



Published in final edited form as:

*J Psychoactive Drugs*. 2010 March ; 42(1): 83–87.

## A Pilot Study of Seeking Safety Therapy with OEF/OIF Veterans

Sonya B. Norman<sup>a,b</sup>, Kendall C. Wilkins<sup>c</sup>, Susan F. Tapert<sup>a,b</sup>, Ariel J. Lang, PhD<sup>a,b</sup>, and Lisa M. Najavits<sup>d</sup>

<sup>a</sup>VA San Diego Healthcare System (VASDHS)

<sup>b</sup>Department of Psychiatry, University of California, San Diego, California

<sup>c</sup>San Diego State University/University of California San Diego Joint Doctoral Program

<sup>d</sup>McLean Hospital / Harvard Medical School

### Abstract

PTSD and substance use disorder (SUD) are highly prevalent among Veterans returning from Iraq and Afghanistan (Operation Enduring Freedom/Operation Iraqi Freedom; OEF/OIF). Seeking Safety (SS) is a cognitive-behavioral psychotherapy for co-occurring PTSD/SUD. This pilot study with fourteen male OEF/OIF Veterans suggests that SS may help to reduce alcohol use, PTSD, and depression in some participants at clinically significant levels, even when providing less than half of the full model. We emphasize several SS features as especially helpful: the case management component to help engage clients in further mental health and SUD care; offering PTSD as an entry point, and emphasis on community resources. Issues particular to Veterans include reintegration to civilian life and supporting Veterans' connection with other Veterans.

### Keywords

PTSD; substance abuse; OEF/OIF; psychotherapy

---

Combat experience is a risk factor for developing not only posttraumatic stress disorder (PTSD) but also substance use disorder (SUD; Bray 2005; Jacobson et al. 2008). The rate of PTSD among those returning from Iraq and Afghanistan (Operation Enduring Freedom, OEF, and Operation Iraqi Freedom, OIF) ranges from 11% to 20% (Hoge et al. 2006; Seal et al. 2007). The rate of SUD among OEF/OIF Veterans in Veterans Administration (VA) hospitals is estimated at over 24% (VHA 2008). Comorbid PTSD/SUD was found to be 17.4% in one study of OEF/OIF VA patients (Baker et al. Submitted). Comorbid PTSD/SUD is associated with emotional, physical, and functional problems (e.g., Ouimette et al. 1998; Norman et al. 2007), and both VA and community clinicians report significant challenges in treating them (Najavits et al. submitted; Najavits 2002). VA Clinicians report that OEF/OIF Veterans appear to be more difficult to engage in treatment than prior cohorts (Najavits et al. submitted).

It is recommended to treat PTSD and SUD concurrently (e.g., Ouimette et al. 1998). Seeking Safety (SS; Najavits, et al. 2008) is the only model for comorbid PTSD and SUD that meets criteria as an effective therapy (Najavits, Ryngala, et al. 2008). There are fourteen published studies of SS in diverse samples including Veterans (for review, see Najavits, in press). Overall, the research indicates that SS is effective in reducing PTSD and substance use (see Najavits in press). A pilot study with eighteen Veterans (age range 41–59) who completed SS found

that Veterans decreased in PTSD symptoms and reported increased quality of life (Cook et al. 2006). SS has also been found to be acceptable to male Veterans (Weaver et al. 2007). However, there are as yet no published studies on SS with OEF/OIF Veterans. This report offers an example of implementing group SS with OEF/OIF Veterans at a VA, including preliminary data on nine OEF/OIF Veterans who completed SS.

## Method

### Procedure

The VA San Diego began offering group OEF/OIF SS in summer, 2006. The majority of Veterans referred to SS screened positive for PTSD or alcohol abuse on their post-deployment screening which, if the Veteran agreed, generated a consult for an intake with a mental health provider. Those who endorsed problem drug or alcohol use and PTSD at their intake and agreed to the referral were sent to SS. Treatment consisted of 10 weekly ninety-minute sessions. Participants could join at any time and attend for ten weeks from their entry point. The groups were co-led by psychology trainees and supervised by the program directors of the Substance Abuse Mental Illness (SAMI) and OEF/OIF PTSD specialty clinics (authors ST and SN). Trainees viewed training videos of SS and co-lead the groups with a supervisor trained in SS by Lisa Najavits (SN) prior to leading groups on their own. Session audiorecordings were reviewed during weekly supervision and therapists were given feedback on compliance with the SS manual.

