Psychological Services

Perceived Helpfulness of Peer-Delivered Trauma Specific Treatment: A Randomized Controlled Trial

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Peer providers have been associated with positive outcomes in behavioral health, but little is known about the perceived helpfulness of their services. We used a mixed-methods randomized controlled trial to compare the perceived helpfulness of seeking safety (SS) led by peer providers compared to its delivery by licensed behavioral health clinicians (including both a licensed alcohol and drug abuse counselor and licensed clinical mental health counselor). Participants ($N = 278$) rated the helpfulness of 12 SS topics at the end of every session. A subset ($n = 245$) of participants also rated the helpfulness of SS overall and its treatment components; 3 and 6 months following their first SS group. We also collected qualitative data to inform our understanding of the ways perceived helpfulness varied among participants in peer-led (PL) and clinician-led (CL) groups. Ratings of overall and topic-specific helpfulness were high among both groups, and while ratings were slightly higher among participants in PL groups, the difference was not significant. Participants in PL-SS rated certain treatment components significantly more helpful compared to participants in CL-SS, including the focus on learning coping skills (81.6% PL vs. 64.9% CL, $p = .020$) and safety as a priority of treatment (81.6% PL vs. 61.5% CL, $p = .006$). Because of the homogeneity of helpfulness ratings, the relationship between perceived helpfulness and treatment retention and outcomes could not be examined. Future research on this association is warranted.

Keywords: seeking safety, perceived helpfulness, peer-support services

The employment of peer providers (also referred to as peer support specialists, peer support workers) has gained attention as a promising strategy to improve access to treatment by increasing the behavioral health workforce, especially in rural communities challenged by workforce shortages (Heller, 2016). A *peer provider* is "someone who uses lived experience of recovery from mental illness and/or addiction, plus the skills learned in formal training, to deliver services in behavioral health settings to promote mind-body recovery and resilience" (Substance Abuse and Mental Health Services Administration, Health Resources and Services

Administration Center for Integrated Health Solutions, n.d.). The evidence on the effectiveness of peer-delivered services in behavioral health is substantial and growing with recent multiple meta-analyses of the research (Chinman et al., 2014; Davidson, Bellamy, Guy, & Miller, 2012; Fuhr et al., 2014; Lloyd-Evans et al., 2014; Reif et al., 2014; Repper & Carter, 2011). Little is known, however, about patients' perceived helpfulness of peer-delivered services. This is important information because perceiving treatment as more helpful has been associated with treatment engagement, retention and outcomes (Colman, Missinne, & Bracke, 2014; Lee et al., 2007; Mojtabai et al., 2011). In the research on factors that influence treatment engagement, retention and outcomes, perceived helpfulness has been categorized as a cognitive factor along with beliefs and satisfaction (Basedow, Hibbert, Hooper, Runciman, & Esterman, 2016)—with satisfaction being the most studied cognitive factor in studies on peer delivered-services. The findings on satisfaction with peer-delivered services have been inconsistent. A review of research on peer-delivered services conducted between 1989 and 2009 found that people who engaged in peer-delivered interventions in groups reported high satisfaction with services (Rogers et al., 2010). But a review of randomized controlled trials found little or no association between peer support and satisfaction with services compared to treatment as usual—defined as professionally led services (Lloyd-Evans et al., 2014; Pitt et al., 2013).

Seeking safety (SS) is a manualized integrated cognitive–behavioral treatment for posttraumatic stress disorder (PTSD) and/or substance use disorder (SUD; Najavits, 2002). SS includes 25 topics that address both PTSD and SUD and cover interper-

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sonal, behavioral, and cognitive domains. SS has a strong evidence base (Lenz, Henesy, & Callender, 2016; Najavits & Hien, 2013; Wolff, Frueh, Shi, & Schumann, 2012). Although far less studied than therapeutic outcomes, satisfaction with SS has been found to be high (Najavits, Gallop, & Weiss, 2006; Najavits, Schmitz, Gotthardt, & Weiss, 2005). The one study on the perceived helpfulness of SS also reported high ratings (Brown et al., 2007). The perceived helpfulness of peer-led SS has yet to be examined.

