



# Seeking Safety: The Benefits of Gender-specific versus Co-Educational Therapy

## Key Messages

- Seeking Safety programming is an approach for addressing co-occurring substance use disorder and post-traumatic stress disorder.
- Much of the research on the effectiveness of Seeking Safety has been carried out on programming specific to women.
- It is not possible to determine whether co-educational Seeking Safety groups are as effective as programming specific to women.
- While there is growing support in principle for gender-specific substance use treatment, more research on single-sex and co-educational Seeking Safety groups is required to determine the most effective options for women.

## Context

Seeking Safety is a therapeutic approach for addressing co-occurring substance use disorder (SUD) and post-traumatic stress disorder (PTSD) that focuses on establishing safety for the individual (Najavits, 2002). Seeking Safety is a manualized therapy, which means that a manual is followed to ensure that treatment follows the same steps for each session. It combines cognitive behavioural therapy (CBT) and psychodynamic psychotherapy. Seeking Safety includes a therapist guide and patient materials on 25 topics covering cognitive, behavioural and interpersonal challenges and coping skills for PTSD and SUD. The program topics are independent of each other, so sessions can be tailored to focus on the topics that are identified as most pertinent by the counsellor, the client or both. The approach can also be offered in either an individual or group format.

## The Issue

There is growing research on gender-specific approaches in substance use treatment and growing evidence for providing gender-specific treatment in particular. Researchers have noted differing barriers to access to treatment by gender; that some gender-specific predictors of outcome exist; and have called for study of how participant characteristics and treatment approaches can differentially affect outcomes by gender (Center for Substance Abuse Treatment, 2009; Greenfield et al., 2007; Grella, 2003).

This review determines how Seeking Safety group treatment specifically for women for substance use compares to co-educational (co-ed) Seeking Safety group treatment for substance use.



## Approach

Researchers conducted a rapid review of the literature on Seeking Safety to compare single sex and co-ed treatment results. Ten databases were searched from 1990 to 2013 using “Seeking Safety” as the subject search term and a Google search was conducted using the same term. (Appendix A provides details about search strategy and inclusion criteria.)

The database search located 56 references and the Seeking Safety website provided 27 additional references. Of these studies, 67 did not meet the inclusion criteria. Data was extracted from the remaining 16 studies for analysis.

## Findings

Fifteen of the 16 studies were conducted in the United States and one study included participants from both the US and Canada (Najavits et al., 2013) (Appendix B). Narrative summaries of all studies, including study methods, variations in how Seeking Safety was offered, study participants and outcomes are available upon request.

The following subsections summarize the outcomes arising from interventions that were offered to groups of women only, men only, and both women and men.

### Outcomes for Women

Twelve studies evaluated Seeking Safety therapy offered to women only. The outcomes measured in these studies included substance use, drug use, alcohol use, PTSD symptom severity, trauma related to sexual abuse, treatment retention, treatment attendance, reduction of HIV-related sexual risk, coping, cocaine use, depressive symptoms, treatment alliance, maladaptive behaviour and psychopathology. The populations of women studied included incarcerated women, women in chemical dependency treatment, incarcerated women with mental illness and women in the National Institute on Drug Abuse (NIDA) Clinical Trials Network “Women and Trauma” Multi-Site Study (Appendix B).

Reductions in PTSD and increased treatment retention were common outcomes. The outcome of interest for this review is the effect on substance use and was measured in six studies. The results were as follows:

- **A significant decrease in alcohol misuse:** A significant reduction in alcohol use for women in a Seeking Safety group was found, with those who attended post-treatment twelve-step programming achieving the greatest reductions over time in alcohol use (Morgan-Lopez, 2013).
- Substance use was significantly decreased only among those who reported heavy substance use at baseline and who had achieved significant PTSD reductions (Hein, 2010c).
- **Some changes in substance use:** A significant decrease in alcohol use was found from baseline to one week post-treatment among treatment completers, followed by a non-significant increase in alcohol use during follow-up in another analysis of the NIDA clinical trials (Hein, 2012). In a study of incarcerated women, over three-quarters of women reported that Seeking Safety was helpful for addressing substance use (Wolff, Frueh, Shi, & Schumann, 2012).
- **No significant changes in substance use:** No significant changes were found in one of the NIDA Clinical Trials Network studies (Hein, 2009); among women in a residential chemical dependence treatment (Ghee, Bolling, & Johnson, 2009); and in a study with incarcerated women (Zlotnick, Johnson, & Najavits, 2009) although there were improvements over time.