Of the 25 SS modules, the following combination of cognitive-behavioral and interpersonal sessions were selected: PTSD Taking Back Your Power, Commitment, When Substances Control You, Red & Green Flags, Honesty / Integrating the Split Self (combined into one session), Recovery Thinking / Discovery (combined into one session), Healing from Anger, Grounding, Creating Meaning, Life Choices Game, Healthy Relationships. Initially, modules were selected by the supervisors and therapists. Integrating the Split Self and Discovery were added because the therapists expressed that they could integrate more material on certain weeks. Participants requested that more time be spent on relationships and thus the Healthy Relationships module was added. In addition, the Life Choices Game is now played every six weeks because participants reported they enjoyed this module and the therapists felt the module helped improve patient participation in session.

Participants in the study were assessed at baseline, mid- and post-treatment, and three and six month follow-up. Pre-, mid-, and post-treatment measures were administered by the group therapists prior to the start of each patient's first, fifth, and tenth week of treatment (regardless of number of missed sessions). Follow-up measures at 3- and 6- months were mailed to participants with stamped envelopes. If participants did not return the assessment, they were telephoned and sent a second packet one month later. Participants received \$20 for each assessment.

### Participants

Veterans about to begin treatment in SS were telephoned by a study investigator, told about the study, and asked to arrive early for their first session for consenting and measures if they chose to participate. About 50% agreed to participate with others citing time restrictions or lack of interest as reasons for refusal. We enrolled 14 male outpatients over a 1.5 year period. Nine of the fourteen completed treatment and their post-treatment assessment. Seven of the nine were referred because of PTSD and alcohol use disorder, two because of PTSD and marijuana dependence. Six of the nine completed one or both follow-up assessments.

## Measures

Participants completed the following psychometrically validated measures: the PTSD Checklist-Military Version (PCL-M; Weathers et al. 1993, 1994), the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Garbin, 1988), the Alcohol Use Disorders Identification Test (AUDIT; Babor et al. 2001), and the Drug Abuse Screening Test (DAST-10; Yudko 2007). The AUDIT and DAST were modified to be completed in regard to the past month.

## Results

Demographic and deployment statistics by completers and drop-outs are presented in Table 1. Attendance averaged 7.64 sessions. Groups had 5–10 weekly attendees. Due to our small sample size, changes from pre- to post-treatment were examined on an individual basis (Table 2). For PTSD and depression, changes were examined using calculations of reliable and clinically significant change. Eight of the nine (89%) decreased in PCL score ( $M = 11.37$ ;  $SD = 11.98$ ) and one worsened (increase of 6 points). Of the eight who improved, six (75%) had a reliable change in PCL total score of a decrease of five or more points (Monson, et al, 2004); four (50%) had a clinically significant decrease of at least 10 points<sup>1</sup> (Resick, Monson, & Chard, 2007). Five (62.5%) decreased in BDI-II total score ( $M = 22.4$ ;  $SD = 6.31$ ). A fifteen point change is both clinically significant and reliable (Seggar et al. 2002). All five showed decreases of at least fifteen points. The remaining four participants (44%) showed BDI-II increases from two to seven points. Seven (77.7%) endorsed problem drinking at baseline. Five participants (55.5%) reported a reduction in number of drinking days, drinks per episode, or both. Both participants with marijuana dependence reported using marijuana at least once in the prior month at post-treatment; frequency data were not collected. No clinically significant exacerbations occurred. There were no adverse events reported by participants or therapists.

## Discussion

This pilot study suggests that a 10-session course of SS may help some OEF/OIF Veterans to reduce alcohol use, PTSD, and depression. Indeed, in those who improved, improvements were in the clinically significant range, a more stringent criterion than statistical significance. Those who completed follow-up assessments maintained their gains or continued to improve on PTSD symptoms (Table 3). Study dropouts had a trend toward higher AUDIT scores and fewer sessions attended, suggesting that those with more alcohol problems may be harder to retain.

