

BRIEF REPORT

Cognitive–Behavioral Conjoint Therapy for PTSD: Pilot Results From a Community Sample

Candice M. Monson

VA National Center for Posttraumatic Stress Disorder, Boston University School of Medicine,
Ryerson University

Steffany J. Fredman

VA National Center for Posttraumatic Stress Disorder, Boston University School of Medicine

Kathryn C. Adair

VA National Center for Posttraumatic Stress Disorder

Susan P. Stevens

VA National Center for Posttraumatic Stress Disorder, Dartmouth Medical School

Patricia A. Resick

VA National Center for Posttraumatic Stress Disorder, Boston University School of Medicine

Paula P. Schnurr

VA National Center for Posttraumatic Stress Disorder, Dartmouth Medical School

Helen Z. MacDonald and Alexandra Macdonald

VA National Center for Posttraumatic Stress Disorder, Boston University School of Medicine

Seven couples participated in an uncontrolled trial of cognitive–behavioral conjoint therapy for posttraumatic stress disorder (PTSD). Among the 6 couples who completed treatment, 5 of the patients no longer met criteria for PTSD and there were across-treatment effect size improvements in patients' total PTSD symptoms according to independent clinician assessment, patient report, and partner report ($d = 1.32$ – 1.69). Three of the 4 couples relationally distressed at pretreatment were satisfied at posttreatment. Partners reported statistically significant and large effect size improvements in relationship satisfaction; patients reported nonsignificant moderate to large improvements in relationship satisfaction. Patients also reported nonsignificant, but large effect size improvements in depression and state anger symptoms. Future directions for research and treatment of traumatized individuals and close others are offered.

Candice M. Monson, VA National Center for Posttraumatic Stress Disorder, Women's Health Sciences Division; Boston University School of Medicine, Department of Psychiatry; Ryerson University, Department of Psychology; Steffany J. Fredman, VA National Center for Posttraumatic Stress Disorder; Boston University School of Medicine, Department of Psychiatry; Kathryn C. Adair, VA National Center for Posttraumatic Stress Disorder, Women's Health Sciences Division; Susan P. Stevens, VA National Center for Posttraumatic Stress Disorder, Executive Division; Dartmouth Medical School, Department of Psychiatry; Patricia A. Resick, VA National Center for Posttraumatic Stress Disorder, Women's Health Sciences Division; Boston University School of Medicine, Department of Psychiatry; Paula P. Schnurr, VA National Center for Posttraumatic Stress Disorder, Executive Division; Dartmouth Medical School, Department of Psychiatry; Helen Z. MacDonald and Alexandra Macdonald, VA National Center for Posttraumatic Stress Disorder, Behavioral Science Division; Boston University School of Medicine, Department of Psychiatry.

The study was supported by a National Institute of Mental Health grant to the first author (5R34MH076813).

Correspondence concerning this article should be addressed to: Candice M. Monson, Department of Psychology, Ryerson University, 350 Victoria Street, Toronto, ON M5B 2K3 Canada. E-mail: Candice.Monson@Psych.Ryerson.ca

© 2011 International Society for Traumatic Stress Studies. View this article online at wileyonlinelibrary.com DOI: 10.1002/jts.20604

Many individuals with posttraumatic stress disorder (PTSD) experience problems in their intimate relationships; there also is evidence that family dysfunction is associated with poorer individual treatment outcomes (see Monson, Fredman, & Dekel, 2010). As a result, clinicians and researchers alike have called for the development and testing of couple/family-based treatments for patients with PTSD and their loved ones (Riggs, Monson, Glynn, & Canterino, 2009).

There is only one published randomized trial of conjoint therapy for PTSD. Glynn and colleagues (1999) found that veterans receiving behavioral family therapy after individual exposure treatment had statistically significant improvements in interpersonal problem solving compared with veterans who received individual exposure only. Although not statistically significant, improvements in positive symptoms of PTSD (i.e., reexperiencing, hyperarousal) in the combined condition were approximately twice that obtained in the exposure-only condition. Uncontrolled

trials of other types of conjoint therapy have found improvements in overall PTSD symptoms and relationship adjustment (e.g., MacIntosh & Johnson, 2008) and avoidance symptoms (Sautter, Glynn, Thompson, Franklin, & Han, 2009), whereas others have found improvements in relationship satisfaction only and not PTSD symptoms (e.g., Rabin & Nardi, 1991).

