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In-person vs Synchronous Virtual Provider Workshops for Evidence-Based Therapies for Posttraumatic Stress Disorder (PTSD)

Pruiksma, Blankenship, Choi, Yoo, Wolfe, Fina, and Dondanville

Abstract

In response to the novel coronavirus (COVID-19), many mental health provider trainings for evidence-based therapies (EBTs) shifted to virtual rather than in-person formats. The purpose of this paper is to compare workshops in EBTs for posttraumatic stress disorder (PTSD) that were formerly conducted in person to workshops conducted virtually during the pandemic. Providers reported similar ratings for learning objective achievements between in-person and virtual trainings. Providers and trainers reported facilitators and barriers to learning in virtual training and provided recommendations for virtual trainings. Both provider participants and trainers identified a loss of networking opportunities as the primary drawback of virtual training.

Keywords: evidence-based treatment, posttraumatic stress disorder (PTSD), virtual training, COVID-19, Prolonged Exposure, Cognitive Processing Therapy

Introduction

Cognitive-behavioral interventions are recommended as first-line, evidence-based treatments (EBTs) for several behavioral health conditions, including posttraumatic stress disorder (PTSD; American Psychological Association, 2017; U.S. Department of Veterans Affairs & U.S. Department of Defense, 2017). Despite strong evidence supporting their use with diverse populations (Asmundson et al., 2019; Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010), access to EBTs for PTSD can be challenging due to lack of availability of trained local therapists (Maguen et al., 2020; Richards et al., 2017). A significant amount of work has focused on dissemination and implementation of EBTs in the Department of Veterans Affairs (e.g., Karlin et al., 2010) and on examining optimal training approaches that are most beneficial to trainees to facilitate implementation of EBTs to fidelity (Frank, Becker-Haimes, & Kendall, 2019). Training approaches traditionally include in-person workshops (e.g., "in-person" time-limited training opportunities lasting several hours or up to four days that focus on a single intervention topic). However, with the advance of technology, training approaches have expanded to trainer-led online trainings (i.e., synchronous) and self-paced online training modules (i.e., asynchronous).

Most research to date has focused on comparing in-person workshops and asynchronous web-based training modules for EBTs. Studies have examined training on treatment modalities for a range of disorders including bipolar disorder (Stein et al., 2015), anxiety among youths (Beidas, Edmunds, Marcus, & Kendall, 2012), borderline personality disorder (Dimeff et al., 2015), and insomnia (Taylor et al., 2021). While web-based training is particularly attractive as a cost-effective, scalable training solution, some studies found that trainer-led, in-person workshops outperformed web-based training models in therapist satisfaction and self-efficacy (Beidas et al., 2012), motivation (Dimeff et al., 2015), and completion (German et al., 2018). Further, research comparing trainer-led, in-person work-

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shops and web-based modules found that regardless of the training modality, the number of post-training consultation hours attended was the best predictor of therapist adherence and skill (Beidas et al., 2012). Regardless of the initial training format, researchers consistently find it is important to provide postworkshop consultation (e.g., Charney et al., 2019; Frank et al., 2019; Karlin et al., 2010) and to address contextual organizational factors (e.g., Glisson & Williams, 2015; Rosen et al., 2016) for mental health providers to develop competency in delivering complex interventions like EBTs for PTSD. To date, there is no published research comparing in-person workshops to synchronous trainer-led virtual workshops, a critical and initial component of training.