Through funding from the Patient Centered Outcomes Research Institute (PCORI-CE-12–11-4484), Annette S. Crisanti conducted a comparative effectiveness RCT that examined whether peer providers could deliver SS as effectively as licensed behavioral health clinicians (including both a licensed alcohol and drug abuse counselor and licensed clinical mental health counselor). In addition to reporting on outcomes, participants rated the overall helpfulness of SS, its treatment components, and specific topics. The purpose of this article is to describe these findings. Outcome data will be published later. We had two research questions. First, was there a difference in ratings of overall helpfulness of SS and its treatment components among participants who participated in peer-led (PL) groups compared to clinician-led (CL) groups; controlling for demographics and clinical characteristics and whether treatment was completed? Second, did ratings of helpfulness of specific SS topics vary between PL and CL groups? We approached these questions by examining both quantitative and qualitative feedback of the perceived helpfulness of SS among participants.

Method

Participants

Participants met criteria for current PTSD and/or SUD and were ages 18 and older. Eligibility was determined by a licensed clinical mental health counselor through a structured clinical interview using the Mini International Neuropsychiatric Interview (M.I.N.I.; Sheehan et al., 1998). Study exclusion criteria included not having either PTSD and/or SUD, a psychiatric hospitalization or suicide attempt in the past 2 months and inability to provide informed consent to participate in the study. Participants were recruited from a peer-operated organization located in a rural community between January 2014 and May 2016.

Materials and Procedure

Eligible participants were randomized to a gender-specific SS group led by a peer provider or a clinician. The male and female CL groups were facilitated by a male licensed clinical mental health counselor with an MA in counseling and female licensed Alcohol and Drug Abuse Counselor with an MS in Developmental Psychology, respectively. The male and female PL groups were facilitated by a male or female certified peer support worker (CPSW). Peers were certified by a local Credentialing Board for Behavioral Health Professionals once they completed 40 hr of classroom training and an exam. Facilitators received the same level of training and supervision in SS; which consisted of initial training in SS (through participation in a 1-day training on SS by Dr. Najavits or watching the SS training DVDs) and participation

in monthly clinical supervision that focused on the implementation of SS.

Figure 1 depicts the participant flow. Two hundred seventy-eight participants completed at least one SS group. Among those, 245 participated in the evaluation of SS that consisted of a baseline interview and two follow-up interviews 3 and 6 months after their first SS group. Participants received a $20.00 gift card for completing each interview. This study was approved by the institutional review board at the local university.

Facilitators delivered SS through weekly groups with an open-enrollment format. Consistent with other studies on SS, 12 of the 25 SS topics were selected for implementation (Anderson & Najavits, 2014; Hien et al., 2015; Morgan-Lopez et al., 2014). The topics included Safety, PTSD: Taking Back Your Power, Detaching from Emotional Pain, When Substances Control You, Asking for Help, Red and Green Flags, Integrating the Split Self, Setting Boundaries in Relationships, Discovery, Coping with Triggers, Healthy Relationships, and Healing from Anger. Facilitators cycled through the 12 topics 11 times between January 2014 and June 2016 resulting in a total of 132 SS groups during the study period. Treatment completion was defined as completing six or more sessions within six months. We based this decision on previous research on SS, including some of the original work by the creator of SS (Cash Ghee, Bolling, & Johnson, 2009; Najavits, Weiss, Shaw, & Muenz, 1998). Sign-in sheets were used to track session attendance.

Independent quarterly fidelity assessments were conducted by Treatment Innovations (a consultant firm developed by the creator of SS) using the SS Adherence Scale, Long Version (Najavits, 2003). Each facilitator completed nine fidelity assessments. One of the fidelity assessments for the female clinician was not scored because of a problem with the audio-recorder. The fidelity scale has a total of 21 items that are divided into three sections: format, content, and process. Items are rated on a scale ranging from 0 to 3, with a rating of 2 or higher indicative of high fidelity. The clinicians showed slightly higher fidelity to SS compared to peer providers, however, all facilitators were implementing SS high fidelity. The average ratings for items in the format section over all assessments were female peer = 2.1, female clinician = 2.4, male peer = 2.2, and male clinician = 2.5. The average ratings for items in the content section over all assessments were: female peer = 2.3, female clinician = 2.5, male peer = 2.3, and male clinician = 2.6. The average ratings for items in the process section over all assessments were female peer = 2.3, female clinician = 2.5, male peer = 2.5, and male clinician = 2.7.