Cognitive-behavioral conjoint therapy for PTSD (CBCT for PTSD; Monson & Fredman, in press) was designed to decrease PTSD symptoms and improve relationship adjustment. A prior uncontrolled study of CBCT for PTSD with male Vietnam combat veterans and their wives found pre- to posttreatment improvements in veterans' symptoms of PTSD and its comorbidities, wives' relationship satisfaction, and wives' mental health functioning (Monson, Schnurr, Stevens, & Guthrie, 2004; Monson, Stevens, & Schnurr, 2005). The overall goal of the current uncontrolled study was to test a revised version of the therapy in a sample that varied in the gender of the identified patient, type of trauma, and sexual orientation of the partners. The primary hypotheses were that CBCT for PTSD would be associated with significant improvements in the PTSD-identified partners' PTSD symptoms and the couples' relationship adjustment across treatment. Secondary hypotheses were that the treatment would be associated with improvements in comorbid conditions in both partners.

METHOD

Participants

Seven consecutively enrolled couples in which one of the partners was diagnosed with current PTSD were treated in the pilot phase of a larger project designed to further develop and evaluate CBCT for PTSD. The couples included individuals who had experienced a range of index traumatic events. All but one couple completed the treatment; this couple included an active duty member who was scheduled to be redeployed.

In the six couples that completed treatment, patients' mean age was 41.7 years ($SD = 13.1$) and partners' mean age was 40.3 years ($SD = 12.8$). Three patients and one partner were men. One patient and no partners identified as non-White. Half of the patients and half of the partners were employed. On average, couples had been romantically involved for 6.1 years ($SD = 4.8$), and two were same sex couples. Three couples were cohabitating and two were married. Patients' index events were classified as combat-related (33.3%), sexual assault/abuse (50%), or other (16.7%). The mean length of time since the index trauma was 13 years (range = 2–36 years). Current and lifetime comorbid diagnoses for the patients according to the Structured Clinical Interview for the DSM-IV-Patient Version (SCID; First, Spitzer, Gibbon, & Williams, 1995) included (current %/lifetime%): mood disorder (8.0%/66.7%), other anxiety disorder (16.7%/16.7%), and substance abuse/dependence disorder (16.7%/83.3%). Partners' SCID-derived diagnoses in-

cluded (current %/lifetime %): mood disorder (0%/33.3%), substance abuse/dependence (16.7%/16.7%), psychotic disorder (16.7%/16.7%), and eating disorder (0%/16.7%). Two patients and one partner received supportive individual psychotherapy prior to and during the course of the study. Two patients and one partner were on a stable regimen of psychotropic medication at least 2 months prior to and during the course of intervention.

Measures

The Clinician-Administered PTSD Scale (CAPS; Blake et al., 1995) is a semistructured clinician interview that assesses PTSD diagnostic status and symptom severity consistent with *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR; American Psychiatric Association, 2000) criteria. The PTSD diagnostic status was based on a minimum severity of 45 and meeting the DSM-IV-TR criteria (to be counted, minimum symptom frequency = 1 and intensity = 2). Total CAPS symptom severity was the primary outcome. The PTSD Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993) is a 17-item self-report measure of the PTSD symptoms corresponding with those included in the DSM-IV-TR. Partner ratings of the patients' symptoms were also obtained using the PCL.

The Beck Depression Inventory (Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961) is a 21-item self-report measure designed to assess degree of depressive symptomatology.¹ Anger was measured with the State-Trait Anger Expression Inventory (Spielberger, 1988). The Dyadic Adjustment Scale (Spanier, 1976) is a 32-item self-report inventory designed to measure satisfaction in intimate dyads; a total score < 97 was the criterion for relationship distress. The SCID and the Conflict Tactics Scale-Revised (CTS-2; Straus, Hamby, McCoy, & Sugarman, 1996) were used to establish exclusion criteria. The psychometric properties of the measures used in this study have been well established (e.g., Beck, Steer, & Garbin, 1988; Crane, Allgood, Larson, & Griffin, 1990; Forbes, Creamer, & Biddle, 2001; Forgays, Forgays, & Spielberger, 1997; Weathers, Keane, & Davidson, 2001).