We offer the following observations based on this project.

1. *Address readjustment.* One important theme for Veterans is readjustment to civilian life. One participant, for example, described carrying a gun to feel safe. This was discussed within the SS model as unsafe coping, but also in the context of readjustment to civilian life where carrying weapons has different implications than in combat. SS emphasizes using examples from clients' lives; we made it a point to use examples relevant to military and Veterans.
2. *PTSD as an entry point.* During our project, the VA San Diego initiated an OEF/OIF PTSD clinic, and most Veterans are now referred from there. Some Veterans who refused substance abuse treatment were willing to enter the PTSD clinic or to come in for help with trauma problems such as nightmares. Offering SS through a PTSD clinic may help engage Veterans who initially resist substance interventions and labels.

---

<sup>1</sup>Calculation of Clinically Significant PCL Change: [ $5 * 1.96$  (equivalent to  $p < .05$  significance)]

3. *Allow a “try-out”.* We have begun to encourage Veterans to try out SS without obligation to continue. Because OEF/OIF Veterans may resist treatment, letting them observe or participate in three sessions before deciding can build willingness to continue. Simply monitoring substance use levels can help build awareness that may lead to behavior change.
4. *Encourage community participation.* Many Veterans reported that spending time with other OEF/OIF Veterans is an important benefit of group SS. We encouraged this connection, but discouraged it from occurring solely in VA. We helped Veterans identify OEF/OIF community resources (e.g., a student group or softball team), and emphasized these in weekly commitments.
5. *SS as a gateway to more treatment.* The case management component of SS is designed to engage clients in additional treatments. Several SS patients who were initially unwilling to do so went on to residential SUD treatment or exposure therapy for PTSD. As clients became more aware of the problems caused by PTSD and substance use in their lives, they were more willing to enter other treatments.
6. *Integrate treatment as much as possible.* Our groups were supervised jointly by the directors of the substance abuse clinic and the PTSD clinic. This helped ensure that both SUD and PTSD were represented in all sessions even if some therapists had stronger backgrounds in one disorder. Per the SS manual, involving multiple therapists is not required, but it is recommended that therapists obtain cross-training for a solid understanding of both conditions.
7. *Focus on attendance.* Our overall attendance among those who did not drop out was strong ( $m=7.6/10$  sessions), which is in keeping with prior SS studies (Najavits, 2008). However, drop out was high and more research is needed to understand what elements help to engage and retain OEF/OIF Veterans. Ideas include offering individual and group treatment, evening and daytime sessions, and gender-specific treatment.
8. *Focus on engagement and retention.* We offered fewer than half of SS’s 25 topics due to the clinicians’ sense that this was the longest time to which OEF/OIF Veterans would commit. The high drop out rate confirmed that many Veterans would not be willing to attend for a full 25 weeks. However, for those who did remain in treatment, the full dose of SS may have led to continued improvement. Prior SS studies mostly used the full SS dose, thus it is not clear what degree of improvement we would have seen with that. One prior study conducted a dose-response analysis, finding that the more SS sessions attended, the greater the improvement on PTSD and drug use (Zlotnick et al. in press). The SS manual suggests conducting the full therapy prior to making modifications. Future investigations should focus on methods to improve engagement and retention in order to make offering the full dose a more viable option.

Limitations of our project include the small sample, the lack of a control condition, fidelity assessment, reporting of all substance use post-intake, and lack of data on study dropouts. Pre and post measures were administered by the therapists which may bias participants’ responses. The high study drop-out rate (42%) and the low number of Veterans who completed at least one follow-up assessment ( $n = 6$ ) is concerning in that there is no information on the use trajectory of study drop-outs. Future research is needed to understand how better to engage and retain OEF/OIF Veterans with concurrent PTSD and SUD in treatment. Across VA, providers are challenged by how to treat OEF/OIF Veterans, particularly those with comorbid PTSD/SUD (Najavits, et al; Submitted). In this pilot, SS appeared promising for engagement and symptom reduction. We hope this report contributes to an ongoing discussion and helps to inform future studies.