The novel coronavirus (COVID-19) has rapidly impacted the world. The growing impact on mental health is staggering (Xiong et al., 2020). This is particularly concerning given that the mental health system in the U.S. is already strained (Czeisler et al., 2020; Simon, Saxe, & Marmar, 2020), which makes it especially important to adapt training models for mental health providers in EBTs for PTSD during the pandemic to meet this growing need. In response, most workshops for EBTs have shifted to virtual platforms rather than in-person workshops to mitigate opportunity for spreading COVID-19. As mental health providers become more accustomed to virtual platforms, the reduced need for travel, costs of travel, and time away from work and family are expected to impact trainees' preference for virtual training options. Our group, the STRONG STAR Training Initiative (SSTI), has been conducting in-person workshops in EBTs for PTSD (i.e., Cognitive Processing Therapy [CPT] and Prolonged Exposure Therapy [PE]) since 2017 as part of a competency-based training model (see Dondanville et al., 2020). Responding to the growing need for trained mental health providers during the COVID-19 pandemic, our group transitioned EBT for PTSD trainings in May 2020 to virtual delivery. We began training through a video teleconferencing platform, Zoom Video Communications, that would allow providers to attend trainings while also following recommended health and safety guidelines (e.g., avoiding travel and large gatherings in a room over extended periods of time).

While much is unknown about when it will be safe enough to return to in-person training programs, it is important to evaluate and learn best practices for virtual delivery for future trainings during and after the pandemic. Based on our experience with in-person and virtual provider workshops in EBTs for PTSD, the aims of this paper are as follows: (a) compare in-person vs. virtual attendee ratings of workshop learning objectives; (b) describe qualitative provider participant feedback about how the virtual format of the workshop supported or impeded learning, along with provider recommendations; and (c) describe qualitative trainer feedback about the virtual workshop.

Method

This manuscript was a prospective evaluation of the SSTI national training program in which we compared in-person provider workshops in cognitive-behavioral therapies for PTSD that occurred prior to the COVID-19 pandemic to virtual workshops that occurred during the pandemic. The Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) guidelines provided the framework for this article (Ogrinc et al., 2016).

Context

The SSTI is a national training program for veteran-serving, community-based mental health providers. The SSTI aims to increase community access to EBTs for PTSD, suicide risk, and other related disorders for veterans seeking mental health services in community settings. Informed by the learning collaborative model (Nadeem, Olin, Hill, Hoagwood, & Horwitz, 2014), the SSTI includes the following components: (a) provider application indicating interest and organizational support; (b) online provider portal that consists of treatment resources, demonstration videos, and advanced training webinars; (c) preworkshop learning; (d) a 2-day workshop; (e) weekly consultation via phone or video teleconferencing; and (f) organizational consultation. More detailed information about the initial development and implementation of SSTI is available in Dondanville et al. (2020). Prior to the COVID-19 pandemic, only the workshops were conducted in person. All other aspects were conducted virtual-

ly. In May of 2020, our workshops transitioned to the virtual format.

The provider sample included a total of 156 licensed mental health providers enrolled with the SSTI national training program for a workshop in an EBT for PTSD. Demographic information for providers who attended the workshops is presented in Table 1. Five trainers conducted the workshops. Trainers were female (100%), White (80%), African American (20%), and included clinical psychologists (80%) and a clinical social worker (20%). They had a mean of 4.3 years of experience conducting trainings in EBTs.

Intervention

Each 2-day workshop was led by one expert trainer in either CPT or PE therapy for PTSD. All the trainers were originally trained by the developers of the treatments (i.eDr. Patricia Resick for CPT and Dr. Edna Foa for PE). Workshops were designed for providers to develop skills in the core components of the particular EBT for PTSD. Content of each workshop was established by the treatment developers based on the treatment manual (CPT: Resick, Monson, & Chard, 2016; PE: Foa, Hembree, Rothbaum, & Rauch, 2019). All workshops included a didactic presentation with PowerPoint slides and handouts on treatment research, structure, format, and delivery. Video demonstrations of treatment-specific techniques were incorporated throughout. Workshops also included interactive role-plays topics in dyads or small groups with opportunities for feedback from the trainer or peers. Opportunities to ask questions and consult on specific clients were presented throughout the workshops. Finally, written materials and webinars were made available before and after the workshop.