## ***Outcomes for Men***

The researchers included studies that addressed outcomes of gender-specific Seeking Safety interventions for men to determine if the outcomes shed light on the effectiveness of gender-specific approaches. Two studies were found that evaluated Seeking Safety among men only and both involved samples of veterans from the US military who had seen active service. The two studies showed moderate improvements in outcomes such as retention of treatment and reduction in problem gambling, PTSD symptoms, depression, and alcohol and marijuana use (Boden et al., 2012; Norman, Wilkins, Tapert, Lang, & Najavits, 2010).

## ***Outcomes for Both Men and Women***

The two studies that included both women and men demonstrated improvements in some outcomes. However, these results are inconclusive since one study provided Seeking Safety to women and men separately (Searcy & Lipps, 2012) and the other study offered Seeking Safety in an individual format with a very small sample size and no gender differentiation of outcomes (Najavits et al., 2013).

## **Discussion**

The available literature does not offer enough evidence to determine whether gender-specific or co-ed Seeking Safety programs are more effective for women. Much of the research found on the effectiveness of Seeking Safety has been carried out on programming specifically for women.

Substance use did not decrease significantly in all of the studies of Seeking Safety programming. This lack of a decrease is not surprising as it is commonly reported by women with multiple burdens (trauma, mental illness and substance use problems) that they see substance use as beneficial in coping with trauma-related symptoms (Bryans et al., 2012; Poole & Pearce, 2005). Because of this perception, changes in substance use might follow reductions in other symptoms instead of being achieved immediately or simultaneously.

Differing rates of effectiveness have been demonstrated by treatments designed for specific subgroups or that address problems more common to women with problematic substance or dependency concerns (Niccols, Dell, & Clarke, 2010; Poole & Greaves, 2007). Greenfield and colleagues (2008) have found that single-gender group treatment might confer added benefit over co-ed group treatment for women with substance abuse and high psychiatric symptom severity. Specialized treatment for women has also been found to promote continuing care (Claus et al., 2007). In a 2011 study women participating in gender-specific treatment reported significantly less substance use and criminal activity following treatment than those participating in the mixed-gender treatment (Prendergast, Messina, Hall, & Warda, 2011).

## **Conclusion**

While the Seeking Safety approach offered to women alone shows some promise in reducing alcohol use, there is insufficient research to determine whether offering Seeking Safety to women alone is more or less effective than offering it to women and men together.



## Acknowledgments

This review was conducted by Rose Schmidt, Natalie Hemsing, Lorraine Greaves and Nancy Poole of the British Columbia Centre of Excellence for Women's Health.

## Resources

- Dell, C., & Poole, N. (2009). *Applying a sex/gender/diversity-based analysis within the national framework for action to reduce the harms associated with alcohol and other drugs and substances in Canada*. Ottawa: Canadian Centre on Substance Abuse.
- Canadian Centre on Substance Abuse. (2010) *Bringing gender and diversity analysis to our work: A checklist*. Ottawa: Author.
- Clow, B., Pederson, A., Haworth-Brockman, M., & Bernier, J. (2009). *Rising to the Challenge: Sex and gender-based analysis for health policy, planning and research in Canada*. Halifax: Atlantic Centre of Excellence for Women's Health.