Procedure

Couples were recruited from the Boston metropolitan area by clinician referral and by self-referral via flyers hung in the community. All data were collected at the Department of Veterans Affairs Boston Healthcare System study site. Inclusion criteria were a current PTSD diagnosis in one partner and an intimate partner without PTSD willing to participate; both partners had to be between 18 and 65 years of age. Exclusion criteria for both the patient and partner included substance dependence not in remission for

¹ One partner was given an incorrect version of the Beck Depression Inventory at posttreatment and was excluded from those analyses.

at least 3 months, current uncontrolled bipolar or psychotic disorder, and severe cognitive impairment. Couples experiencing any severe physical or sexual aggression in their intimate relationship in the past year according to scoring rules on the CTS-2 were also excluded. The couples were asked to refrain from receiving other conjoint therapy or evidence-based individual therapy for PTSD during the study and, if taking psychotropic medications, to remain on a regimen stabilized 2 months prior to entry. Pre-treatment assessments were completed within a month of initiating treatment, and posttreatment assessments were completed within a month of treatment ending. Trained doctoral-level psychologists administered the CAPS to both partners to determine initial eligibility, and to patients at posttreatment. The same interviewer administered the pre- and posttreatment CAPS for a given patient and did not treat the couples. Partners reported on patients' symptoms on the PCL; otherwise, each participant completed all measures.

The CBCT for PTSD consists of fifteen 75-minute sessions, typically delivered on a weekly basis. There are three treatment phases: (1) rationale and education about PTSD and relationships and strategies to promote both physical and emotional safety in the relationship; (2) exercises to enhance relationship functioning and encourage approach behaviors by both members of the couple; and (3) dyadic cognitive restructuring to address trauma-relevant cognitions that contribute to both PTSD and relationship difficulties.

All couples received the manualized treatment more fully described elsewhere (Monson & Fredman, in press). The tested treatment was based on work from the prior uncontrolled trial of the treatment (Monson et al., 2004), but differed from it in that the tested version included a greater emphasis on decreasing couple-level avoidance of feared places, situations, people, and feelings, as well as an increased focus on cognitions about the traumatic event(s). The treating clinicians (C.M. and S.E.) watched each other's sessions using audio-visual technology and provided feedback to assure fidelity to the treatment.

RESULTS

Given the small sample size, we examined change on an individual level for each outcome using reliable change criteria used in prior research (e.g., Monson et al., 2004), as well as PTSD diagnosis and relationship distress status. Paired sample *t* tests were also used to assess change, and pre- and posttest effect sizes ($d = t/\sqrt{df}$) were calculated to measure the magnitude of change. Effect sizes are qualitatively described according to conventions described by Cohen (1992).

Five of the six patients had improvements in their PTSD symptoms according to clinician and patient report (Table 1). All six had reliable improvements according to partner report. Only one of six patients met criteria for PTSD according to clinician assessment at the end of treatment. There were also statistically significant

improvements in the patients' total PTSD symptoms according to clinician, patient, and partner report, with effect sizes $d = 1.32$ – 1.69 .

Two patients and two partners reported reliable improvements in relationship satisfaction; one patient reported reliable decreases in relationship satisfaction but was in the satisfied range at the beginning and end of treatment. Regarding couple-level distress status, for the three couples in which either only the patient ($n = 2$) or the partner ($n = 1$) who were distressed at pretreatment, all were satisfied (i.e., were nondistressed) at posttreatment. For the one couple in which both the patient and the partner were distressed at pretreatment, the patient was satisfied and the partner was not satisfied at posttreatment. For the two couples in which neither partner was distressed at pretreatment, all partners remained satisfied at posttreatment. Overall, there were statistically significant and large improvements in the partners' relationship satisfaction; there were nonsignificant, moderate to large improvements in the patients' relationship satisfaction.

Four of the six patients reported reliable improvements in depression; no partners had a reliable change in depression. There were no reliable changes in patients' state anger, but overall nonsignificant large effect size improvements in state anger. There were no reliable changes in partners' anger expression, but overall statistically significant and large increases in partners' anger expression.