In-Person Workshops

In-person workshops were hosted in the Houston metro area in January and February of 2020. Workshops were held in large meeting rooms with audio and visual equipment. One expert trainer and an administrative support person traveled from San Antonio or Austin to Houston (an approximately 3-hour driving distance) to conduct the workshops. Training staff traveled by car the day before the workshop, spent 2 nights in a local hotel, and traveled back at the end of Day 2 of the workshop. Training staff prepared binders with workshop materials, including copies of workshop slides and handouts. Lunch and refreshments were included with the workshop. Provider attendees were both local and nonlocal. Local providers traveled by car, with daily commutes to the workshop ranging from 20 to 90 minutes. Nonlocal providers traveled both by car and plane to attend the workshop and typically arrived the day before the workshop and left the day after the workshop. They stayed in a hotel for three nights.

Virtual Workshops

Virtual workshops were held in May and June of 2020 and included the same agenda and content as in-person workshops with aim of making the virtual workshops as similar as possible to the in-person workshops that had been refined over time. The virtual-meeting platform technical specifications included video teleconferencing, a chat feature, and breakout rooms available through Zoom Video Communications. All provider participants were required to have audio and video capability to fully participate in the workshop. Technical assistance for the virtual platform was offered to participants prior to the workshop dates. All workshop materials were emailed to participants. Role plays were conducted using the breakout room feature, during which participants were automatically assigned a role-play partner and were placed in a breakout room to conduct the role play using video teleconferencing. In addition, one to five additional expert consultants joined and rotated among the breakout rooms to answer questions and provide feedback to the participants.

Measures

Learning Objectives

At the end of Day 2 of the 2-day workshop in the EBT for PTSD, providers received a workshop evaluation. Providers who attended the workshop in person completed a handwritten evaluation. Providers who attended the workshop virtually received a link to the survey via REDCap. Consistent with the American Psychological Association *Standards and Criteria for Approval of Sponsors of Continuing Education for Psychologists* (2015), participants were "'asked' rather than 'required' to complete evaluation forms" (p. 9), and not all providers wanted credit for continuing

education. For this reason, Table 1 presents data on 156 provider participants, but Table 2 presents data on only 141 providers who completed the ratings of the learning objectives. Since the evaluations were completed anonymously, we were not able to match providers who attended to those who completed the evaluations.

Providers rated each learning objective related to the specific EBT for PTSD workshop on a 5-point Likert scale that ranged from "Strongly Agree" (5) to "Strongly Disagree" (1). Providers who attended the virtual workshop were asked the following additional questions as free responses: (a) "How (if at all) did the Zoom platform support your learning?" (b) "How (if at all) did the Zoom platform impede your learning?" (c) "What could be improved using the Zoom platform or any online platform in delivering EBT training?"

Qualitative Interviews With Workshop Trainers

All trainers had conducted at least one virtual workshop on an evidence-based cognitive and behavioral psychotherapy. All trainers met for a 30-minute interview with a PhD-level interviewer with expertise in conducting qualitative interviewing (AB). All interviews were recorded and transcribed in order to conduct an open thematic analysis. As recommended by Agee (2009), the interview was limited to five open-ended questions designed to elicit responses relevant to the research questions. The interview questions were as follows: (a) "What was your overall experience conducting a virtual training?" (b) "In particular, what was it like to instruct over a virtual platform?" (c) "What are the relative pros and cons of conducting a training over a virtual platform?" (d) "What recommendations do you have to improve facilitating over a virtual platform?" (e) "Is there anything that I didn't ask you wanted to share with me?"

Analysis

The primary aim of this study was to compare in-person and virtual EBT for PTSD workshops among a sample of community-based mental health providers ($N = 156$) who participated in the SSTI national training program. The outcome variables of interest included ratings of workshop learning objectives and qualitative reports on experiences in virtual workshops. Data was collected at the end of the second day of the workshop. The workshop learning objectives variable was based on a 5-point Likert scale that ranged from 5 = "Strongly Agree" to 1 = "Strongly Disagree." Mean scores of each learning objective were calculated, and independent sample *t* tests were conducted on each learning objective to compare responses of in-person participants with those of virtual participants. All analyses were completed using SPSS Version 26. Alpha was set at .05 for all analyses.

