences between the two bCBCT conditions. Additionally, relationship satisfaction and psychosocial functioning improved in all conditions, and there were no significant differences between conditions.

The goal of this study was to expand upon the current literature by examining changes in trait anger and psychological aggression among veterans with PTSD and their intimate partners who were enrolled in couples-based PTSD interventions (Morland et al., 2022). We hypothesized that both bCBCT and PFE would significantly reduce veterans' and partners' trait anger and psychological aggression from pretreatment to posttreatment due to their specific psychoeducation about anger and/or skills training to address anger. We also posited that these gains would be maintained at follow-up. Given the specific focus on conflict management and communication skills in bCBCT but not PFE, we hypothesized that bCBCT would result in significantly larger improvements in trait anger and psychological aggression than PFE from pre- to posttreatment and through the follow-up period.

METHOD

Participants

Participants were 137 couples, which included veterans with PTSD and their intimate partners who engaged in bCBCT or PFE as a part of the parent RCT (Morland et al., 2022). This study includes the intent-to-treat (ITT) sample. Primary inclusion criteria were that the couple had to include a veteran with PTSD as determined using the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5; Weathers, Blake, et al., 2013), and couples needed to be willing to be randomized to and participate in any of the study interventions and not receive other individual or group psychotherapy for PTSD or couples-based psychotherapy during the treatment portion of the study. Primary exclusion criteria, which applied to both members of the couple, were: current (i.e., past 3 months) substance use disorder, current uncontrolled psychotic symptoms, imminent suicidality or homicidality, and severe physical or sexual relationship aggression in the past year. Additionally, intimate partners could not score above 33 on the

PTSD Checklist for DSM-5 (Weathers, Litz, et al., 2013). For a complete list of the eligibility criteria, see Morland et al., 2022. See Table 1 for participant demographic characteristics.

Procedure

Recruitment, randomization, and study design

Recruitment occurred through the San Diego Department of Veterans Affairs (VA) Healthcare System. Veterans and their intimate partners completed informed consent and a baseline assessment to determine eligibility. Eligible couples were randomized to one of three conditions: bCBCT via telehealth ($n = 46$), office-based bCBCT ($n = 46$), or office-based PFE ($n = 45$). All three treatment conditions consisted of an eight-session protocol. Following the baseline assessment, additional assessments were administered at midtreatment, posttreatment, and 3- and 6-month follow-ups. See Morland et al. (2022) for a full description of the study procedures and interventions. There were no differences in PTSD symptom change or psychosocial functioning, including relationship functioning, between office-based or telehealth-delivered bCBCT in the parent trial, and we do not have any reason to expect that the treatment modality (i.e., telehealth vs. in-person) would have any impact on anger outcomes; thus, these two conditions were collapsed in the current study ($N = 92$). The parent study protocol was approved by the Institutional Review Board of the San Diego VA Health Care System.

Treatments

bCBCT. The bCBCT intervention is an eight-session version of CBCT that consists of two of the three phases in the full protocol. Phase 1 includes psychoeducation about PTSD and its impact on relationships. Additionally, Phase 1 teaches couples to identify anger and learn strategies to manage anger and conflict (e.g., "timeout"s). More specifically, the second session of Phase 1 is focused on increasing safety, which includes psychoeducation about anger, learning to identify anger, individual strategies to regulate anger (i.e., breathing), and dyadic strategies (e.g., timeouts, identifying one's early signs of anger escalation and those of their partner). Phase 2 helps couples learn to challenge trauma-related beliefs, approach activities that are typically avoided due to PTSD, learn communication skills, and engage in problem-solving to minimize the impact of PTSD on the relationship. Phase 2 concludes with a treatment consolidation and termination session.

TABLE 1 Sample demographic characteristics

Variable	bCBCT (<i>n</i> = 92 couples)			PFE (<i>n</i> = 45 couples)	
	<i>M</i>	<i>SD</i>	%	<i>M</i>	<i>SD</i>
Relationship length (years)	11.3	9.4		15.3	14.4
Age (years)	40.85	12.5		43.9	15.2
Married			72.9		80.0
Veteran gender			80.5		82.2
Same-gender couple			8.6		4.4
Hispanic/Latine ethnicity			35.2		33.3
Race					
African American/Black			20.6		14.3
American Indian/Alaska Native			2.9		2.4
Asian			4.1		8.2
Native Hawaiian/Pacific Islander			4.7		1.2
White			55.6		63.1

Note: bCBCT = brief cognitive-behavioral conjoint therapy; PFE = PTSD family education.