## References

- Boden, M. T., Kimerling, R., Jacobs-Lentz, J., Bowman, D., Weaver, C., Carney, D., Walsler, R., & Trafton, J. A. (2012). Seeking Safety treatment for male veterans with a substance use disorder and post-traumatic stress disorder symptomatology. *Addiction, 107*(3), 578–586.
- CanFASD. (2012). Supporting pregnant and parenting women who use substances: What communities are doing to help Ottawa: Author. Retrieved from [http://fasdprevention.files.wordpress.com/2013/02/what-communities-are-doing-to-help\\_feb-2013.pdf](http://fasdprevention.files.wordpress.com/2013/02/what-communities-are-doing-to-help_feb-2013.pdf).
- Center for Substance Abuse Treatment. (2009). *Substance abuse treatment: Addressing the specific needs of women*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Claus, R. E., Orwin, R. G., Kissin, W., Krupski, A., Campbell, K., & Stark, K. (2007). Does gender-specific substance abuse treatment for women promote continuity of care? *Journal of Substance Abuse Treatment, 32*(1), 27–39.
- Ghee, A. C., Bolling, L. C., & Johnson, C. S. (2009). The efficacy of a condensed Seeking Safety intervention for women in residential chemical dependence treatment at 30 days posttreatment. *Journal of Child Sexual Abuse, 18*(5), 475–488.
- Ghee, A. C., Johnson, C. S., Burlew, A. K., & Bolling, L. C. (2009). Enhancing retention through a condensed trauma-integrated intervention for women with chemical dependence. *North American Journal of Psychology, 11*(1), 157–172.
- Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., ... Miele, G. M. (2007). Substance abuse treatment entry, retention, and outcome in women: A review of the literature. *Drug and Alcohol Dependence, 86*(1), 1–21.
- Greenfield, S. F., Potter, J. S., Lincoln, M. F., Popuch, R. E., Kuper, L., & Gallop, R. J. (2008). High psychiatric symptom severity is a moderator of substance abuse treatment outcomes among women in single vs. mixed gender group treatment. *American Journal of Drug and Alcohol Abuse, 34*(5), 594–602.
- Grella, C. E. (2003). Effects of gender and diagnosis on addiction history, treatment utilization, and psychosocial functioning among a dually-diagnosed sample in drug treatment. *Journal of Psychoactive Drugs, 35*(Suppl 1), 169–179.
- Hien, D. A., Campbell, A. N., Killeen, T., Hu, M.-C., Hansen, C., Jiang, H., ... Nunes, E. V. (2010). The impact of trauma-focused group therapy upon HIV sexual risk behaviors in the NIDA Clinical Trials Network "Women and Trauma" multi-site study. *AIDS and Behavior, 14*(2), 421–430.
- Hien, D. A., Campbell, A. N., Ruglass, L. M., Hu, M. C., & Killeen, T. (2010). The role of alcohol misuse in PTSD outcomes for women in community treatment: a secondary analysis of NIDA's Women and Trauma Study. *Drug and Alcohol Dependence, 111*(1–2), 114–119.