Qualitative Analysis Methods

A thematic analysis (Braun & Clarke, 2006) was conducted in order to understand the participants' experiences of the virtual workshop. A PhD-level clinical psychologist (AB) and two bachelor's-level research assistants (HC and GY) carefully read all responses from the trainers and workshop participants. Then they organized the feedback into a conceptually clustered matrix by participant in order to identify major categories (Miles, Huberman, & Saldana, 2014).

Ethical Considerations

The University of Texas Health Science Center at San Antonio Institutional Review Board reviewed the program evaluation plan and made a non-research determination. The project was designed for internal program evaluation purposes, and the findings are to be used to support our mission to improve the training program. As such, provider consent to participate was given by virtue of participation in the training program, which included program evaluation.

Results

Quantitative Results

Across the 25 learning objectives that were rated postworkshop (CPT = 11, PE = 14), the mean for all ratings was 4.27 or higher on a scale from 5 = "Strongly Agree" to 1 = "Strongly Disagree," indicating high agreement that the workshops achieved the noted learning objectives (Table 2). There was a statistically significant difference in mean rating for only one of the 25 learning objectives. Participants in the in-person

PE workshop rated the item "Identify appropriate cases for PE through interview and self-report methods" significantly higher ($M = 4.81$, $SD = .40$) than providers who attended the virtual PE workshop ($M = 4.45$, $SD = .67$; $t(30) = 2.22$, $p < .05$).

Provider Qualitative Results: Virtual Workshop Learning Facilitators

Through thematic analysis, four themes emerged as a result of providers' open-ended responses to the prompt: "How (if at all) did the Zoom platform support your learning?" (i.e., workshop facilitators).

Accessible, Convenient, and Comfortable

The vast majority of provider participants indicated that "accessibility" and "convenience" were significant benefits of participating in a virtual workshop. Interestingly, participants infrequently endorsed the convenience of reducing one's risk to COVID-19. Instead, providers discussed the relief associated with not traveling, being able to participate from home or at the workplace, continuing to maintain at least some work-related responsibilities, and being able to be physically "comfortable."

Ease of Real-Time Engagement

Even though the workshop was delivered via a virtual platform, many participants felt as though they were better able to engage with other providers, trainers, and consultants. Providers endorsed being able to "see" and "hear" everyone equally as a significant benefit, which sometimes does not happen when participating in a workshop conducted in a large meeting room. In addition, providers indicated that using the chat box allowed them to ask questions in real time, which they may have not done during an in-person workshop.

Zoom (Virtual Platform) Features

The vast majority of participants also indicated that Zoom features such as the "chat box," "breakout rooms," "ability to share screens," and "show video" greatly facilitated their learning. Participants reported that these features gave provider participants a more personalized experience, and in some cases, they afforded opportunities that otherwise would not be available, such as having an outside "consultant to observe role plays."

Better Than Expected

Many providers indicated that they had doubts about whether the workshop would be as good or as effective in person. However, following the workshop, the majority of participants indicated that the workshop was "good," "better than expected," and "preferred over an in-person workshop."

Provider Qualitative Results: Virtual Workshop Learning Barriers

Through thematic analysis, four themes emerged as a result of providers' open-ended responses to the prompt: "How (if at all) did the Zoom platform impede your learning?"

None

While the majority of provider and trainer participants expressed concern about the extent to which the workshop would be "as good" or "as effective," the majority of provider participants indicated that their experience was quite good and that the virtual platform did not impede their workshop experience.

No Networking and No Human Connection

Provider participants overwhelmingly endorsed the loss of being able to connect "directly" with the other providers, trainers, and consultants as being a significant impediment to the virtual workshop. Providers also endorsed simply missing "human contact" as a significant loss when participating in a virtual workshop.

Technology and Technology Problems

Although providers endorsed Zoom features as a facilitator to their workshop experiences, they also indicated that some features did not work as "seamlessly" as hoped, or they were not as "effective" or were more "clunky" than an in-person experience may have been. In addition, providers described technology problems as impeding their learning. These included uncontrollable problems such as "internet going in and out," "video rebuffering," or "video lagging" and controllable problems such as a provider not being "tech savvy."

