This pilot study investigated the impact of *Seeking Safety* (SS; Najavits, 2002) on trauma symptoms among rural women with comorbid substance abuse and trauma problems. This common comorbidity affects multiple domains of functioning and presents complex challenges to recovery (Najavits et al., 2008). The presence of either problem alone increases the risk of developing the other (Najavits, Weiss, & Shaw, 1997). Individuals with this comorbidity may enter high-risk environments when using substances, increasing their likelihood of further trauma. Conversely, people suffering from trauma problems may use substances to self-medicate. Yet in the long term, the physical and cognitive symptoms caused by substance withdrawal can exacerbate hyperalertness, inattention, insomnia, nightmares, and flashbacks (Jacobsen, Southwick, & Kosten, 2001).

Although substance abuse and trauma problems often co-occur, they have historically been con-
ceptualized as separate issues and addressed in separate treatment environments. However, the past several years have seen the emergence of new therapies for integrated treatment of comorbid trauma and substance use. The most studied model, SS, is a present-focused therapy that provides coping skills and psychoeducation. It shows positive outcomes in 20 studies across various settings and populations, and is the only treatment outperforming a control for both posttraumatic stress disorder and substance use disorder (Najavits & Hien, 2013).

Despite its demonstrated effectiveness, SS has not been investigated within rural populations. Compared with urban residents, rural residents are more likely to meet criteria for comorbid mental illness and substance use disorder, and to exhibit more severe symptoms of both disorders (Fischer, Owen, & Cuffel, 1996; Simmons & Havens, 2007). Despite the prominence of these disorders, rural residents are much less likely to receive formal treatment for them than their urban counterparts (Wang et al., 2005). Far distances to providers, stigma attached to obtaining therapy in small rural communities, and reduced access to affordable treatment options create major barriers to engaging in therapy for mental health and substance abuse issues (Fox, Blank, Rovnyak, & Barnett, 2001; Health Resources and Services Administration, 2005; Smalley et al., 2010; Ziller, Anderson, & Coburn, 2010). The current pilot study investigated the impact of SS on trauma symptoms among rural women with co-morbid substance abuse and trauma problems. It was hypothesized that participants in 12-week SS therapy groups would report significant reduction in trauma symptoms from pre- to postintervention time points.

Method

Procedure

Data were collected on 23 community-based women who voluntarily participated in SS treatment groups. These groups were conducted by the first author as part of her private outpatient therapy practice in rural Nebraska. Supervision of group treatment was provided by the practice’s director, who offered clinical guidance to the study therapist and responded to case-specific questions as needed.

Recruitment occurred via community agencies, such as a sexual assault crisis center and the Salvation Army. Inclusion criteria were current substance-related problems (confirmed by the referring provider) and current trauma-related problems (confirmed by the study therapist at screening using the Trauma Symptom Inventory [TSI]; Briere, 1995). Exclusion criteria were involuntary mandate to treatment (e.g., requirement of probation or child protective services) or severe mental illness that might affect the group process (e.g., hallucinations).

Of the 30 women referred, all were eligible. Six chose not to enroll because of lack of interest in therapy or inability to fulfill the required time commitment. One discontinued group attendance, reporting that she preferred to attend solely individual therapy. She declined the postintervention measure and was thus excluded from the analyses. The sample ($n = 23$) had a mean age of 40.4 years ($SD = 9.4$; range 22 to 56). All were Caucasian, consistent with their rural community, which is 95% Caucasian.

Participants were divided into two SS groups, each of which occurred over 12 weeks. Two 1.5-hr sessions were conducted per week, totaling 24 sessions, with one SS topic per session. One week after the end of treatment, participants completed the TSI again. All participants, while in the SS group, were required to engage in weekly individual therapy (at a site of their choosing) and to have that therapist’s approval to participate in the group.