PFE. PFE is an eight-session psychoeducation intervention. PFE provides information about PTSD and its impact on relationships, as well as education about commonly co-occurring issues, such as depression, anger, substance use, and complex PTSD. Anger is discussed most directly as part of Session 5, which focuses on PTSD health and wellness and incorporates information about stress and self-care. Much of Session 5 is focused on educating the couple about the connection between PTSD, anger, stress, and health. It also includes a handout on tips for managing anger and encourages self-care for coping with stress and anger. The PFE intervention also offers education about PTSD treatments.

Measures

Anger

The parent study included two subscales from the State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1999) to measure anger symptoms for veterans and their intimate partners. The Angry Temperament subscale measures an individual's likelihood of experiencing angry feelings even when they are not provoked. The Angry Reaction subscale assesses the frequency of angry feelings when provoked. Each of these subscales includes four items that are rated on a Likert scale ranging from 1 (*almost never*) to 4 (*almost always*). Higher scores indicate higher levels of anger and range from 4 to 16 for each subscale. The STAXI-2 has demonstrated good validity and reliability (Lievaart et al., 2016). In this sample, Cronbach's alpha values for the Angry Temperament subscale were .91

and .86 for veterans and their partners, respectively. For the Angry Reaction subscale, Cronbach's alpha values were .73 and .77 for veterans and their partners, respectively.

Psychological aggression

Both partners completed the Psychological Aggression subscale of the Revised Conflict Tactics Scale-Short Form (CTS-2S; Straus & Douglas, 2004) to measure psychological aggression in the relationship. This four-item, self-report subscale asks the respondent to answer two items about their own behavior, and then they are asked to rate their partner on the same two items (i.e., self- and other-report). Items are rated on an ordinal scale to indicate the number of times the behavior occurred in the past year, coded 0 (*never*) to 6 (*> 20 times in the past year*). For this study, the mean frequency score for Psychological Aggression subscale items was calculated and averaged across self- and other-rated items for both veterans and their partners to capture the overall level of psychological aggression in the relationship (Straus & Douglas, 2004). Concurrent validity between the CTS-2S Psychological subscale and the Psychological Aggression subscale from the full CTS-2 was very good for veterans, $r = .77$, and good for their partners, $r = .69$ (Straus & Douglas, 2004).

Data analysis

Data were analyzed using *Mplus* (Version 8.7). Models were multiple-group growth curve models, grouped by the two treatment conditions (bCBCT or PFE), with

TABLE 2 Anger and psychological aggression across assessment points

Variable	Baseline			Midtreatment			Posttreatment			3-month follow-up			6-month follow-up		
	N	M	SD	n	M	SD	n	M	SD	n	M	SD	n	M	SD
bCBCT															
Angry temperament															
Veteran	90	9.30	3.15	58	8.03	2.83	52	7.69	2.78	42	7.67	3.35	41	7.56	3.07
Partner	90	6.21	2.41	59	5.95	2.14	53	5.81	1.87	44	5.68	1.78	40	5.40	1.68
Angry reaction															
Veteran	90	9.36	3.04	58	9.19	2.79	52	8.62	3.06	42	8.29	3.02	41	8.34	3.08
Partner	91	7.65	2.76	59	7.42	2.51	53	7.02	2.42	44	6.36	2.02	40	6.15	2.05
Psychological aggression															
Veteran	92	4.17	2.06	57	2.21	1.67	53	1.64	1.50	42	1.46	1.52	41	1.48	1.50
Partner	92	4.20	1.89	59	2.16	1.74	53	1.84	1.56	44	1.58	1.47	40	1.56	1.43
PFE															
Angry temperament															
Veteran	43	9.95	3.41	30	9.83	3.43	30	9.37	3.53	25	9.32	3.59	27	8.37	3.51
Partner	44	6.20	2.49	30	5.93	2.26	30	5.53	2.13	25	5.48	2.20	26	5.12	1.68
Angry reaction															
Veteran	43	9.91	3.05	30	9.27	3.58	30	9.63	3.58	25	8.68	3.22	27	8.19	3.45
Partner	45	7.31	2.48	29	7.28	1.83	30	6.77	2.19	25	7.24	2.63	26	6.54	2.06
Psychological aggression															
Veteran	45	3.92	1.86	30	1.62	1.70	30	1.42	1.62	25	1.64	1.27	27	1.13	1.44
Partner	45	3.79	2.29	30	1.48	1.51	30	1.63	1.67	25	1.70	1.76	25	1.46	1.61