Data Collection and Measures

Participants completed the SS End of Session questionnaire at the end of each SS session (Najavits, 2002). The questionnaire consisted of four quantitative questions that asked about the helpfulness and usefulness of the topic. Our analysis focused on the first question that asked, "How helpful was today's session for you, overall?" The rating scale ranged from 0 (*not at all*) to 3 (*a great deal*). Although group assignment was tracked, participants remained anonymous. Participants completed the SS End of Treatment questionnaire during the 3- and 6-month follow-up interviews (Najavits, 2002). The questionnaire consisted of four sections. The first section asked participants to rate the helpfulness of
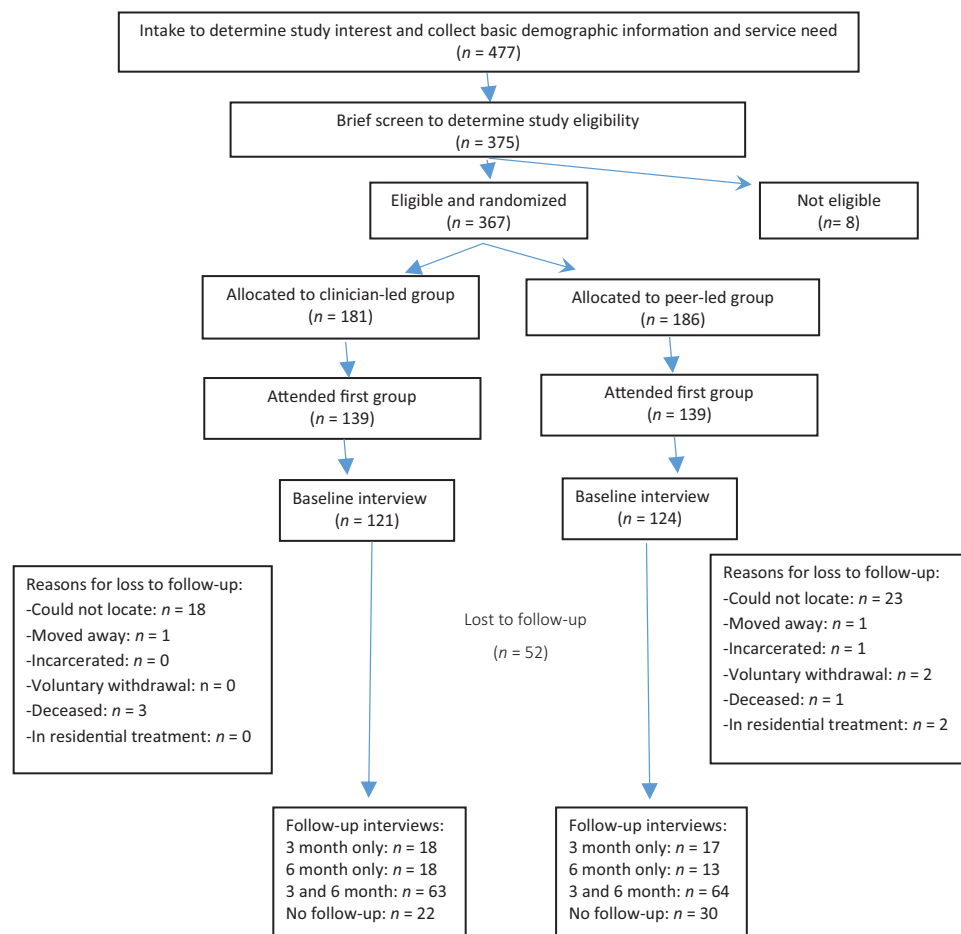
Figure 1. CONSORT diagram of participant flow. See the online article for the color version of this figure.