## Acknowledgments

This research was supported by grant K23-AA015707 awarded to Dr. Sonya Norman and by the VASDHS Center of Excellence in Stress and Mental Health. The authors wish to thank Drs. Jill Stoddard, Archana Jajodia, Carmen Pulido, Ryan Trim, Ruthlyn Sodano, Katherine St. Amant, and Katherine Lydecker for their contributions to this study.

## References

- Babor, T.; Higgins-Biddle, J.C.; Saunders, J.B.; Monteiro, M.G. 2nd Edition Geneva, Switzerland: 2001. The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Health Care. WHO Document No. WHO/PSA/92.4.
- Baker DG, Heppner P, Afari N, Nunnink S, Kilmer M, Simmons A, Harder L, Bosse B. Trauma exposure, branch of service and physical injury in relation to mental health among US veterans returning from Iraq and Afghanistan. (Submitted).
- Beck AT, Steer RA, Garbin MG. Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review* 1988;8:77–100.
- Bray, R.M.; Hourani, L.L.; Rae Olmstead, K.L., et al. Department of Defense Survey of Health Related Behaviors Among Active Duty Military Personnel. 2005 Dec. 2006
- Cocco KM, Carey KB. Psychometric properties of the Drug Abuse Screening Test in psychiatric outpatients. *Psychological Assessment* 1998;10:408–414.
- Hoge CW, Auchterlonie JL, Milliken CS. Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *JAMA* 2006;29:1023–1032. [PubMed: 16507803]
- Jacobson IG, et al. Alcohol use and alcohol-related problems before and after military combat deployment. *JAMA* 2008;300:663–675. [PubMed: 18698065]
- Monson CM, Schnurr PP, Stevens SP, Guthrie KA. Cognitive-behavioral couple's treatment for posttraumatic stress disorder: Initial findings. *Journal of Traumatic Stress* 2004;17:341–344. [PubMed: 15462542]
- Najavits LM. Clinicians' views on treating posttraumatic stress disorder and substance use disorder. *Journal on Substance Abuse Treatment* 2002;22:79–85.
- Najavits LM, Norman SB, Kivlahan D, Kosten T. Improving PTSD / Substance Abuse Treatment in the VA: A Survey of Providers. Submitted.
- Najavits, L.M.; Ryngala, D.; Back, S.E.; Bolton, E.; Mueser, K.T.; Brady, K.T. Treatment for PTSD and comorbid disorders: A review of the literature. In: Foa, E.B.; Keane, T.M.; Friedman, M.J.; Cohen, J., editors. *Effective treatments for PTSD: Practice guidelines from the International Society for Traumatic Stress Studies*. 2nd ed.. New York: Guilford; 2008.
- Najavits, L.M. Treatment of Posttraumatic Stress Disorder and Substance Abuse: Clinical Guidelines for Implementing Seeking Safety therapy. In: Springer, D.; Ruben, A., editors. *Clinicians' guide to evidence-based practice*. New York: John Wiley; In press.
- Najavits, L.M., et al. Men and Addictions. Hauppauge, NY: Nova Science Publishers; Seeking Safety therapy for men: Clinical and research experiences. In press-b.
- Norman SB, Tate SR, Anderson KG, Brown SA. Do Trauma History and PTSD Symptoms Influence Addiction Relapse Context? *Drug and Alcohol Dependence* 2007;33:25–32.
- Quimette PC, Brown PJ, Najavits LM. Course and treatment of patients with both substance use and posttraumatic stress disorder. *Addictive Behaviors* 1998;23:785–795. [PubMed: 9801716]
- Resick, P.A.; Monson, C.M.; Chard, K.M. Cognitive processing therapy: Veteran/military version. Washington, DC: Department of Veterans' Affairs; 2007.
- Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the war back home mental health disorders among 103,788 US Veterans returning from Iraq and Afghanistan seen at Department of Veterans Affairs facilities. *Archives of International Medicine* 2007;167:476–482.
- Segar LB, Lambert LJ, Hansen NB. Assessing clinical significance: Applications to the Beck Depression Inventory. *Behavior Therapy* 2002;33:253–269.