Distractions

While many providers endorsed the ability to "multitask" during the workshop as a benefit to a virtual workshop experience, this also came with

distractions. Many providers described "difficulty concentrating" due to work distractions such as "email" and "patient management" as well as distractions "inside" and "outside" of the household, such as children and others in the home.

Provider Qualitative Results: Recommendations

Through thematic analysis, four themes emerged as a result of providers' open-ended responses to the prompt: "What could be improved using the Zoom platform or any online platform in delivering EBT training?"

No Recommendations

The vast majority of providers indicated that they had no recommendations. Free responses included "n/a," "it was great," and "there was nothing else that could be done differently."

Program Time Commitment

There was a range of responses regarding recommendations for program time commitment. For example, some providers indicated that they would have liked "shorter days" over "more days," while others indicated that they would have preferred "one long day" rather than two consecutive days. Finally, providers overwhelmingly endorsed the need for more breaks throughout the training.

Interactive Training Experiences

Many providers recommended more interactive workshop experiences. Providers indicated that they enjoyed the role plays, whiteboards, and polls, but they would have preferred more of these activities. Similarly, providers recommended additional activities that would facilitate networking and connection among the cohort. Providers recommended activities such as an ice-breaker for "introductions," "email list," or "more time to get to know" other providers, the trainer, and consultants.

Improvement of Future Technology and Access to Materials

Some providers struggled with the Zoom technology, while others were frustrated by colleagues who hadn't mastered the technology. As such, some recommended an opportunity for a Zoom "orientation" prior to the workshop in order to better understand the features. Providers also recommended having a readily available Zoom administrative person who could help them navigate technological challenges. Providers also recommended improvement of audio-visual materials to ensure that audio can be heard and visuals can be seen. Finally, many participants recommended "paper" copies of materials and for the workshop to be "recorded" so it could be available to view at a later time.

Trainer Qualitative Results

Through thematic analysis, four themes emerged from review of transcripts from the qualitative interviews with the workshop trainers in response to the following prompts: (a) "What was your overall experience of doing the virtual training?" (b) "In particular, what was it like to instruct over a virtual platform?" (c) "What are relative pros and cons of conducting a training over a virtual platform?"

Convenience, Accessibility and Reach

Trainers overwhelmingly endorsed that the virtual workshop improved convenience, accessibility, and reach. In particular, not having to "travel," "get childcare," and deal with the consequences of "time away" were significant benefits to conducting a virtual workshop. In addition, all trainers indicated that this not only created "accessibility during COVID-19," but it also allowed them to reach providers who may be unable to attend trainings, such as those who are not "local," who live in "rural areas," or who could not "afford it."

Zoom (Virtual Platform Features)

Similar to providers, trainers found that the Zoom features made the virtual training feel "not that different from the in-person training." Trainers cited features such as "sharing screens," "showing videos," "chat box," "break-out rooms" and the "white board" as being particularly helpful in facilitating the training. In addition, trainers appreciated being able to "see everyone" and "see their names," which they indicated made it seem as though "everyone had a front row seat," and each participant could "see" and "hear" well.

Content Versus Process

All of the trainers indicated that facilitating the training via a virtual platform was "better than

expected." In fact, all trainers indicated that the content of the training "didn't feel very different." However, all trainers indicated that there were a number of experiential components that were missed. These included "organic" interaction between the trainer and the providers, ability for providers to engage in "cross talk" and "networking," and the ability for the trainer to receive "nonverbal feedback," "move around," and have a "shared [in-person] experience with the providers." However, all trainers did endorse that there appeared to be a "good exchange" between the individual providers and the trainers.

Trainer Qualitative Results: Recommendations

Through thematic analysis, the following recommendations emerged as a result of trainers' open-ended responses to the prompt: "What recommendations do you have to improve facilitating over a virtual platform?"