Note: bCBCT = brief cognitive-behavioral conjoint therapy for PTSD; PFE = PTSD family education.

separate slopes estimated for veterans’ and partners’ anger outcomes in each group. Piecewise growth curve models were used to estimate separate slopes for the treatment and follow-up periods. Thus, within each treatment, four slopes were estimated: veterans’ treatment period, veterans’ follow-up period, partners’ treatment period, and partners’ follow-up period. Model constraint functions were used to statistically test differences between each of these four parameters in bCBCT versus PFE. Effect sizes were calculated as Cohen’s *d* based on slope estimates and standard deviations averaged across the relevant treatment period and were interpreted based on typical benchmarks for Cohen’s *d* (i.e., small = 0.2, medium = 0.5, and large = 0.8; Feingold, 2013). All models included appropriate parameters to account for the dyadic data structure, including covariances between veterans’ and partners’ intercepts and slopes. Missing data were handled using full information maximum likelihood estimation.

RESULTS

Table 2 shows the means and standard deviations for angry temperament, angry reaction, and psychological aggression

at each assessment point (i.e., baseline, midtreatment, posttreatment, and 3- and 6-month follow-ups). Table 3 shows results for change in angry temperament, angry reaction, and psychological aggression among veterans and their intimate partners who were assigned to receive bCBCT or PFE. Veterans assigned to bCBCT showed improvement in angry temperament, with a medium effect, $d = -0.47$, as well as improvement in angry reaction, with a small effect, $d = -0.26$. Additionally, intimate partners assigned to bCBCT showed significant improvement in angry reaction, with a small effect, $d = -0.28$. Participants assigned to PFE did not show significant improvement in angry temperament or reaction, $ds = -.17--.13$). However, regarding change in both angry temperament and angry reaction, direct head-to-head comparisons between the bCBCT and PFE groups were nonsignificant, suggesting a lack of power at this sample size to detect this difference in slopes. For psychological aggression, veterans and partners in both conditions showed significant, large-size improvement, $ds = -1.08--1.46$, with no significant differences between bCBCT and PFE.

There were no significant changes in anger during the follow-up period among any participant group on any anger measure. The overall trend, though nonsignificant,

TABLE 3 Changes in angry temperament, angry reaction, and psychological aggression for veterans and their partners, by treatment condition

Variable	Treatment slope				Follow-up slope			
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>d</i>	<i>B</i>	<i>SE</i>	<i>p</i>	<i>d</i>
Angry temperament								
Veterans								
bCBCT	−0.697	0.144	< .001	−0.471	−0.042	0.055	.448	−0.086
PFE	−0.286	0.207	.166	−0.165	−0.142	0.073	.052	−0.242
bCBCT vs. PFE	0.410	0.252	.103	−	−0.100	0.091	.272	
Partners								
bCBCT	−0.040	0.108	.711	−0.037	−0.035	0.041	.404	−0.118
PFE	−0.190	0.119	.110	−0.164	−0.023	0.042	.582	−0.072
bCBCT vs. PFE	−0.150	0.160	.350	−	0.011	0.059	.846	
Angry reaction								
Veterans								
bCBCT	−0.399	0.138	.004	−0.262	−0.095	0.052	.069	−0.186
PFE	−0.216	0.195	.268	−0.130	−0.124	0.069	.070	−0.212
bCBCT vs. PFE	0.183	0.239	.443	−	−0.029	0.086	.737	
Partners								
CBCT	−0.357	0.119	.003	−0.275	−0.088	0.046	.054	−0.236
PFE	−0.200	0.152	.190	−0.171	−0.041	0.055	.454	−0.116
bCBCT vs. PFE	0.157	0.193	.416	−	0.047	0.072	.513	
Psychological aggression								
Veterans								
bCBCT	−1.297	0.103	< .001	−1.460	0.047	0.040	.236	0.188
PFE	−1.220	0.152	< .001	−1.401	0.042	0.055	.451	0.165
bCBCT vs. PFE	0.076	0.183	.677	−	−0.005	0.068	.937	
Partners								
CBCT	−1.194	0.109	< .001	−1.386	0.051	0.043	.236	0.205
PFE	−1.080	0.153	< .001	−1.089	0.066	0.056	.237	0.242
bCBCT vs. PFE	0.114	0.188	.545	−	0.015	0.071	.216	