- Veterans Health Administration (VHA) Office of Public Health and Environmental Hazards. Washington, DC: 2008. Analysis of VA health care utilization among US global war on terrorism (GWOT) veterans: Operation Enduring Freedom / Operation Iraqi Freedom.
- Weathers, FH.; Litz, BT.; Herman, DS.; Huska, JA.; Keane, TM. The PTSD checklist: reliability, validity, & diagnostic utility. Paper presented at the Annual Meeting of the International Society for Traumatic Stress Studies; October; San Antonio, TX. 1993.
- Weaver CM, Trafton JA, Walser RD, Kimerling RE. Pilot test of Seeking Safety with male veterans. *Psychiatric Services* 2007;58:1012. [PubMed: 17602023]
- Yudko E, Lozhkina O, Fouts A. A comprehensive review of the psychometric properties of the Drug Abuse Screening Test. *Journal of Substance Abuse* 2007;32:189–198.

**Table 1**

## Participant Demographics and Deployment Information at baseline

	Drop-Outs <sup>a</sup> (N=5)	Completers (N=9)
Mean #Sessions attended	6.6	8.2
Age	24–40	24–49
<i>M</i>	31	32.11
<i>SD</i>	7.91	8.79
Race		
Caucasian	3	6
African-American	1	2
Hispanic	1	0
Other	0	1
Branch		
Marine	3	3
Navy	1	3
Army	1	2
Navy and Army	0	1
Deployments		
Average #	1.4	2
Location		
OIF	4	9
OEF & OIF	1	0
Total Symptom Scores		
PCL <sup>b</sup>	63.6	59.4
BDI <sup>c</sup>	31.8	30.0
AUDIT <sup>d</sup>	17.5	12.4
DAST <sup>e</sup>	2	1.56

Note.

<sup>a</sup> Drop-outs did not complete post-treatment measures

<sup>b</sup> Over 50 considered clinically significant.

<sup>c</sup> ≤10=minimal depression, 11–18=mild, 19–29=moderate, >30=severe.

<sup>d</sup> ≥8=hazardous or harmful alcohol use.

<sup>e</sup> ≥3=abuse or dependence.

**Table 2**

Study Completers Pre- and Post-Treatment Data

	PCL-M Total			BDI-II Total			Drinking Frequency			#Drinks/Episode		
	Pre	Mid	Post	Pre	Mid	Post	Pre	Mid	Post	Pre	Mid	Post
1	42	43	48	19	27	24	4+/week	2-3/week	2-3/week	7-9	5-6	5-6
2 <sup>a</sup>	62	40	23	29	10	0	≤Monthly	≤Monthly	≤Monthly	5-6	5-6	5-6
3	73	64	72	31	24	35	4+/week	4+/week	4+/week	10+	10+	10+
4	77	61	67	40	30	25	2-4/month	Never	Never	1-2	b	b
5	44	30	30	28	4	5	2-4/month	Never	≤Monthly	1-2	b	1-2
6 <sup>a</sup>	46	42	41	27	29	34	≤Monthly	≤Monthly	≤Monthly	1-2	1-2	1-2
7	72	71	66	40	49	42	2-3/week	2-3/week	Never	1-2	5-6	b
8	60	40	56	35	13	7	4+/week	2-3/week	2-4/month	3-4	7-9	3-4
9	59	56	47	21	10	9	4+/week	Never	4+/week	10+	b	7-9
Mean	59.4	49.7	50	30	21.8	19.8	--	--	--	--	--	--

Note: Dashes where means were not calculated.

<sup>a</sup> =Marijuana use disorder.

<sup>b</sup> =Past month sobriety endorsed.



**Table 3**

Follow-Up Data

	3-Month				6-Month			
	PCL-M Total	BDI-II Total	Drinking Frequency	# Drinks/Episode	PCL-M Total	BDI-II Total	Drinking Frequency	# Drinks/Episode
1	-	-	-	-	43	21	2-3/week	3-4
3	57	28	Never	<i>a</i>	51	34	Never	<i>a</i>
4	43	13	Never	<i>a</i>	41	15	Never	<i>a</i>
6	-	-	-	-	43	34	≤Monthly	1-2
8	28	14	2-4/month	1-2	-	-	-	-
9	53	10	4+/week	10+	-	-	-	-

*Note.* Dashes indicate assessments not completed.

*a*=Past month sobriety endorsed.