Recommendations

Trainers had a number of recommendations, which tended to fall into three categories: technology, interactive facilitation, and practical recommendations. With regard to technology, trainers recommended to "check technology ahead of time," "encouraging people [providers] to speak up about technology problems" (e.g., video rebuffering), and to request that all providers "have their videos on." With regard to facilitating interactive experiences, trainers recommended including more "interactive polls," additional consultants "to facilitate role plays," "curating community" by finding creative ways to engage providers, or having a co-presenter to manage the "chat box." Practical recommendations included "a lot of good stretch breaks," providing physical "materials ahead of time," and for the trainer to have "two screens" in order to see PowerPoint slides, notes, and the provider participants.

Discussion

This study is one of the first to compare in-person workshops for training mental health participant providers in an EBT to virtual synchronous workshops. Two-day in-person workshops were conducted in the months directly prior to the COVID-19 pandemic, and two-day virtual workshops were conducted in May 2020 during the pandemic. Analyses indicate that providers similarly rate the achievement of learning objectives between the two formats. Although there was one statistically significant difference in ratings for the learning objective "Identify appropriate cases for PE through interview and self-report methods," the means were both 4.45 or above (on a scale from 5 = "Strongly Agree" to 1 = "Strongly Disagree"), and this difference does not appear to be very meaningful. This difference may have been specific to provider question(s) in the in-person PE groups that facilitated more discussion about appropriate PE cases. It is difficult to determine without qualitative data or the ability to follow-up on anonymous evaluations. Overall, these data provide strong initial support for the use of virtual workshops for achieving learning objectives.

According to the qualitative provider feedback, there was general support for the virtual workshop experience. For the providers as well as the trainers, benefits of the virtual workshop included being able to attend in a comfortable environment (e.g., from their own home) and time and costs savings related to travel and hosting the workshops. Virtual workshops allowed for additional trainers to join and facilitate role-play training exercises, which enriched the experience for participant providers. The providers also were able to participate despite poor weather conditions that otherwise could have resulted in a canceled workshop. As a negative, the virtual format limited the interaction and opportunities for professional networking among providers. In-person workshops allow opportunities for conversations before and after the workshop and during lunch and other breaks. During the qualitative interviews, workshop trainers overwhelmingly endorsed the importance of convenience, accessibility, and reach as being a benefit of virtual trainings for both trainers and providers. A significant theme among trainers was that while delivery of content felt unchanged, the experiential component of meeting colleagues during in-person training tends to be limited.

Our findings are consistent with published literature that found similar gains in knowledge acquisition and satisfaction examining training modalities including in-person and asynchronous web-based training models (Beidas et al., 2012; Dimeff et al., 2015; Stein et al., 2015; Taylor et

al., 2021). The sychronous virtual trainings in this study were equivalent in trainer-led format with the same content, material, and timeframe as the in-person workshops. In contrast, asynchronous web-based trainings are designed by treatment developers and educational specialists, but they are completed at the learner's pace without a trainer or live practice opportunities and feedback.

It is important to note that this report evaluated only the 2-day workshops, which are only one aspect of the broader SSTI learning community model (Dondanville et al., 2020), which also includes weekly case consultation and organizational consultation. Evidence is clear that consultation following training workshops (e.g., Charney et al., 2019; Frank et al., 2019; Karlin et al., 2010) and consultation to address contextual organizational factors (e.g., Glisson & Williams, 2015; Rosen et al., 2016) are critical to support providers in ultimately adopting EBTs. Although the providers who completed the workshops as part of this report also participated in postworkshop weekly consultations, data on consultation attendance, fidelity to treatment protocols, and achievement of provider status were not available for this report. Future research should consider examining these important postworkshop outcomes.