Note: Domains of anger (i.e., angry temperament, angry reaction, and psychological aggression) were assessed using the relevant State-Trait Anger Expression Inventory-2 subscale. bCBCT = brief cognitive-behavioral conjoint therapy for PTSD; PFE = PTSD family education.

was for angry temperament and angry reaction to continue to decline during follow-up, providing evidence against rebound on these variables. For psychological aggression, slopes rebounded slightly during follow-up subsequent to the large improvements during the study period. However, none of these follow-up trends were statistically significant, so caution should be exercised when interpreting them.

DISCUSSION

Dysregulated anger among individuals with PTSD can be challenging to treat, even after the receipt of evidence-based PTSD interventions for individuals (see Wells et al., 2024). Dyadic PTSD interventions may be particularly well-suited for improving anger symptoms because they

work at both the individual and interpersonal levels. We therefore examined changes in anger among veterans with PTSD and their partners following participation in two couples-based PTSD interventions—bCBCT and PFE. Our results indicate that veterans and their partners experienced improvements in anger symptoms following both treatments.

The bCBCT intervention resulted in statistically significant improvements across all three anger domains (i.e., angry temperament, angry reaction, and psychological aggression) for veteran participants at posttreatment. These improvements in veterans' anger following this brief version of CBCT are consistent with prior studies examining changes in anger following CBCT (Fredman et al., 2020; Monson et al., 2012). Although there are no prior studies examining changes in psychological aggression following couples-based PTSD treatment, our finding

demonstrating improvement in psychological aggression is consistent with research suggesting a positive impact of PTSD treatments (i.e., CPT; Miles et al., 2020) and dyadic interventions (i.e., Strength at Home Couples; Taft et al., 2016) on psychological aggression. Veterans' partners also experienced significant improvements in psychological aggression and angry reaction, but not angry temperament, at posttreatment. Improvements at follow-up were nonsignificant across all domains for veterans' partners, but effect sizes remained large for psychological aggression and angry reaction. The findings suggest that bCBCT can result in significant improvements in anger among both veterans and their partners.

Veterans and their partners who participated in the PFE condition also experienced large and statistically significant improvements in psychological aggression. Similar to the bCBCT group, effect sizes were large but nonsignificant during the follow-up period. However, neither veterans nor their partners experienced significant improvements in angry temperament or angry reaction during the post-treatment or follow-up periods, and we found no evidence of symptom rebound during follow-up.

Despite significant improvements across all anger domains following bCBCT and in psychological aggression following PFE, and contrary to our hypothesis, there were no significant differences between treatment conditions. This null finding was consistent for both veterans and their partners and may be attributed to a lack of statistical power, as the parent study was not designed to detect differences in anger following the two interventions. Ultimately, both treatments resulted in significant and large improvements in psychological aggression. PFE provides explicit psychoeducation about the detrimental effects of psychological aggression, which may facilitate empathy and decrease aggressive behaviors between partners; bCBCT contains content that directly targets ineffective communication and conflict (e.g., planned timeouts), which may serve to reduce psychological aggression as well. Both bCBCT and PFE may alleviate both partners' use of psychological aggression, which is particularly damaging to families and relationships (Taft et al., 2011; Williams et al., 2012).