SS: overall, for PTSD and substance abuse, for PTSD alone, and for substance abuse alone. The second section asked participants to rate the helpfulness of specific implementation characteristics of SS (e.g., use of quotations, focus on coping skills, and handouts). The rating scale for the first two sections ranged from -3 (*greatly harmful*) to $+3$ (*greatly helpful*). The third section asked participants to rate on a scale ranging from 0% (*not at all*) to 100% (*totally*): (a) How frequently they would use the SS material, (b) How easy SS was to understand, (c) How creative or different SS was compared to other treatments, and (d) To what extent they would recommend SS to someone else. The fourth section included two open-ended questions that asked participants to comment on the best/worst aspects of the treatment program and suggest modifications, if any. Psychometric properties of the SS End of Session or End of Treatment questionnaires have not been studied.

Demographic data were collected at baseline, including age, sex, ethnicity, education, living situation, and employment. History of trauma was collected at intake using the Life Events Checklist (LEC; Weathers et al., 2013). The LEC is a self-report checklist that includes 16 events known to result in PTSD or distress and has adequate psychometric properties (Gray, Litz, Hsu, & Lombardo, 2004).

Quantitative Analysis

The SS End of Session questionnaire responses were summarized with mean and median overall ratings. Ordinal logistic regression was used to test the relationships between perceived helpfulness ratings, topic, and treatment arm. Two hundred and 78 individuals attended at least one SS group and completed a total of 1,632 SS groups and 1,585 End of Session questionnaires—resulting in a 97% response rate.

The SS End of Treatment ratings are presented as the proportion of participants indicating a rating of $+3$—the highest possible rating. Because of the highly skewed distribution, it was not possible to analyze these ratings as a continuous variable. Ratings were therefore dichotomized into the highest rating and less than the highest rating, an approach that has been used previously (Zhang, Gerstein, & Friedmann, 2008). McNemar's test for dependent samples was used to compare ratings at three months and six months follow-up. Chi-square and Fisher's exact tests were used to test bivariate relationships between the overall ratings of helpfulness and treatment arm (PL or CL), completion of treatment (six sessions completed by three months, by six months, or never), clinical eligibility (PTSD, SUD, or both), sex, history of trauma, age, ethnicity, education, living situation, and employment at 3-

and 6-month follow-up. A binomial mixed effects model was fitted to participants' rating of overall treatment helpfulness with fixed effects of treatment arm, demographics, and clinical characteristics, controlling for completion of treatment and missing follow-up interviews and accounting for the random effect of a single participant's responses at three- and 6-month. All quantitative analyses were completed using SAS 9.4. For all statistical tests, $\alpha = .05$ was used to establish significance. Of the 245 participants who participated in the evaluation, 186 (75.9%) completed the End of Treatment questionnaire at least once, including 96 (79.3%) of the 121 CL group participants and 90 (72.6%) of the 124 PL group participants.

Three subscores were generated for the LEC: number of events experienced, number of events witnessed, and number of events learned about. The events experienced and events witnessed were combined for a total number of types of lifetime traumatic events experienced or witnessed with scores ranging from 0 to 16. Number of lifetime traumatic events was dichotomized at the median (seven events) for the purposes of descriptive statistics but remained a continuous variable in multivariable models.

Qualitative Analysis

Participants' responses to the two open-ended questions on the End of Treatment questionnaire were entered into NVivo 11(c) qualitative software for coding and analysis. The analysis was limited to responses from the first follow-up to reduce the likelihood of bias that is more likely to result in the recall of long-term compared to short-term events (Althubaiti, 2016). At 3-month follow-up, 75 (94.9%) PL group participants and 75 (96.2%) CL group participants responded to at least one qualitative question. Responses from those in PL and CL groups were coded separately and compared. Annette S. Crisanti, a qualitative research expert, and three members of the research team reviewed coding for every statement to ensure accuracy and establish coding consensus. Initial coded responses were grouped into broader overarching themes (Liamputtong, 2013) and reviewed/finalized by the research team. The analysis examined themes that emerged between PL and CL groups with a focus on any areas of difference (e.g., themes only or primarily from PL or CL respondents).