This study includes several limitations. First, this was not a prospective research study or randomized controlled trial of training formats; therefore, time and the onset of the COVID-19 pandemic pose important confounds. Second, as the authors did not intend to study training formats prior to the COVID-19 pandemic, the quantitative comparison was limited to training objectives and qualitative questions to aid in program evaluation and quality improvement. As such, the findings should not be extrapolated to imply that virtual training is equivalent to in-person training. Future research comparing in-person and virtual training formats should examine other important outcomes such as specific skill acquisition, psychotherapy competency, and self-efficacy in delivering the treatments, and utilize randomized controlled trials for scientific rigor. Third, these findings may be specific only to EBTs for PTSD (i.e., CPT and PE) and may not generalize to trainings in EBTs for other disorders or for trainings that are of differing durations (e.g., less than or more than two days).

Overall, this report informs future practice for conducting in-person and synchronous virtual trainings in EBTs through practical recommendations from both provider participants and trainers experienced with both formats. Provider participants and trainers generally shared positive feedback about virtual training experiences. Provider ratings of workshop learning objectives were comparable, supporting the viable use of virtual synchronous training for EBTs for PTSD. Findings indicate that virtual training workshops are likely a feasible method for conducting workshops as a part of an implementation program to support the overall adoption of a new treatment into practice.

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Table 1

	In-Person		Virtual		Total	
	n = 86	%	*n* = 70	%	*N* = 156	%
Age, Mean (*SD*)	42.9 (11)		41.7 (10.9)		44.4 (11)	
Gender						
Female	68	79.1	54	76.1	122	78.2
Male	18	20.9	16	22.5	34	21.8
Race						
White	47	54.7	43	60.6	90	57.3
Black	25	29.1	13	18.3	38	24.2
Other	14	16.3	14	19.7	28	17.8
Ethnicity						
Hispanic/Latino	59	68.6	18	25.4	45	71.2
Non-Hispanic/Latino	27	31.4	52	73.2	111	28.8
Discipline						
Counseling	40	46.5	34	47.9	74	47.1
Social work	32	37.2	23	32.4	55	35
Psychology	10	11.6	9	12.7	19	12.1
Marriage & family therapist	4	4.7	4	5.6	8	5.1
Other (e.g., chaplain or nurse)	0	0	1	1.4	1	.6
Practice setting						
Solo private practice	18	20.9	27	38	45	28.8
Group private practice	18	20.9	13	18.3	31	19.9
Non-profit agency	20	23.3	11	15.5	31	19.9
State agency	11	12.8	0	0	11	7.1
Federal agency	5	5.8	5	7	10	6.4
University medical center	8	9.3	4	5.6	12	7.7
College counseling center	2	2.3	3	4.2	5	3.2
Other	4	4.7	7	9.9	11	7.1

Note. Proportion and frequency statistics differ for individual demographic variables due to missing data.

Table 2

In-Person vs Virtual Workshop Learning Objectives for CPT and PE Workshops

Learning objective	In-Person *M* (*SD*)	Virtual *M* (*SD*)	*t* test	*p*
CPT	*n* = 46	*n* = 37		
Identify potential barriers to implementing CPT with patients.	4.54 (.72)	4.70 (.46)	-1.22	.23
Discuss the research that provides empirical support for CPT as an effective treatment for PTSD.	4.67 (.82)	4.81 (.40)	-.10	.32
Administer assessment and outcome measures to patients.	4.54 (.84)	4.76 (.50)	-1.45	.15
List the diagnostic criteria for PTSD according to the *DSM-5*.	4.72 (.50)	4.78 (.48)	-.61	.54
Describe the cognitive theory underlying CPT and the processes of assimilation, accommodation, and over-accommodation.	4.76 (.67)	4.78 (.48)	-.18	.86
Identify stuck points and assist patients in recognizing their own stuck points.	4.80 (.65)	4.81 (.40)	-.06	.96
Identify and address pretreatment issues such as poor patient buy-in.	4.59 (.65)	4.70 (.57)	-.86	.39
Introduce worksheets to patients and implement methods to encourage homework compliance.	4.61 (.75)	4.81 (.40)	-1.58	.12
Identify the principles of Socratic dialogue and utilize Socratic dialogue to challenge patients' stuck points.	4.70 (.73)	4.81 (40)	-.92	.36
Introduce patients to safety, trust, control, esteem, and intimacy modules.	4.74 (.68)	4.73 (.45)	.08	.94
Teach patients the skills to identify and address future goals and issues after the completion of CPT.	4.67 (.79)	4.78 (.42)	-.81	.42
	In-Person *M* (*SD*)	Virtual *M* (*SD*)	*t* test	*p*