DISCUSSION

Our results provide further evidence that CBCT for PTSD holds promise for treating PTSD, as well as improving the relationship distress that often accompanies the disorder. These improvements occurred in a sample of couples in which the patients varied with regard to gender, type of trauma, and sexual orientation. The treatment also was well tolerated. Prior conjoint studies may have yielded more modest improvements due to their primary focus on male combat veterans suffering from PTSD for decades. However, our prior uncontrolled trial with a sample of male Vietnam veterans (Monson et al., 2004) yielded similar treatment effects to those found in the current study.

There were improvements in relationship adjustment, and as we found in our prior research (Monson et al., 2004; Monson et al., 2005), partners reported relatively greater satisfaction enhancement compared with patients. There was also some evidence of improvements in conditions frequently comorbid with PTSD and relevant to relationship satisfaction. For example, partners reported statistically significant and large increases in their anger expression. In the absence of partners' increased state anger and their low trait anger, we find this result to be a positive outcome of the therapy in that partners seem to be more open and able to express their negative feelings.

Our results should be generalized cautiously in light of the uncontrolled nature of the study, small sample size, relatively low levels of depressive symptomatology in the patients and partners

Table 1. Treatment Outcomes for Cognitive–Behavioral Conjoint Therapy for Posttraumatic Stress Disorder (PTSD)

	Pretreatment		Posttreatment		<i>t</i> (5)	<i>d</i>	Reliable change
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Clinician-Administered PTSD							
Scale Total	57.7	8.3	29.7	18.1	3.62*	1.62	5 Improved
PTSD Checklist- Total							
Patient	43.8	8.8	28.7	13.2	2.96*	1.32	5 Improved
Per partner	46.0	19.2	31.2	16.4	3.78*	1.69	6 Improved
Dyadic Adjustment Scale							
Patient	102.4	14.9	111.4	7.3	−1.58	0.71	2 Improved 1 Worsened
Partner	104.3	11.6	112.8	10.1	−3.16*	1.41	2 Improved
Beck Depression Inventory							
Patient	11.0	3.2	7.0	6.0	1.24	0.55	4 Improved
Partner	2.5	1.9	3.6	2.4	−1.21	−0.54	No change
State–Trait Anger							
Inventory – Patient							
State	11.3	1.5	10.2	0.4	1.78	0.80	No change
Trait	19.7	7.0	17.0	7.5	0.93	0.42	1 Improved
Expression	31.3	7.0	26.8	18.2	0.70	0.31	2 Improved
State–Trait Anger							
Inventory – Partner							
State	10.0	0.0	10.0	0.0	0.00	0.00	No change
Trait	15.3	3.5	15.3	4.0	−0.10	−0.04	No change
Expression	17.3	9.4	21.2	9.6	−3.66*	1.64	No change

Note. *N* = 6 couples. Positive effect sizes (*d*) indicate the desired therapy effect. Partner reports are of their own symptoms, except for the PTSD Checklist, on which partners reported on patients' symptoms. The amount of change used to determine reliable change (+/−) was as follows: Clinician-Administered PTSD Scale = 10; PTSD Checklist = 5; Dyadic Adjustment Scale = 10; Beck Depression Inventory = 5; and State–Trait Anger Inventory, State (male = 13, female = 15), Trait (male = 8, female = 7), Expression (male = 13, female = 11).

**p* < .05.

relative to other clinical samples, and limited racial/ethnic diversity of the sample. In future work we plan to address these limitations and to examine potential moderators of treatment outcome like cohabitation status, partner psychopathology, relationship distress levels, and comorbidities. We are also interested in testing the therapy in dyads that include nonromantic significant others to be more inclusive of the range of individuals who might be included in the treatment. As there is growing recognition of the potential role that significant others can have in an individual's recovery from trauma, we look forward to exploring the treatment with a range of affected individuals and their loved ones and more definitively determining the efficacy of the therapy in controlled trials.

REFERENCES

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*, 77–100. doi:10.1016/0272-7358(88)90050-5
- Beck, A. T., Ward, C. H., Mendelsohn, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571. Retrieved from <http://archpsyc.ama-assn.org/>
- Blake, D. D., Weathers, F. W., Nagy, L. M., Kaloupek, D. G., Gusman, F. D., Charney, D. S., & Keane, T. M. (1995). The development of a Clinician-Administered PTSD Scale. *Journal of Traumatic Stress, 8*, 75–90. doi:10.1007/BF02105408.
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155–159. doi:10.1037//0033-2909.112.1.155.
- Crane, D. R., Allgood, S. M., Larson, J. H., & Griffin, W. (1990). Assessing marital quality with distressed and nondistressed couples: A comparison and equivalency table for three frequently used measures. *Journal of Marriage and the Family, 52*, 87–93. doi:10.2307/352841
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. (1995). *Structured Clinical Interview for DSM-IV Axis I Disorders—Patient edition (SCID-IP, version 2)*. New York, NY: Biometrics Research Department, New York State Psychiatric Institute.
- Forbes, D., Creamer, M., & Biddle, D. (2001). The validity of the PTSD Checklist as a measure of symptomatic change in combat-related PTSD.