Results

Quantitative Results

Perceived helpfulness of SS topics. There were 796 and 950 End of Session questionnaires completed by participants in the CL and PL groups, respectively. The median rating for all 12 topics was 3 (the highest possible rating), and the average ratings ranged from 2.7 ("Asking for help," "Healing from anger") to 2.9 ("Discovery"), with no significant difference in scores by topic. Overall, participants in the PL groups rated the sessions more helpful compared to participants in the CL groups, although the difference was not significant (odds ratio [OR] = 1.28, $p = .055$).

Perceived helpfulness of SS overall. Demographics for participants who completed the end of treatment helpfulness ratings are included in Table 1 by 3 month and 6-month interview. Ratings for overall helpfulness of SS were high; 107 (68.2%) respondents indicated the highest rating (+3) at 3-month follow-up, 37 (23.6%)

gave a rating of + 2, 10 (6.4%) gave a rating of + 1, three (1.9%) gave a rating of neutral, and none gave a negative rating.

The proportion of participants who gave the highest rating of overall helpfulness did not differ significantly by time or treatment arm. However, there were significant differences in the helpfulness ratings of SS treatment components. At 6-month follow-up, participants in PL-SS were significantly more likely than participants in CL-SS to give the highest rating of how helpful the treatment is for SUD ($p = .010$), safety as the priority of treatment ($p = .006$), the integrated treatment ($p = .047$), the focus on learning coping skills ($p = .020$), and the structured approach ($p = .030$; see Table 2). Participants in PL-SS were also significantly more likely than their counterparts to give the highest rating of the structured approach at 3-month follow-up ($p = .033$).

At both time points, more than half of the respondents answered at least 90% when asked how frequently they would use what they learned in the future (57.6% at 3 months and 51.3% at 6 months follow-up) and how creative the treatment was (56.4% at 3 months and 52.7% at 6 months follow-up). At both time points, the majority of respondents answered 100% when asked how easy it was to understand the treatment (60.3% at 3 months and 53.3% at 6 months follow-up) and to what extent they would recommend the treatment to someone else (78.3% at 3 months and 75.8% at 6 months follow-up). No significant differences were observed between treatment arms for these questions.

In bivariate analysis, participants in PL groups were more likely to give the highest rating of overall helpfulness than participants in CL groups, although this difference was not significant (3-month $OR = 1.29$, $p = .459$; 6-month $OR = 1.74$, $p = .121$; see Table 2). In a binomial mixed effects model controlling for time, treatment completion, missed follow-up interviews, diagnoses, and sex, participants in PL-SS had higher odds of giving the highest possible rating than those in CL-SS, but the difference was not significant ($OR = 1.74$, 95% CI [0.82, 3.71]).

More participants in the PL groups compared to the CL groups completed 6 SS sessions but the p value of a chi-square test was not significant ($p = .06$). At 3 months, 50% of participants in PL groups completed treatment compared to 41.7% of those in the CL groups. At 6 months, an additional 14.4% of participants in PL groups completed treatment compared to 7.3% of those in the CL groups. A total of 51% of participants in the CL groups and 35.6% of participants in the PL groups failed to complete treatment within 6 months.

Qualitative Results

The main themes that developed in response to the qualitative study questions are presented below. When present, theme differences across groups (PL and CL) are noted to help provide insight regarding the impact of PL or CL groups on perceived helpfulness.

Three themes developed regarding the best aspects. First, Relating To Others was a theme in both the PL and CL groups. Examples included "Being able to vent and get feedback from others going through the same things as you have," and "Getting to know others and knowing I'm not alone." Within the PL groups there were more comments (15 vs. 3) about relating to the facilitator. For example, "We have somebody who has gone through this and we can talk to her," and "being able to relate to the leader of the group because he's had similar problems and can identify

Table 1

Helpfulness Ratings From End of Treatment Questionnaire by Follow-Up Time and Demographics