- Hien, D. A., Jiang, H., Campbell, A. N., Hu, M.-C., Miele, G. M., Cohen, L. R., ... Nunes, E. V. (2010). Do treatment improvements in PTSD severity affect substance use outcomes? A secondary analysis from a randomized clinical trial in NIDA's Clinical Trials Network. *American Journal of Psychiatry*, 167(1), 95–101.
- Hien, D. A., Morgan-Lopez, A. A., Campbell, A. N. C., Saavedra, L. M., Wu, E., Cohen, L., ... Nunes, E. V. (2012). Attendance and substance use outcomes for the Seeking Safety program: Sometimes less is more. *Journal of Consulting and Clinical Psychology*, 80(1), 29–42.
- Hien, D. A., Wells, E. A., Jiang, H., Suarez-Morales, L., Campbell, A. N. C., Cohen, L. R., ... Nunes, E. V. (2009). Multisite randomized trial of behavioral interventions for women with co-occurring PTSD and substance use disorders. *Journal of Consulting and Clinical Psychology*, 77(4), 607–619.
- Lynch, S. M., Heath, N. M., Mathews, K. C., & Cepeda, G. J. (2012). Seeking Safety: An intervention for trauma-exposed incarcerated women? *Journal of Trauma and Dissociation*, 13(1), 88–101.
- Morgan-Lopez, A. A., Saavedra, L. M., Hien, D. A., Campbell, A. N., Wu, E., & Ruglass, L. (2013). Synergy between Seeking Safety and twelve-step affiliation on substance use outcomes for women. *Journal of Substance Abuse Treatment*, 45(2), 179–189.
- Najavits, L. M. (2002). *Seeking Safety: A treatment manual for PTSD and substance abuse*. New York, NY: Guilford Press.
- Najavits, L. M., Smylie, D., Johnson, K., Lung, J., Gallop, R. J., & Classen, C. C. (2013). Seeking Safety therapy for pathological gambling and PTSD: A pilot outcome study. *Journal of Psychoactive Drugs*, 45(1), 10–16.
- Niccols, A., Dell, C. A., & Clarke, S. (2010). Treatment issues for aboriginal mothers with substance use problems and their children. *International Journal of Mental Health and Addiction*, 8(2), 320–335.
- Norman, S. B., Wilkins, K. C., Tapert, S. F., Lang, A. J., & Najavits, L. M. (2010). A pilot study of seeking safety therapy with OEF/OIF veterans. *Journal of Psychoactive Drugs*, 42(1), 83–87.
- Poole, N., & Greaves, L. (Eds.). (2007). *Highs & lows: Canadian perspectives on women and substance use*. Toronto, ON: Centre for Addiction and Mental Health.
- Poole, N., & Pearce, D. (2005). *Seeking Safety: An integrated model for women experiencing post-traumatic stress disorder and substance abuse—A pilot project of the Victoria women's sexual assault centre, evaluation report*. Victoria, BC: Victoria Women's Sexual Assault Centre.
- Prendergast, M. L., Messina, N. P., Hall, E. A., & Warda, U. S. (2011). The relative effectiveness of women-only and mixed-gender treatment for substance-abusing women. *Journal of Substance Abuse Treatment*, 40(4), 336–348.
- Ruglass, L. M., Miele, G. M., Hien, D. A., Campbell, A. N., Hu, M. C., Caldeira, N. ... Nunes, E. V. (2012). Helping alliance, retention, and treatment outcomes: A secondary analysis from the NIDA Clinical Trials Network Women and Trauma Study. *Substance Use & Misuse*, 47(6), 695–707.
- Searcy, V., & Lipps, A. (2012). The effectiveness of Seeking Safety on reducing PTSD symptoms in clients receiving substance dependence treatment. *Alcoholism Treatment Quarterly*, 30(2), 238–255.
- Wolff, N., Frueh, B. C., Shi, J., & Schumann, B. E. (2012). Effectiveness of cognitive-behavioral trauma treatment for incarcerated women with mental illnesses and substance abuse disorders. *Journal of Anxiety Disorders*, 26(7), 703–710.
- Zlotnick, C., Johnson, J., & Najavits, L. M. (2009). Randomized controlled pilot study of cognitive-behavioral therapy in a sample of incarcerated women with substance use disorder and PTSD. *Behavior Therapy*, 40(4), 325–336.

**Disclaimer:** Rapid reviews are produced using accelerated and streamlined systematic review methods, usually in response to a question or topic identified by the field. The information in this rapid review is a summary of available evidence based on a limited literature search. CCSA does not warrant the currency, accuracy or completeness of this rapid review and denies any representation, implied or expressed, concerning the efficacy, appropriateness or suitability of any intervention or treatment discussed in it.

ISBN 978-1-77178-199-2

© Canadian Centre on Substance Abuse 2014



Canadian Centre  
on Substance Abuse  
Centre canadien de lutte  
contre les toxicomanies

The Canadian Centre on Substance Abuse changes lives by bringing people and knowledge together to reduce the harm of alcohol and other drugs on society. We partner with public, private and non-governmental organizations to improve the health and safety of Canadians.

CCSA activities and products are made possible through a financial contribution from Health Canada. The views of CCSA do not necessarily represent the views of the Government of Canada.



## Appendix A: Methods

### Research Question

In adults with substance use problems, how does Seeking Safety group treatment specifically for women only compare to co-educational Seeking Safety group treatment in terms of effect on substance use?