- Behaviour Research and Therapy*, 39, 977–986. doi:10.1016/S0005-7967(00)00084-X.
- Forgays, D. G., Forgays, D. K., & Spielberger, C. D. (1997). Factor structure of the State-Trait Anger Expression Inventory. *Journal of Personality Assessment*, 69, 497–507. doi:10.1207/s15327752jpa6903.5
- Glynn, S. M., Eth, S., Randolph, E. T., Foy, D. W., Urbaitis, M., Boxer, L., . . . Crothers, J. (1999). A test of behavioral family therapy to augment exposure for combat-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 67, 243–251. doi:10.1037/0022-006X.67.2.243
- MacIntosh, H. B., & Johnson, S. (2008). Emotionally focused therapy for couples and childhood sexual abuse survivors. *Journal of Marital and Family Therapy*, 34, 298–315. doi:10.1111/j.1752-0606.2008.00074.x
- Monson, C. M., & Fredman, S. J. (in press). *Cognitive-behavioral conjoint therapy for posttraumatic stress disorder: Therapist's manual*. New York, NY: Guilford Press.
- Monson, C. M., Fredman, S. J., & Dekel, R. (2010). Posttraumatic stress disorder in an interpersonal context. In J. G. Beck (Ed.), *Interpersonal processes in the anxiety disorders: Implications for understanding psychopathology and treatment* (pp. 179–208). Washington, DC: American Psychological Association.
- Monson, C. M., Schnurr, P. P., Stevens, S. P., & Guthrie, K. A. (2004). Cognitive-behavioral couple's treatment for posttraumatic stress disorder: Initial findings. *Journal of Traumatic Stress*, 17, 341–344. doi:10.1023/B:JOTS.0000038483.69570.5b
- Monson, C. M., Stevens, S. P., & Schnurr, P. P. (2005). Cognitive-behavioral couple's treatment for posttraumatic stress disorder. In T. A. Corales (Ed.), *Focus on posttraumatic stress disorder research* (pp. 251–280). Hauppauge, NY: Nova Science.
- Rabin, C., & Nardi, C. (1991). Treating post-traumatic stress disorder couples: A psychoeducational program. *Community Mental Health Journal*, 27, 209–224. doi:10.1007/BF00752422.
- Riggs, D. S., Monson, C. M., Glynn, S., & Canterino, J. (2009). Couples and family therapy. In E. B. Foa, T. M. Keane, M. J. Friedman, & J. A. Cohen (Eds.), *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies* (2nd ed., pp. 458–478). New York, NY: Guilford Press.
- Sautter, F., Glynn, S., Thompson, K. E., Franklin, C. L., & Han, X. (2009). A couple-based approach to the reduction of PTSD avoidance symptoms: Preliminary findings. *Journal of Marital and Family Therapy*, 35, 343–349. doi:10.1111/j.1752-0606.2009.00125.x
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15–28. doi:10.2307/350547
- Spielberger, C. D. (1988). *State-Trait Anger Expression Inventory*. Odessa, FL: Psychological Assessment Resources.
- Straus, M. A., Hamby, S. L., McCoy, S. B., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17, 283–316. doi:10.1177/019251396017003001
- Weathers, F. W., Keane, T. M., & Davidson, J. R. (2001). Clinician-Administered PTSD Scale: A review of the first ten years of research. *Depression and Anxiety*, 13, 132–156. doi:10.1002/da.1029
- Weathers, F. W., Litz, B. T., Herman, J. A., Huska, J. A., & Keane, T. M. (1993, October). *The PTSD Checklist (PCL): Reliability, validity and diagnostic utility*. Paper presented at the 9th annual conference of the International Society for Traumatic Stress Studies, San Antonio, TX.