Intervention

SS is a present-focused, evidence-based cognitive–behavioral therapy that provides psychoeducation and coping skills to help people attain safety from trauma and/or substance abuse symptoms (Najavits, 2002). SS offers 25 topics, each representing a safe coping skill, such as “Setting Boundaries in Relationships,” “Compassion,” “Creating Meaning,” and “Asking for Help.” The treatment was designed for flexible use. It has been conducted in group and individual format; for women, men, and mixed-gender groups; and in outpatient, inpatient, and residential settings. For more on SS, see www.seekingsafety.org.
Prior to initiating this study, the study therapist obtained SS training conducted by Lisa M. Najavits, PhD, creator of SS. Additionally, regular consultation with Dr. Najavits continued throughout the study to ensure adherence to the SS model. SS was delivered according to its original protocol; no specific adaptations were made to tailor the intervention to the rural sample being investigated.

**Measure**

The TSI (Briere, 1995) was administered as part of the screening process to determine the presence of current trauma-related symptoms; it also served as the study’s key outcome measure (Briere, 1995). The TSI has 100 items for self-report trauma symptoms in 10 domains: Anxious Arousal, Depression, Tension Reduction Behavior, Impaired Self-Reference, Anger/Irritability, Intrusive Experiences, Defensive Avoidance, Dissociation, Sexual Concerns, and Dysfunctional Sexual Behavior (McDevitt-Murphy, Weathers, & Adkins, 2005). Each symptom is rated according to its frequency during the prior 6 months, using a 4-point scale ranging from 0 (never) to 3 (often). Raw scores on each domain are converted to $t$ scores ($M/SD = 100$; $SD = 10$) based on a nonclinical normative sample, with separate norms for gender and age.

The TSI has shown sufficient evidence of reliability and validity. Investigations of internal consistency have reported a mean alpha of .87 across the 10 domains, ranging from .75 for Tension Reduction Behavior to .90 for Depression and Intrusive Experiences (Briere, Elliott, Harris, & Cotman, 1995). Additionally, the TSI has shown evidence of construct validity, in that TSI scores are significantly higher among individuals exposed to childhood or adulthood interpersonal violence (Briere et al., 1995).

**Data Analysis**

Pre- and postintervention TSI $t$ scores were compared using the Wilcoxon’s signed-rank statistic, a nonparametric statistical method selected to test for differences between two related samples. To account for inflation of Type I error, we applied Bonferroni’s correction: .05/10 tests $= .005$. Post hoc power analysis conducted in G Power 3.1, with $n = 23$ and alpha $= .005$, yielded a power of .60 to detect a large effect size.

**Results**

All preintervention TSI mean $t$ scores fell approximately one standard deviation above the mean of the nonclinical norm group, except for the Anger/Irritability subscale, which was within the normal range.

Table 1 provides TSI outcome scores. Means on all 10 subscales decreased significantly from pre- to postintervention, both with and without the application of Bonferroni’s correction. Whereas preintervention scores were one standard deviation above the mean, postintervention scores fell one standard deviation below the mean.