### Database Searching

The following databases were searched with Ebsco Host from 1990 to December 5, 2013, using “Seeking Safety” as a subject term:

1. Academic Search Complete
2. Bibliography of Native North Americans
3. CINAHL with Full Text
4. ERIC
5. Family & Society Studies Worldwide
6. LGBT Life with Full Text
7. MEDLINE with Full Text
8. PsycINFO
9. Social Work Abstracts
10. Women's Studies International

### Additional Sources

Additionally, a Google search was performed using the key words “Seeking Safety” and “Evidence.” The second hit was for a page on the website of Lisa M. Najavits, creator of Seeking Safety. The page is called “Outcomes – Seeking Safety” and it contains a summary and brief description of each completed study of Seeking Safety. The first five pages of Google results returned no additional effectiveness studies of Seeking Safety.

### Inclusion Criteria

The following inclusion criteria were applied when retrieving articles from the databases:

1. Does the study evaluate the intervention Seeking Safety;
2. Was the study published in 1990 or later;
3. Was the study published in English;
4. Was the article publicly available or able to be purchased and delivered within one week of the initial request?

Studies that did not evaluate the effectiveness of Seeking Safety were not included in the review. However, some of these studies provide contextual material for the reviews and are covered in the background section. Systematic reviews were excluded, but individual studies covered by these reviews were screened for inclusion in this review.

After consultation with partners, the inclusion criteria were revised and reapplied to the references in the EndNote database. The revised inclusion criterion was:

2. Was the study published in the last five years (i.e., between 2008 and 2013)?



## Appendix B: Included Studies

Study <sup>1</sup>	Aim	Method	Population	Outcomes
Boden, et al. (2012)	To determine whether substituting Seeking Safety for part of treatment-as-usual (TAU) improves substance use outcomes.	Randomized controlled trial (RCT)	<b>Male</b> veterans with SUD and PTSD, who participated in Operation Enduring Freedom / Operation Iraqi Freedom (OEF/OIF) and were out-patients of Veterans Administration (VA) Health Care System SUD clinic. n=177 (Seeking Safety=59, TAU=58)	Seeking Safety compared to TAU was associated with better drug use outcomes, but alcohol use and PTSD severity decreased equally under both treatments. Seeking Safety versus TAU was associated with increased treatment attendance, client satisfaction and active coping. Neither these factors nor decreases in PTSD severity mediated the effect of treatment on drug use.
Ghee, Bolling, and Johnson (2009)	To examine the efficacy of a condensed version of Seeking Safety in the reduction of trauma-related symptoms and improved drug abstinence rates among women in residential chemical dependence treatment.	RCT	<b>Women</b> with trauma-related symptoms undergoing substance abuse treatment at a community residential facility. n=104	Seeking Safety participants reported lower sexual-abuse-related trauma symptoms at 30 days post-treatment compared to participants who received only standard treatment. However, Seeking Safety was not more advantageous in reducing overall trauma symptoms, nor more advantageous in reducing relapse 30 days after treatment ended.
Ghee, Johnson, Burlew, and Bolling (2009)	To examine whether treatment integrated with a condensed version of Seeking Safety (i.e., six sessions) improved retention compared to TAU, and to investigate whether the relationship of pre-treatment trauma- and depression-related symptoms to retention was the same for both treatment types.	RCT	<b>Women</b> undergoing treatment for SUD at a community residential facility. n=104	The overall retention rate of the sample was 53.8%. The average number of condensed Seeking Safety sessions completed by the women in the treatment integrated intervention group was 4.7 sessions. Women who received integrated Seeking Safety had substantially higher rates of retention within the initial 30-day residential phase of treatment.
*Hien, Campbell, Killeen, et al. (2010)	To examine the impact of two group therapy interventions on reduction of unprotected sexual occasions (USO) among women with SUD and PTSD.	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-based substance use treatment programs offering intensive outpatient treatment. n=346	Seeking Safety was significantly more effective in reducing HIV sexual risk for women with higher levels of unprotected sex when compared with a Women's Health Education (WHE) curriculum. The effect of treatment on USO was statistically different among individuals with higher baseline levels of USO.
*Hien, Campbell, Ruglass, et al. (2010)	To explore effectiveness of two interventions for women with comorbid PTSD and SUD. To	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-	Among women with alcohol misuse, PTSD scores were significantly lower in Seeking Safety during treatment and follow-up. Alcohol misusers in Seeking

<sup>1</sup>Seven of the included studies used data from the same sample of participants. These papers are marked with an asterisk (\*) and all reported on data collected as part of the NIDA Clinical Trials Network "Women and Trauma" Multi-Site Study.