In addition, bCBCT resulted in significant improvements in angry reactions and angry temperament among veterans with PTSD; PFE did not have significant effects. Angry reactions (e.g., heightened sensitivity to perceived criticism) and angry temperament (e.g., quick temper) may be linked to alcohol use, violence, and other negative outcomes (e.g., Sakusic et al., 2010; Varker et al., 2022). Future studies can examine whether bCBCT improves a variety of negative outcomes among individuals with both PTSD and dysregulated anger via improvements in angry reaction and angry temperament.

Importantly, the dyadic nature of both interventions enables the inclusion of content that can reduce anger on both the individual and partner levels. Therapists who provide bCBCT and PFE focus on the experiences and reactions of both partners (i.e., bCBCT through dyadic interventions, and PFE through education about dyadic processes), which may drive changes in complex and tense interactions in relationships in which one individual has PTSD (Monson et al., 2010). In addition to increasing awareness of anger, bCBCT focuses on communication skills, identifying anger and other emotions, and aggression prevention within the context of a relationship. Further, bCBCT dedicates an entire session to focusing on anger at the individual and couple levels; most trauma-focused treatments do not have anger-specific content as a part of their manualized intervention. These findings reinforce the value of dyadic interventions, particularly among veterans with PTSD, for addressing emotions that often arise in interpersonal situations.

This study has many important strengths. The current findings are based on a large, diverse sample of veterans with PTSD and their partners. Validated self-report measures were used, and the inclusion of psychological aggression addresses a gap from previous studies. Including partners as participants expands understanding of how evidence-based interventions for PTSD impact the family unit beyond the patient presenting with PTSD. The current study utilized a relationship-centered lens to expand upon the existing research examining the impact of PTSD interventions on anger symptoms and is the first to draw from a sample of participants who received bCBCT.

The findings should be interpreted in light of study limitations. The parent study only included the STAXI-2 Angry Reaction and Angry Temperament subscales rather than the full Trait Anger scale; thus, these findings cannot be directly compared to other studies that examined anger using the full STAXI-2, and future studies may benefit from examining the impact of bCBCT on other anger dimensions, such as anger expression. Additionally, the findings may not be generalizable outside of the veteran population. Further, the primary outcome in the original parent study was PTSD. The parent study did not target the recruitment of individuals based on problematic anger. Similarly, the parent study excluded couples with recent severe aggressive behavior, which may have further limited the range of anger symptoms reported by our sample compared to the broader PTSD population. However, the exclusion of couples with severe aggression is consistent with PTSD-focused couples therapy in clinical practice. As a result, we were underpowered for our treatment condition comparisons and may have seen a limited magnitude of effect for our other findings. However, our sample may more closely reflect the general population

of veterans with PTSD, which includes individuals with a broad range of anger symptoms. Further, these findings may be particularly clinically relevant because significant and large improvements in this sample suggest that even larger improvements in anger following bCBCT may be observed among individuals and partners with more severe anger symptoms. Additional research among individuals with high anger levels and their partners is warranted.

Elevated and dysregulated anger can be especially challenging to treat within the context of PTSD (Wells et al., 2024). Dyadic interventions may be particularly effective in treating anger symptoms because they effect change for both veterans and their primary support person (i.e., intimate partner). We found that bCBCT improved symptoms across several different domains of anger for both veterans with PTSD and their partners. PFE, a control condition, exhibited benefits for psychological aggression only. There were no significant differences between treatments. This paper fills gaps in the literature regarding anger outcomes following evidence-based PTSD interventions, specifically dyadic interventions and among patients and a primary support person.

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OPEN PRACTICES STATEMENT

The parent study's design and hypotheses were preregistered at clinicaltrials.gov (NCT02720016). The analyses reported in this article were not formally preregistered.

The U.S. Department of Veterans Affairs (VA) datasets analyzed for the present study have not been made available on a permanent third-party archive. Study materials, including treatment manuals and the full analysis code, are available from the principal investigator of the parent study upon reasonable request at Leslie.morland@va.gov.

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