Characteristic	3-month follow-up			6-month follow-up		
	n	+ 3 rating (%)	p	n	+ 3 rating (%)	p
Total	157	107 (68.2)	N/A	156	110 (70.5)	.500
Treatment arm						
Clinician-led	78	51 (65.4)	.459	80	52 (65.0)	.121
Peer-led	79	56 (70.9)		76	58 (76.3)	
Treatment completion						
3 months	81	60 (74.1)	.171	76	60 (79.0)	.022*
6 months	20	14 (70.0)		18	14 (77.8)	
Never	56	33 (58.9)		62	36 (58.1)	
Sex						
Female	75	54 (72.0)	.322	77	60 (77.9)	.045*
Male	82	53 (64.6)		79	50 (63.3)	
Diagnosis						
PTSD	20	13 (65.0)	.110	19	15 (79.0)	.40
SUD	38	21 (55.3)		35	27 (77.1)	
Both	99	73 (73.7)		102	68 (66.7)	
History of trauma						
<7 events	67	46 (68.7)	.922	68	52 (76.5)	.172
7+ events	81	55 (67.9)		80	53 (66.3)	
Age, years						
18–25	39	28 (71.8)	.614	40	29 (72.5)	.166
26–35	43	26 (60.5)		42	25 (59.5)	
36–45	37	27 (73.0)		39	32 (82.1)	
46–65	38	26 (68.4)		35	24 (68.6)	
Ethnicity						
Hispanic	139	93 (66.9)	.430	137	94 (68.6)	.191
Non-Hispanic	18	14 (77.8)		19	16 (84.2)	
Education						
High school graduate	104	73 (70.2)	.442	104	74 (71.2)	.804
Less than high school graduate	53	34 (64.2)		52	36 (69.2)	
Living situation						
House	109	72 (66.1)	.777	103	75 (72.8)	.396
Homeless	44	32 (72.7)		47	32 (68.1)	
Institution	4	3 (75.0)		6	3 (50.0)	
Employment						
Employed	38	29 (76.3)	.204	42	31 (73.8)	.562
Unemployed	118	77 (65.3)		113	78 (69.0)	

Note. PTSD = posttraumatic stress disorder; SUD = substance use disorder. Data represents the proportion of participants who gave the highest possible rating by treatment arm, Treatment completion, and demographics and p values for chi-squared test for differences in rating proportions by participant characteristic.
* $p < .05$.

with me and break it down better for me to understand." A second theme, Feeling Safe/Not Judged, was specific to the CL participants. Examples included "I don't get judged or looked down on," and that the participant "felt safe at meetings." A third theme shared across CL and PL groups was that one of the best aspects of the groups was learning new things. Examples included "Taught me how to cope with things better" and "Very helpful in understanding PTSD"

Four themes developed regarding the worst aspects of the program. Participants from both PL and CL groups contributed statements in all four theme areas. The first theme was Participants' Current Drug Use. Statements include not liking participants "Coming in high" and "People leaving after groups to get high" and more generally "Being around other substance users." Another theme was Knowing Others in The Group. This included bad relationships with other participants. For example, "Having undesirable people in group that I have history with" or simply finding

it hard to share personal information in the sessions "because I knew too many people." The third theme was Being Honest with Oneself and referenced the difficult process of confronting past and present challenges openly. Examples include, "Just opens up cans of worms that are hard, have to relive it and deal with it more" and "having to look at who you really are." The forth theme was related to not liking Disruptive/Distracting Behavior of other participants. For example, "They distract because they repeat the same bad things about their life," "listening to other people's BS" and "Some of the people in my group seem to waste the time while in there." Although statements came from both groups, most came from the CL group.

Two themes developed under Study Modifications and came from participants in both groups. The first and strongest theme focused on wanting more sessions, longer sessions, more varied times, and more locations. A second theme reflected the need for additional support to ensure smooth session implementation that