Study <sup>1</sup>	Aim	Method	Population	Outcomes
	examine whether individuals with alcohol misuse in the “Women and Trauma Study” had differential treatment responses to Seeking Safety vs. WHE groups on PTSD symptoms in comparison to those with no misuse.		based substance use treatment programs offering intensive outpatient treatment. n=353	Safety who had higher baseline hyper-arousal severity improved more quickly than those with lower baseline hyper-arousal severity during treatment.
*Hien, Jiang, et al. (2010)	To examine the temporal course of improvement in symptoms of PTSD and SUD among women in outpatient substance abuse treatment.	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-based substance use treatment programs offering intensive outpatient treatment. n=353	Subjects exhibiting nonresponse, SU response or global response (reduction in both SU and PTSD) tended to maintain original classification; subjects exhibiting PTSD response were significantly more likely to transition to global response over time, indicating maintained PTSD improvement was associated with subsequent substance use improvement. Seeking Safety was significantly more effective than WHE in reducing SU, but only among heavy substance users at baseline who also achieved significant PTSD reductions.
*Hien, et al. (2012)	To assess if there are different treatment attendance patterns in the “Women and Trauma Study,” and, if so, does one of the patterns involve a titration of treatment frequently observed among individuals with PTSD and SUD? Are there differential substance use outcomes by treatment type associated with these attendance patterns?	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-based substance use treatment programs offering intensive outpatient treatment. n=353	Treatment attendance patterns emerged: completers never decreased below an 80% probability of attendance, droppers never exceeded a 41% probability of attendance, and titrators demonstrated a 50% to 80% probability of attendance. Among completers, there were significant decreases in alcohol use from baseline to one-week post-treatment, followed by non-significant increases in alcohol during follow-up. Differences between treatment conditions were detected. Titrators in Seeking Safety had lower rates of alcohol use from one-week through 12-month follow-ups, compared with control participants. Droppers had non-significant increases in alcohol during both study phases. Cocaine use findings were similar, but did not reach significance levels.
*Hien, et al. (2009)	To compare the effectiveness of Seeking Safety for SUD and PTSD to an active comparison health education group.	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-based substance use treatment programs offering intensive outpatient treatment. n=353 (Seeking Safety=176, WHE=177)	There were large, clinically significant reductions in PTSD symptoms, but they did not differ significantly between conditions. Substance use outcomes were not significantly different over time between the two treatments and at follow-up showed no significant change from baseline.



Study <sup>1</sup>	Aim	Method	Population	Outcomes
Lynch, Heath, Mathews, and Cepeda (2012)	To examine the effectiveness of Seeking Safety with incarcerated women.	Non-randomized controlled trial (N-RCT)	<b>Women</b> with trauma histories incarcerated at a northwestern women's minimum and medium security state prison. n=114 (Seeking Safety=59, Waitlist=55)	Both treatment and wait-listed participants showed significant decreases in PTSD symptoms. However, women in the treatment condition showed more significant decreases in PTSD at the follow-up than did the wait-listed women. A greater number of treatment participants indicated reliable improvement in symptoms of depression, interpersonal difficulties, and maladaptive coping as compared to the wait-listed group.
*Morgan-Lopez, et al. (2013)	To examine the interactive effects of a treatment for comorbid PTSD and substance use, Seeking Safety and post-treatment Twelve-Step Affiliation (TSA) on alcohol and cocaine use.	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-based substance use treatment programs offering intensive outpatient treatment. n=353 (Seeking Safety=176, WHE=177)	There were significant reductions in alcohol use among women in Seeking Safety, and women in Seeking Safety who followed up with TSA had the greatest reductions over time in alcohol use. Reductions in cocaine use over time were also observed, but did not differ between treatment conditions nor were there interactions with post-treatment TSA.
Njavits, et al. (2013)	To pilot evaluate individual Seeking Safety therapy for seven outpatients with current comorbid pathological gambling and PTSD.	One-group pre-test-post-test (Pilot)	<b>Men and women</b> with co-occurring PTSD and problem gambling. women n=4 men n=3	Significant improvements were found in PTSD and trauma symptoms, problem gambling, functioning, psychopathology, self-compassion and helping alliance.
Norman, Wilkins, Tapert, Lang, and Najavits (2010)	This report offers an example of implementation of a Seeking Safety group with OEF/OIF veterans at a VA including preliminary data on nine OEF/OIF veterans who completed Seeking Safety.	One-group pre-test-post-test (Pilot)	<b>Male</b> veterans with SUD and PTSD, who participated in OEF/OIF in the San Diego VA. n=14	Attendance averaged 7.64 sessions. Eight of the nine veterans (89%) decreased in PTSD scores (six decreases were statistically significant) and one worsened.
*Ruglass, et al. (2012)	To examine the impact of the therapeutic alliance on treatment retention and outcomes among this sample of women with comorbid PTSD and SUD.	RCT	<b>Women</b> with co-occurring PTSD and SUD attending one of seven community-based substance use treatment programs offering intensive outpatient treatment.	Both groups of participants reported high levels of alliance, with average scores between 5.15 and 5.33 (out of 6). There was a significant difference between treatment conditions in alliance ratings at Week 2, with Seeking Safety participants reporting significantly higher alliance than WHE participants. Alliance was related to significant decreases in PTSD symptoms and higher attendance in both interventions. Alliance was not related to substance use outcomes.