PE	*n* = 36	*n* = 22		
Describe the theory and empirical research underlying PE.	4.75 (.50)	4.50 (.67)	1.51	.14
Administer assessment and outcome measures to patients.	4.67 (.59)	4.59 (.59)	.48	.64
Identify appropriate cases for PE through interview and self-report methods.	4.81 (.40)	4.45 (.67)	2.22	**.03**
Present the overview and treatment rationale of PE to patients to increase therapy buy-in.	4.81 (.47)	4.68 (.65)	.78	.44
Implement techniques for facilitating a therapeutic alliance between provider and patient.	4.69 (.53)	4.59 (.59)	.68	.50
Conduct a trauma interview to gather information about the patient's trauma history and identify an index trauma.	4.69 (.53)	4.50 (.67)	1.10	.28
Identify the common reactions to trauma in order to validate patients' experiences and symptoms in the context of PTSD.	4.77 (.43)	4.59 (.67)	1.13	.27
Introduce worksheets to patients and implement methods to encourage homework compliance.	4.80 (.41)	4.45 (.74)	2.01	.05
Guide patients through imaginal exposure and processing imaginal exposure.	4.83 (.38)	4.64 (.66)	1.28	.21
Implement techniques to address patients' anger, guilt, and shame.	4.61 (.55)	4.55 (.67)	.39	.70
Assist patients in identifying and working through distressing "hotspot" memories.	4.81 (.40)	4.59 (.67)	1.37	.18
Identify and address factors that impair effective emotional engagement in PE.	4.75 (.44)	4.64 (.58)	.79	.44
Identify risk factors for secondary traumatic stress and implement strategies to improve therapist self-care.	4.50 (.70)	4.27 (.88)	1.03	.31
Implement strategies to facilitate patients' homework compliance.	4.75 (.44)	4.45 (.74)	1.70	.10

Note. CPT = Cognitive Processing Therapy for PTSD; PE = Prolonged Exposure therapy for PTSD. Providers rated each item on a Likert scale that ranged from 5 = “Strongly Agree” to 1 = “Strongly Disagree.”

Table 3

Provider Qualitative Themes

Virtual Training Facilitators	**Example(s)**
Theme 1: Accessible, convenient, and comfortable	"It was much more convenient than traveling. I wouldn't have been able to attend long distance."
Theme 2: Ease of real-time engagement	"It [Zoom] allowed chat so that questions could be asked and answered in systematic way that may have been harder to achieve in person."
Theme 3: Zoom (virtual platform) features	"In your face access to documents and to people who are speaking (no issues with hearing anyone as everyone can equally be heard through the computer)."
Theme 4: Better than expected	"It made it more comfortable ... no issues with the temperature being wrong in the meeting room or being uncomfortable. And yet still very well presented." "Better than expected." "I liked it better than in person."
Virtual Training Barriers	
Theme 1: None	"None." "Not much." "I don't think it did."
Theme 2: No networking and no human connection	"The 8-hour days, 2 days in a row, without the stimulation in in-person contact was a little difficult."
Theme 3: Technology and technology problems	"Sometimes the internet was not good and would go in and out."
Theme 4: Distraction	"Working at home with kids was hard to focus. My problem, not yours!"
Recommendations	
Theme 1. No recommendations	"No need for improvement." "It was excellent."
Theme 2. Program time commitment	"Longer, for one. Maybe 3 days."
Theme 3. Interactive training experiences	"More break out groups for small group discussions."
Theme 4. Improvement of future technology and access to materials	"Make a recorded version of the training available on the website to be referenced or reviewed at a later time." "Some individuals had technology issues."

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