<table>
<thead>
<tr>
<th>TSI subscale</th>
<th>Pretest $t$ score ($n = 23$)</th>
<th>Posttest $t$ score ($n = 23$)</th>
<th>$\Delta$</th>
<th>$Z$</th>
<th>$p$</th>
<th>Effect size $(r)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxious arousal</td>
<td>60.7 (7.0)</td>
<td>52.3 (6.6)</td>
<td></td>
<td></td>
<td>&lt;.001</td>
<td>.60</td>
</tr>
<tr>
<td>Depression</td>
<td>59.5 (8.4)</td>
<td>49.3 (6.6)</td>
<td>-10.2</td>
<td>4.08</td>
<td>&lt;.001</td>
<td>.60</td>
</tr>
<tr>
<td>Anger/Irritability</td>
<td>52.9 (9.1)</td>
<td>46.8 (6.2)</td>
<td>-6.1</td>
<td>3.55</td>
<td>&lt;.001</td>
<td>.52</td>
</tr>
<tr>
<td>Intrusive experiences</td>
<td>62.0 (9.6)</td>
<td>55.1 (9.3)</td>
<td>-6.9</td>
<td>3.73</td>
<td>&lt;.001</td>
<td>.55</td>
</tr>
<tr>
<td>Defensive avoidance</td>
<td>62.8 (10.1)</td>
<td>53.0 (8.6)</td>
<td>-9.8</td>
<td>4.11</td>
<td>&lt;.001</td>
<td>.61</td>
</tr>
<tr>
<td>Dissociation</td>
<td>60.2 (12.2)</td>
<td>50.9 (7.0)</td>
<td>-9.3</td>
<td>3.44</td>
<td>&lt;.001</td>
<td>.51</td>
</tr>
<tr>
<td>Sexual concerns</td>
<td>57.3 (9.3)</td>
<td>50.4 (8.5)</td>
<td>-6.9</td>
<td>2.81</td>
<td>.005</td>
<td>.41</td>
</tr>
<tr>
<td>Dysfunctional sexual behavior</td>
<td>56.9 (11.9)</td>
<td>48.3 (7.6)</td>
<td>-8.6</td>
<td>3.49</td>
<td>&lt;.001</td>
<td>.51</td>
</tr>
<tr>
<td>Impaired self-reference</td>
<td>59.3 (7.8)</td>
<td>50.9 (6.8)</td>
<td>-8.4</td>
<td>3.83</td>
<td>&lt;.001</td>
<td>.56</td>
</tr>
<tr>
<td>Tension reduction</td>
<td>59.9 (12.0)</td>
<td>50.9 (9.7)</td>
<td>-9.0</td>
<td>3.47</td>
<td>&lt;.001</td>
<td>.51</td>
</tr>
</tbody>
</table>

*Note. TSI = Trauma Symptom Inventory.*
scores clustered around the mean. Effect sizes were large across all subscales, except sexual concerns, which was medium to large. The largest effect sizes were observed for reductions in Defensive Avoidance, Depression, and Anxious Arousal.

Discussion

We investigated the ability of SS to reduce trauma symptoms among rural women with comorbid substance abuse and trauma problems. From pre- to postintervention, participants showed reductions across all trauma symptoms assessed, including highly impairing symptoms of hyperarousal, flashbacks, dissociation, depression, and avoidance. Postintervention scores fell within the normal range, even compared with the nonclinical norm group. Our findings align with previous SS outcome studies, which report consistent positive results among vulnerable populations with trauma symptoms and substance abuse (Najavits & Hien, 2013). Similar to the current investigation, many of these studies have used group treatment and clinicians native to the treatment setting, with the goal of demonstrating real-world effectiveness of SS (Najavits & Hien, 2013). As such, this pilot study provides initial evidence that SS produces positive outcomes in real-world rural settings.

A number of limitations apply to these findings. First, our sample was small, and thus further research would be needed to assess the impact of SS in other rural communities. Second, we had no control group and participants were required to engage in individual therapy concurrent with SS group participation. Detailed information about participant characteristics, including the types of traumas experienced, and treatment other than SS was not collected. Third, there was no follow-up period to assess maintenance of gains after the end of treatment.

Despite these limitations, our results are very promising. Engagement in SS was associated with consistent reduction of a wide range of trauma symptoms among rural community-based women with comorbid substance abuse and trauma problems. Given the dearth of mental health and substance abuse providers in rural settings (Smalley et al., 2010), SS group treatment may be an efficient approach for reaching greater numbers of rural community women and removing access barriers to their recovery. Many SS topics may overlap with unique aspects of rural life that impede recovery. For example, “Asking for Help” may assist rural residents in reaching out for support and reducing isolation; “Community Resources” may assist clients to better navigate the limited numbers of, and far distances to, available services; and “Setting Boundaries in Relationships” may help them better manage the dual relationships often experienced by residents of small communities (Mulder et al., 2000). Although additional research is needed to investigate these hypotheses, these overlaps suggest that SS is particularly well suited to combat trauma symptoms among rural clients with substance abuse and trauma problems.

References


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