Study <sup>1</sup>	Aim	Method	Population	Outcomes
Searcy, and Lipps, (2012)	To evaluate the effectiveness of the Seeking Safety program in reducing PTSD symptoms in clients in treatment for substance dependence.	One-group pre-test-post-test (Pilot)	<b>Men and women</b> attending a co-ed 28-day intensive-residential substance abuse treatment. women n=28 men n=12	Overall, there were statistically significant pre-test to post-test decreases on the total scale and on all six subscales of the Trauma-Symptom Checklist. Decreases in male symptoms on the Anxiety, Sexual Abuse Trauma Index and Sexual Problems subscales of the Trauma-Symptom Checklist-40 were not statistically significant. For women, however, the total scale and all six subscales showed statistically significant post-treatment decreases. Women's pre-test to post-test scores also changed more than the men's. Among women, the subscale with the greatest decrease in symptoms was Depression followed by Dissociation. For men, Sleep Disturbance scores decreased the most, followed by Depression.
Wolff, Frueh, Shi, and Schumann (2012)	To provide implementation and effectiveness data on a group therapy modality of Seeking Safety provided to incarcerated women with mental illnesses in addition to PTSD and SUD housed in general (non-therapeutic) population.	One-group pre-test-post-test	Incarcerated <b>women</b> with mental illness and substance use disorders. n=111	Implementation feasibility was demonstrated by the ability to recruit, screen, assign and retain participation. Effectiveness was supported by changes pre-post intervention of PTSD symptoms. At least three-quarters of participants reported Seeking Safety was helpful in each of the following areas: overall, for traumatic stress symptoms, for substance use, to focus on safety and to learn safe coping skills.
Zlotnick, Johnson, and Najavits (2009)	To evaluate outcomes of Seeking Safety plus TAU to TAU-alone in an incarcerated sample of women on key variables: PTSD diagnosis, substance use, prison recidivism, legal problems and psychopathology.	RCT	Incarcerated <b>women</b> with substance use disorder and PTSD n=49 Intervention n=27 Control n=22	There were no significant differences between conditions on PTSD, SUD, psychopathology or legal problems. However, both conditions showed significant improvements on all of these outcomes across time. At follow-up, Seeking Safety participants showed improvements on clinician rated PTSD symptoms and TAU participants worsened on self-reported PTSD symptoms. Seeking Safety demonstrated continued improvement on psychopathology at 3 and 6 months, whereas TAU did not. However, alcohol use improved more for TAU during follow-up. Satisfaction with Seeking Safety was high and a greater number of Seeking Safety sessions was associated with greater improvement on PTSD and drug use. Six months after release from prison, 53% of women in both conditions reported a remission in PTSD.