Table 2
Helpfulness Ratings From End of Treatment Questionnaire by Follow-Up Time and Treatment Arms

| | Highest rating (%) | | | |
| | 3 months | | 6 months | |
Rating question	CL-SS	PL-SS	CL-SS	PL-SS
How helpful is the treatment overall?	51 (65.4)	56 (70.9)	52 (65.0)	58 (76.4)
Helpfulness sub-ratings				
How helpful is the treatment for PTSD and SUD?	43 (55.1)	49 (63.6)	45 (57.0)	53 (70.7)
How helpful is the treatment for PTSD alone?	41 (52.6)	38 (48.7)	37 (48.7)	43 (58.1)
How helpful is the treatment for SUD alone?	49 (62.8)	52 (67.5)	42 (53.2)	55 (73.3)*
Treatment element ratings				
Safety as the priority of treatment	43 (56.6)	56 (70.9)	48 (61.5)	62 (81.6)*
The integrated treatment	45 (58.4)	53 (67.)1	38 (50.7)	50 (66.7)*
The focus on abstinence from all substances	46 (60.5)	52 (66.7)	41 (54.0)	47 (62.7)
The focus on ideals	45 (59.2)	57 (72.2)	48 (62.3)	54 (72.0)
The focus on learning coping skills	57 (74.0)	62 (78.5)	50 (64.9)	62 (81.6)*
The focus on mental skills	46 (60.5)	58 (73.4)	43 (55.8)	51 (67.1)
The focus on behavioral skills	46 (59.7)	54 (68.4)	41 (53.3)	46 (62.2)
The focus on interpersonal skills/relating to others	38 (50.0)	51 (64.6)	41 (53.3)	51 (67.1)
The focus on community resources	39 (51.3)	52 (65.8)	37 (48.1)	45 (59.2)
The use of quotations	36 (46.8)	47 (59.5)	37 (48.7)	43 (57.3)
The check-in/check-out	45 (58.4)	47 (59.5)	47 (61.0)	50 (65.8)
The patient handouts	49 (63.6)	59 (74.7)	51 (66.2)	52 (68.4)
The commitments	47 (61.0)	55 (69.6)	47 (61.0)	46 (61.3)
The list of safe coping skills	56 (72.7)	63 (79.8)	51 (66.2)	59 (77.6)
The safe coping sheet	38 (53.5)	49 (64.5)	44 (57.9)	46 (63.9)
The core concepts of treatment	51 (67.1)	60 (77.9)	50 (64.9)	57 (76.0)
The length of treatment	45 (59.2)	51 (66.2)	36 (46.8)	45 (60.0)
The amount of written material provided	40 (52.6)	49 (63.6)	47 (61.0)	53 (70.7)
The structured treatment approach	40 (53.3)	54 (70.1)*	47 (61.0)	58 (77.3)*

Note. OR = odds ratio; CI = confidence interval; PL-SS = peer-led seeking safety; CL-SS = clinician-led seeking safety; PTSD = posttraumatic stress disorder; SUD = substance use disorder.
* $p < .05$.

was free from distractions. Most of these statements came from CL group participants. Examples included "Don't allow cell phone use" and "Assistance for the group leader." This latter comment referenced the desire for someone to support the facilitator in dealing with interruptions, including those from intoxicated participants.

Discussion

This is the first study to elicit patients' perspectives regarding the helpfulness of peer-delivered trauma-specific treatment. Our study found that SS delivered by peers was perceived to be especially helpful and, while ratings of helpfulness were not statistically different, PL-SS was perceived to be slightly more helpful compared to CL-SS. When asked about the helpfulness of specific SS topics, there were no differences between participants in PL and CL groups. The only significant differences related to specific treatment components of SS. Compared to patients in CL groups, patients in the PL groups rated the following SS components significantly more helpful: (a) helpfulness for SUD, (b) safety as the priority of treatment, (c) integrated treatment, (d) the focus on learning coping skills, and (e) the structured treatment approach. Completion rates were statistically similar among participants, with slightly higher completion rates among participants in PL-SS compared to those in CL-SS.

The qualitative feedback showed many common themes and differences between PL and CL participants. In the Best Aspects category, for example, the theme Relating to Others reflected the importance of social support which has been associated with treatment engagement (Kelly et al., 2010), less substance use and greater levels of well-being (Laudet, Magura, Vogel, & Knight, 2000). Broadly defined social support may have influenced client perceptions of helpfulness in both PL and CL groups. The Best Aspects category showed differences. For example, relatively more comments from PL participants referenced the group facilitator - in particular he/her shared lived experience - as one of the best aspects of the treatment program. Another difference was only CL group participants commented on Feeling Safe/Not Judged. Given that participants knew the facilitator's status (i.e., peer or clinician), they may have felt it was important to specifically mention feeling safe in groups that were facilitated by a nonpeer. Regarding the program's Worst Aspects, participants in both groups provided comments in all four of the theme areas that developed. One category, Disruptive/Distracting Behavior, had statements about the need to manage group dynamics and find supportive ways to handle individuals who come to group sessions high. Although these comments came more often from participants in the CL groups, similar statements were present at some level across both PL and CL groups. The possibility of disruptive

behavior and the need to manage it is an important aspect of SS that should be addressed in any setting. The main theme common across PL and CL participants was the need for sessions that were longer, more frequent, and in more locations.

Strengths and Limitations

Strengths of this study include (a) the examination of perceived helpfulness at three and six months posttreatment; (b) a racially/ethnically diverse sample; (c) regular and ongoing confirmation of fidelity; and (d) the triangulation of findings with quantitative and qualitative data. Several limitations need to be addressed. Selection bias may be threatening the validity of the findings in that helpfulness ratings were not available for all participants. Although our response rate was high, only 75% of 245 participants completed the End of Treatment questionnaire. Attrition rates did not vary significantly among those in the PL and CL groups, but perceptions of helpfulness may have been lower among the 25% who were lost to follow-up. Similarly, End of Session ratings were only available from those who participated in SS groups and there is an association between treatment completion and perceived helpfulness (Colman, Missinne, & Bracke, 2014; Lee et al., 2007; Mojtabai et al., 2011). We cannot assume, however, that the reason for those who did not complete SS was because they did not consider it to be helpful as there are many reasons why individuals stop going to treatment, including work schedule conflicts, lack of transportation and current life events that may take precedence over treatment (Crisanti, Case, Isakson, & Steadman, 2014; Dixon, Holoshitz, & Nossel, 2016). Certainly, when asked about the worst aspects about the treatment program, some respondents indicated that the session times conflicted with other schedules. Another possible threat to the validity of the findings was lack of blinding, a critical methodological feature of RCTs (Karanicolas, Farrokh-yar, & Bhandari, 2010). Because blinding was not feasible, biased assessments of helpfulness may have resulted from participants knowing the status of their group leader. Although End of Session feedback questionnaires were completely anonymous, and participants who completed the End of Treatment questionnaire were assured confidentiality, participants may still have had concerns about providing negative ratings as the study was conducted in a small rural community where everyone knows each other and treatment options are limited. The lack of significant differences in perceived helpfulness between PL and CL groups may be a result of a "ceiling effect" produced by extremely high ratings among participants in both groups. Psychometric properties have not been established for the SS End of Session or End of Treatment questionnaires. Finally, we do not know whether the clinicians who facilitated the SS groups had previous personal experiences with PTSD and/or SUD, which would have made them similar, to a certain extent, to the peer facilitators. Previous studies have found the percent of counselors in recovery ranges from 37% to 57% (Curtis & Eby, 2010; Knudsen, Ducharme, & Roman, 2006).

Conclusions

Our study adds to the evidence supporting the effectiveness of peer providers in behavioral health by providing new data on their perceived helpfulness among patients. However, given that the target population was primarily Hispanic (88%) and recruited from a peer-run organization in a rural community, generalizability of the findings may be limited. Although outcome data are not presented here, significant improvements in various domains were observed among participants in PL-SS (https://www.pcori.org/research-results/2013/are-treatment-groups-led-peers-effective-groups-led-counselors-treating). These results, together with our findings of high ratings of helpfulness among recipients of PL-SS and slightly higher treatment completion rates among participants in PL groups compared to CL groups, indicate that peer providers can play a cost-effective role in addressing shortages in trauma-treatment, particularly in rural communities (Altschul et al., in press). Because SS is a manualized treatment, the perceived helpfulness of nonmanualized peer-delivered services should be examined. Further research on the perceived helpfulness of peer providers and its relationship to outcomes and engagement in treatment is also warranted.

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